



```

class emptyImage {      // disegna spook fluttuante, secondo l'umore scelto (felice, triste, paura, esulta, racconta)
    emptyImage (int imgX, int imgY) {
        fill(dark_yellow);
        strokeWeight(1);
        stroke(orange);
        rect(imgX, imgY, 36, 27);
        textAlign(CENTER);
        textFont(din_black_15);
        text("?", imgX+37/2, imgY+20);
        textFont(din_light_15_brown);
        textAlign(LEFT);
    }
}

// UN CORIANDOLO
void pallino(int pX, int pY, int pWidth, int pTransp, int pTime, int pColor) {
    noStroke();
    fill(255,0+pColor,0);
    ellipse(pX,pY,pWidth,pWidth);
}

// UN FIOCCO DI NEVE
void fiocco(int pX, int pY, int pWidth, int pTransp, int pTime, int pColor) {
    noStroke();
    fill(230,230,230);
    ellipse(pX,pY,pWidth,pWidth);
}

// PIOGGIA DI CORIANDOLI
void coriandoli(int numCoriandoli, String direzione) {
    // CORIANDOLI
    for(p=0; p<=numCoriandoli-2; p++) {
        println("PALLINO"+pallinoX[p]);
        pallinoTime[p] -= 1;

        // modifoco la X e la Y per farlo mouvere :o
        if(pallinoTime[p]<=0) {
            //if(frameCount%2==0)
            pallinoDirection[p] = random(-5,5);
            if(frameCount%2==0) pallinoX[p] = pallinoX[p]+pallinoDirection[p];
            pallinoX[p] = constrain(pallinoX[p],0+pallinoW[p]+3,width);
            //if(direzione=="salita")
            pallinoY[p] -= pallinoSpeed[p]; //random(4,10);
            //else pallinoY[p] = pallinoSpeed[p];
            pallinoColor[p] += 4;
        }

        // disegno il pallino solo se ? ancora nello schermo
        if(pallinoY[p]>-10){
            pallino(pallinoX[p],pallinoY[p],pallinoW[p],pallinoT[p],pallinoTime[p],pallinoColor[p]);
            pallino(pallinoX[p],pallinoY[p],pallinoW[p],pallinoT[p],pallinoTime[p],pallinoColor[p]);
        }

        // pioggia infinita di coriandoli
        if(numCoriandoli==100) {
            if(pallinoY[p]<=-10) {
                pallinoY[p] = random(330, 350);
                pallinoColor[p] = 150;
            }
        }
    }
}

// CADE LA NEVE
void neve(int numNeve) {
    for(int p=0; p<=25; p++) {
        println("ARRAY NEVEY "+p+" = "+neveY[p]);
        neveTime[p] -= 1;
    }
}

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// modifico la X e la Y per farlo muovere :o
if(neveTime[p]<=0) {
    neveDirection[p] = random(-1,1);
    if(frameCount%4==0) neveX[p] = neveX[p]+neveDirection[p];
    neveX[p] = constrain(neveX[p],0+neveW[p]+3,width);
    neveY[p] += neveSpeed[p];
}

// disegno il pallino solo se ? ancora nello schermo
if(neveY[p]<340){
    fiocco(neveX[p],neveY[p],neveW[p],neveT[p],neveTime[p],neveColor[p]);
    fiocco(neveX[p],neveY[p],neveW[p],neveT[p],neveTime[p],neveColor[p]);
}

// pioggia infinita di coriandoli
if(neveY[p]>=340) {
    neveY[p] = random(-30, -50);
}
}

// RESETTA CORIANDOLI
void reset_coriandoli() {
    for(int p=0;p<=pallinoX.length-2;p++) {
        //create random coords
        int randomX = random(0, width);
        int randomY = random(330, 350);
        int randomW = random(1,8);
        int randomT = random(20,255);

        // store data
        pallinoX[p] = randomX;
        pallinoY[p] = randomY;
        pallinoW[p] = randomW;
        pallinoT[p] = randomT;
        pallinoTime[p] = random(0,10);
        pallinoDirection[p] = -1;
        pallinoSpeed[p] = random(5,10);
        pallinoColor[p] = 100;
    }
}

// RESETTA NEVE
void reset_neve() {
    for(int p=0;p<=45;p++) {
        //create random coords
        int randomX = random(0, width);
        int randomY = random(-30, -50);
        int randomW = random(8,14);
        int randomT = random(20,255);

        // store data
        neveX[p] = randomX;
        neveY[p] = randomY;
        neveW[p] = randomW;
        neveT[p] = randomT;
        neveTime[p] = random(0,10);
        neveDirection[p] = -1;
        neveSpeed[p] = random(5,10);
    }
}

// RESETTA QUADRI E RISPOSTE
void reset_paintings() {
    icons_painting[0][0] = 0;
    icons_painting[0][1] = 0;
    icons_painting[0][2] = 1;
    icons_painting[0][3] = 1;
    icons_painting[0][4] = 0;
    icons_painting[0][5] = 1;
}

```

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icons_painting[0][6] = 1;
icons_painting[0][7] = 0;
icons_painting[0][8] = 1;

icons_painting[1][0] = 0;
icons_painting[1][1] = 0;
icons_painting[1][2] = 0;
icons_painting[1][3] = 0;
icons_painting[1][4] = 1;
icons_painting[1][5] = 1;
icons_painting[1][6] = 0;
icons_painting[1][7] = 1;
icons_painting[1][8] = 1;

icons_painting[2][0] = 0;
icons_painting[2][1] = 0;
icons_painting[2][2] = 0;
icons_painting[2][3] = 1;
icons_painting[2][4] = 0;
icons_painting[2][5] = 1;
icons_painting[2][6] = 1;
icons_painting[2][7] = 0;
icons_painting[2][8] = 1;

icons_painting[3][0] = 0;
icons_painting[3][1] = 0;
icons_painting[3][2] = 0;
icons_painting[3][3] = 1;
icons_painting[3][4] = 0;
icons_painting[3][5] = 1;
icons_painting[3][6] = 0;
icons_painting[3][7] = 1;
icons_painting[3][8] = 0;

for(i=0;i<=3;i++) {
    paintings_found[i] = 0;
    paintings_wrong[i] = 0;
    given_answers[i] = 0;
}
}

// VARIABLES /////////////////////////////////
int countseconds = 0;
int i;
int j;
int k;
int p;
int totPunti = 0;           // score
int clues = 0;              // "there are XXX clues in this painting"
int distance = 0;           // cursor movement
int modeX = 35;             // starting point animation menu single/time/multi
int modeYquestion = 72;      // starting point animation text in final question
int modeXbarra = 0;          // starting point animation scrolling bar
int modeXicon = -150;         // starting point animation icons in the final question
int X_story = 240;            // starting point animation story_01
int X_story_2 = 240;          // starting point animation story_02
int Xbarchetta = -50;         // starting point animation barchetta (story_02)
int scrollingText = 0;         // how many time i can press UP/DOWN to scroll the final question
text
String letter = "";
String lastletter = "";
String nickname = "";
int immagineIndizio;
char lastkey;
Spook spook;                 // class Spook

```

```

emptyImage emptyImage;                                // class Spook
String moodSpook;
boolean activeMenu = false;
boolean viewMenu = false;

// coriandoli
int[] pallinoX = new int[0];
int[] pallinoY = new int[0];
int[] pallinoW = new int[0];
int[] pallinoT = new int[0];
int[] pallinoTime = new int[0];
int[] pallinoDirection = new int[0];
int[] pallinoSpeed = new int[0];
int[] pallinoColor = new int[0];

// neve
int[] neveX = new int[0];
int[] nevey = new int[0];
int[] neveW = new int[0];
int[] nevet = new int[0];
int[] neveTime = new int[0];
int[] nevedirection = new int[0];
int[] nevespeed = new int[0];
int[] nevecolor = new int[0];

// MENU animation: starting posistions
int POSITION_SINGLE = 35;
int POSITION_TIME = -207;
int POSITION_MULTI = -447;
int easeSpeed = 5;

// STORY animation: starting positions
int POSITION_VENICE = -40;
int POSITION_GHOST = -320;
int POSITION_MUSEUM = 0;
int POSITION_KHAN = -240;
int POSITION_PHONE = -490;

// FINAL QUESTION: starting position of the icons
int POSITION_SKULL = 100;
int POSITION_FOOD = 36;
int POSITION_SHIP = -25;
int POSITION_WEAPON = -89;
int POSITION_JEWEL = -155;
int POSITION_PLANT = -218;
int POSITION_FLAG = -282;
int POSITION_INSTRUMENT = -345;
int POSITION_ANIMAL = -413;

// FINAL QUESTION: starting position of the text
int POSITION_QUESTION_1 = 23;
int POSITION_QUESTION_2 = -30;
int POSITION_QUESTION_3 = -104;
int POSITION_QUESTION_4 = -136;
int POSITION_QUESTION_5 = -224;
int POSITION_QUESTION_6 = -275;

// STARTING millisec per le foto
int STARTING_QUESTION_1;
int STARTING_QUESTION_2;
int STARTING_QUESTION_3;
int STARTING_QUESTION_4;
int STARTING_QUESTION_5;

// GALLERY MUSEUMS animation: starting posistions
int POSITION_ACCADEMIA = 58;
int POSITION_CORRER = -180;
int POSITION_CAPESARO = -420;

```

```
// GALLERY PICTURES animation: starting posistions
int POSITION_SHIP_PIC = 58;
int POSITION_FLAG_PIC = -180;
int POSITION_PLANT_PIC = -420;

// IMAGES /////////////////////////////////
PIImage cornice_storta;
PIImage exclamation_mark;
PIImage final_mask;
PIImage final_mask_testo;
PIImage final_icone;
PIImage final_selection;
PIImage final_skull;
PIImage final_food;
PIImage final_jewel;
PIImage final_plant;
PIImage final_weapon;
PIImage final_animal;
PIImage final_ship;
PIImage final_instrument;
PIImage final_flag;
PIImage final_screen;
PIImage frecce_sx;
PIImage frecce_dx;
PIImage fumini;
PIImage game_mode;
PIImage griglia_icone;
PIImage i_animal;
PIImage i_animal_piccolo;
PIImage i_flag;
PIImage i_flag_piccolo;
PIImage i_food;
PIImage i_food_piccolo;
PIImage i_instrument;
PIImage i_instrument_piccolo;
PIImage i_jewel;
PIImage i_jewel_piccolo;
PIImage i_plant;
PIImage i_plant_piccolo;
PIImage i_ship;
PIImage i_ship_piccolo;
PIImage i_skull;
PIImage i_skull_piccolo;
PIImage i_weapon;
PIImage i_weapon_piccolo;
PIImage icona_stanza;
PIImage icona_quadro;
PIImage icona_spook;
PIImage imageBackground;
PIImage logo;
PIImage linea_arancione;
PIImage museo;
PIImage nuvola_piccola;
PIImage nuvola_grande;
PIImage pop_up_nome;
PIImage quadro02;
PIImage quadro03;
PIImage quadro05;
PIImage quadro06;
PIImage quadro08;
PIImage quadro14;
PIImage quadro15;
PIImage quadro17;
PIImage quadro18;
PIImage quadro23;
PIImage quadro25;
PIImage quadro26;
PIImage quadro28;
PIImage quadro33;
```

```

PImage quadro35;
PImage quadro37;
PImage room_complete;
PImage selezione_grande_1;
PImage selezione_grande_2;
PImage select_1_1;
PImage select_1_2;
PImage select_1_3;
PImage select_2_1;
PImage select_2_2;
PImage select_2_3;
PImage select_3_1;
PImage select_3_2;
PImage select_3_3;
PImage sfondo;
PImage spook Felice;
PImage spook_triste;
PImage spook_esulta;
PImage spook_paura;
PImage spook_saluta;
PImage spook_racconta;
PImage spook_giravolta;
PImage spook_occhei;
PImage spook_piange;
PImage story_01;
PImage story_02;
PImage story_03;

PImage gallery_musei;
PImage gallery_foto;
PImage icona_museo;

// FONTS /////////////////
PFont din_black_12; // small text bold -> section titles & softkeys
menu
PFont din_black_12_brown; // -> painting titles (list)
PFont din_black_12_white; // -> selected paiting titles
(list)
PFont din_light_12_light_brown; // small text light-> application name + score
PFont din_light_12; // -> section subtitles
PFont din_light_12_brown; // -> paiting authors (list)
PFont din_light_12_white; // -> selected paiting authors
(list)
PFont din_light_15_white; // big text light -> "application goes stand-by"
PFont din_light_15_brown; // -> normal text
PFont din_light_15_yellow; // -> pop-up text
PFont din_black_15; // big text bold -> paiting authors
PFont din_black_15_brown; // big text bold -> "the end" in final questio

// COLORS ///////////////
color brown;
color light_brown;
color orange;
color white;
color yellow;
color black;
color dark_yellow;

// CLUES & PAITINGS ///////////////
//// each line is a paiting
//// each column is a true or false clue
int icons_painting[][] = {
{
    0,0,1,1,0,1,1,0,1
}
{
}
}

```

```

    0,0,0,0,1,1,0,1,1
    }
    {
        0,0,0,1,0,1,1,0,1
    }
    {
        0,0,0,1,0,1,0,1,0
    }
};

int paintings_found[] = {                                // found paitings (1) cannot be selected
    0,0,0,0};

int paintings_wrong[] = {                             // found paitings (1) cannot be selected
    0,0,0,0};

int correct_answers[] = {                            // correct answers to final question
    0,7,2,6,3};

int given_answers[] = {                            // given answers to final question
    0,0,0,0,0};                                     // 0 -> not answered yet ///// 1-> wrong answer /////
2 -> correct

String titolo_quadro[] = {
    "L'ARRIVO DEI PELLEGRINI", "SANTA VENERANDA IN TRONO", "APOTEOSI DEI DIECIMILA MARTIRI", "PALA
DI SAN GIOBBE"};
String autore_quadro[] = {
    "Carpaccio (1490)", "Bastiani (1470)", "Carpaccio (1515)", "Bellini (1487)"};

////////////////////////////// MODES ///////////////////////////////
// MODES
////////////////////////////// NAMING GAME-MODES ///////////////////////////////
// NAMING GAME-MODES
int MODE_SINGLE_PLAYER = 1;
int MODE_TIME_CHALLENGE = 2;
int MODE_MULTIPLAYER = 3;
int MODE_GALLERY = 4;

// NAMING SECTIONS
int START_SCREEN = 0;
int REGISTRATION = 1;
int STORY_01 = 2;
int PLAY_OR_GALLERY = 15;
int MUSEUM_LOCALIZATION = 3;
int MENU_GAME_MODE = 4;
int NARRATIVE = 5;
int MUSEUM_ROOM = 6;
int ICONS = 7;
int TAKE_PHOTO = 8;
int GOT_CLUES = 9;
int ROOM_COMPLETE = 10;
int STAND_BY_TO_EXIT = 11;
int EXIT_MUSEUM = 12;
int FINAL_QUESTION = 13;
int LAST_SCREEN = 14;
int TIME_IS_UP = 20;                                // Time mode
int MUSEUM_SELECTION = 30;
int PICS_BROWSING = 31;

//during game focus (used for menu animation)
int gameModeFocus = MODE_SINGLE_PLAYER;

```

```

// NAMING MODES
/// start screens
int LOGO_SCREEN = 0;
int LOGIN = 1;
int REGISTRATION_POPUP = 2;

// story01
int HI_IM_SPOOK = 0;
int IM_DETECTIVE = 1;
int HELP_GHOST = 2;
int REST_IN_PEACE = 3;
int WOULD_YOU_HELP = 4;

/// narrative
int IN_THIS_MUSEUM = 0;
int MARCO_POLO_LEFT = 1;
int RECOGNIZE_CLUES = 2;
int AT_THE_END = 3;
int DONT_GET_WRONG = 4;
int READY = 5;
int ENTER_A_ROOM = 6;
int STAND_BY = 7;

/// museum_room
int PAINT_1 = 0;
int PAINT_2 = 1;
int PAINT_3 = 2;
int PAINT_4 = 3;

/// icons
int SKULL = 0;
int FOOD = 1;
int SHIP = 2;
int WEAPON = 3;
int JEWEL = 4;
int PLANT = 5;
int FLAG = 6;
int INSTRUMENT = 7;
int ANIMAL = 8;

/// final question
int QUESTION_1 = 0;
int QUESTION_2 = 1;
int QUESTION_3 = 2;
int QUESTION_4 = 3;
int QUESTION_5 = 4;
int QUESTION_6 = 5;

/// last screen
int CASE_SOLVED = 0;
int GAME_COMPLETE = 1;

/// menu
int BACK_TO_GAME = 0;
int GALLERY = 1;
int RESTART_THE_GAME = 2;
int EXIT = 4;

/// game or play
int PLAY_THE_GAME = 0;
int VIEW_GALLERY = 1;

/// time
int TIME = 8;
int TIME_READY = 9;
int TIME_ENTER_A_ROOM = 10;

```

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/// museum selection
int ACCADEMIA = 0;
int CORRER = 1;
int CAPESARO = 2;

/// picture browsing
int SHIP_PIC = 0;
int FLAG_PIC = 1;
int PLANT_PIC = 2;

////////////////////////////////////////////////////////////////
// State, Information Collected From Use (Variables)
////////////////////////////////////////////////////////////////

int sezione = START_SCREEN;           // starting SECTION
int mode = LOGO_SCREEN;              // starting FOCUS
int modeMenu = BACK_TO_GAME;         // starting MENU
int modeIcon = 0;                   // starting ICON
int gameMode = 0;                   // starting GAME MODE

int museumSelection = 0;             // starting MUSEUM SELECTION
int picsBrowse = 0;                 // starting PICTURE BROWSING

////////////////////////////////////////////////////////////////
// FUNCTIONS
////////////////////////////////////////////////////////////////

// LOAD IMAGES
void loadImages() {
    cornice_storta = loadImage("cornice_storta.png");
    exclamation_mark = loadImage("exclamation_mark.png");
    final_mask = loadImage("final_mask.png");
    final_mask_testo = loadImage("final_mask_testo.png");
    final_icone = loadImage("final_icone.png");
    final_selection = loadImage("final_selection.png");
    final_skull = loadImage("final_skull.gif");
    final_food = loadImage("final_food.gif");
    final_ship = loadImage("final_ship.gif");
    final_plant = loadImage("final_plant.gif");
    final_jewel = loadImage("final_jewel.gif");
    final_weapon = loadImage("final_weapon.gif");
    final_flag = loadImage("final_flag.gif");
    final_instrument = loadImage("final_instrument.gif");
    final_animal = loadImage("final_animal.gif");
    final_screen = loadImage("final_screen.png");
    frecce_sx = loadImage("frecce_sx.png");
    frecce_dx = loadImage("frecce_dx.png");
    fumini = loadImage("fumini.png");
    griglia_icone = loadImage("griglia_icone.png");
    i_animal = loadImage("i-animal.png");
    i_animal_piccolo = loadImage("i-animal-piccolo.png");
    i_flag = loadImage("i-flag.png");
    i_flag_piccolo = loadImage("i-flag-piccolo.png");
    i_food = loadImage("i-food.png");
    i_food_piccolo = loadImage("i-food-piccolo.png");
    i_instrument = loadImage("i-instrument.png");
    i_instrument_piccolo = loadImage("i-instrument-piccolo.png");
    i_jewel = loadImage("i-jewel.png");
    i_jewel_piccolo = loadImage("i-jewel-piccolo.png");
    i_plant = loadImage("i-plant.png");
    i_plant_piccolo = loadImage("i-plant-piccolo.png");
    i_ship = loadImage("i-ship.png");
    i_ship_piccolo = loadImage("i-ship-piccolo.png");
}

```

```

i_weapon = loadImage("i-weapon.png");
i_weapon_piccolo = loadImage("i-weapon-piccolo.png");
i_skull = loadImage("i-skull.png");
i_skull_piccolo = loadImage("i-skull-piccolo.png");
icona_stanza = loadImage("icona_stanza.png");
icona_quadro = loadImage("icona_quadro.png");
icona_spook = loadImage("icona_spook.png");
imageBackground = loadImage("imageBackground.png");
logo = loadImage("logo.png");
linea_arancione = loadImage("linea_arancione.png");
game_mode = loadImage("game-mode.png");
museo = loadImage("museo.png");
nuvola_piccola = loadImage("nuvola-piccola.png");
nuvola_grande = loadImage("nuvola-grande.png");
pop_up_nome = loadImage("pop_up_nome.png");
quadro02 = loadImage("quadro02.png");
quadro03 = loadImage("quadro03.png");
quadro05 = loadImage("quadro05.png");
quadro06 = loadImage("quadro06.png");
quadro08 = loadImage("quadro08.png");
quadro14 = loadImage("quadro14.png");
quadro15 = loadImage("quadro15.png");
quadro17 = loadImage("quadro17.png");
quadro18 = loadImage("quadro18.png");
quadro23 = loadImage("quadro23.png");
quadro25 = loadImage("quadro25.png");
quadro26 = loadImage("quadro26.png");
quadro28 = loadImage("quadro28.png");
quadro33 = loadImage("quadro33.png");
quadro35 = loadImage("quadro35.png");
quadro37 = loadImage("quadro37.png");
room_complete = loadImage("room_complete.png");
select_1_1 = loadImage("select_1.1.png");
select_1_2 = loadImage("select_1.2.png");
select_1_3 = loadImage("select_1.3.png");
select_2_1 = loadImage("select_2.1.png");
select_2_2 = loadImage("select_2.2.png");
select_2_3 = loadImage("select_2.3.png");
select_3_1 = loadImage("select_3.1.png");
select_3_2 = loadImage("select_3.2.png");
select_3_3 = loadImage("select_3.3.png");
selezione_grande_1 = loadImage("selezione_grande_1.png");
selezione_grande_2 = loadImage("selezione_grande_2.png");
spook_felice = loadImage("spook-felice.png");
spook_triste = loadImage("spook-triste.png");
spook_esulta = loadImage("spook-esulta.png");
spook_saluta = loadImage("spook-saluta.png");
spook_racconta = loadImage("spook-racconta.png");
spook_paura = loadImage("spook-paura.png");
spook_giravolta = loadImage("spook-giravolta.png");
spook_occhei = loadImage("spook-occhei.png");
spook_piange = loadImage("spook-piange.png");
sfondo = loadImage("sfondo.png");
story_01 = loadImage("story_01.png");
story_02 = loadImage("story_02.png");
story_03 = loadImage("story_03.png");

gallery_musei = loadImage("gallery_musei.png");
gallery_foto = loadImage("gallery_foto.png");
icona_museo = loadImage("icona_museo.png");
}

// LOAD FONTS  /////////////////////////////////

```

```

void loadFonts()
{
    // menu fonts
    din_black_12 = loadFont("din_black_12.mvlw", orange);
    din_black_12_brown = loadFont("din_black_12.mvlw", brown);
}

```

```

din_black_12_white = loadFont("din_black_12.mvlw", white);
din_light_12 = loadFont("din_light_12.mvlw", orange);
din_light_12_light_brown = loadFont("din_light_12.mvlw", light_brown);
din_light_12_brown = loadFont("din_light_12.mvlw", brown);
din_light_12_white = loadFont("din_light_12.mvlw", white);
din_light_15_brown = loadFont("din_light_15.mvlw", brown);
din_light_15_yellow = loadFont("din_light_15.mvlw", yellow);
din_light_15_white = loadFont("din_light_15.mvlw", white);
din_black_15 = loadFont("din_black_15.mvlw", orange);
din_black_15_brown = loadFont("din_black_15.mvlw", brown);
}

// MOVEMENT FUNCION    /////////////////////////////////
int easeTo(int currentOriginal, int targetOriginal, int speed)
{
    // make values large for math
    int current = currentOriginal * 1000; // make current value large for math (e.g. 2 becomes 2000)
    int target = targetOriginal * 1000; // make target value large for math (e.g. 33 becomes 33000)
    // do math to calculate our next value
    int change = target - current; // find out how much change there is (e.g. 33000 - 2000 = 31000)
    int changeLittle = change / speed; // make the change a little change (e.g. 31000 / 4 = 7750)
    int next = current + changeLittle; // change the current value a little (e.g. 2000 + 7750 = 9750)
    // make next value small for screen
    next = next / 1000;
    // if our little change was so little that we didn't move...
    if(next == currentOriginal){
        next = targetOriginal; // our next step is our target
    }
    return next; // return our next value (e.g. 9750 / 1000 = 9, remember that we started with 2)
}

// SELECTING PHOTOS (FINAL QUESTION)    ///////////////////////////////
void selectPicture(int imgX, int imgY, int iconSelected, int j) {
    if(j==10) j=iconSelected;
    if(j==0) image(final_skull, imgX, imgY);
    if(j==1) image(final_food, imgX, imgY);
    if(j==2) image(final_ship, imgX, imgY);
    if(j==3) image(final_weapon, imgX, imgY);
    if(j==4) image(final_jewel, imgX, imgY);
    if(j==5) image(final_plant, imgX, imgY);
    if(j==6) image(final_flag, imgX, imgY);
    if(j==7) image(final_instrument, imgX, imgY);
    if(j==8) image(final_animal, imgX, imgY);
}

// CAMERA FUNCTION    ///////////////////////////////
void showCamera(int x, int y, int w, int h, PImage imageBackground) {
    noLoop();
    myCapture.show(x,y,w,h);
    image(imageBackground, 0, 0);
}

void hideCamera() {
    myCapture.hide();
    loop();
}

void readCamera() {
    myCapture.read();
}

```

```

void destroy() {
    myCapture.close();
}

// TIME MODE VAR /////////////////////////////////
int starTime = 0;           // start-playing-game time
int endTime = 0;            // start-playing-game time
int sizeX = 5;              // size rect
int sizeY = 15;             // size rect
int drawX = 0;               // x position
int drawY = 0;               // y position
int traslay = 53;            // start y position
int sbaglio = 0;
int timeMax = 360000;        // room time

PIImage cursore;

// TIME MODE FUNCTIONS ///////////////////////////////
// TIME CHECK ///////////////////////////////

void timeCheck(){
    if((millis() - starTime) > timeMax){
        sezione = TIME_IS_UP;
    }
}

void drawCursor(){
    int tempo = millis()-starTime;

    //image(cursore,236,0,sizeX,sizeY,0,42);

    drawX = (((tempo/1000)*2)/3);
    drawY = (traslay - (((tempo/1000)*2)/45));
    println(drawX + " - " + drawY);
    fill(brown);
    rect(drawX, drawY, sizeX, sizeY);
}

// **** GALLERY ****
// **** GALLERY ****
// **** GALLERY ****

void drawGallery (int sezione, int mode) // sezione, sottosezione
{
    // SELECT MUSEUM
    if(sezione == MUSEUM_SELECTION) {

        drawSoftKeys(true,true,false);

        // titolo
        image(linea_arancione, 0, 46);
        textFont(din_black_12);
        textAlign(LEFT);
        text("CHOOSE YOUR MUSUEM", 32, 34);

        // ACCADEMIA ///////////////////////////////
        if(mode == ACCADEMIA) {
            // frecce
            image(frecce_dx, 220, 160);

```

```

// image
modeX = easeTo(modeX, POSITION_ACCADEMIA, easeSpeed);
image(gallery_musei, modeX, 100);

textFont(din_light_15_brown);
text("Museo Ca Pesaro", 32, 87);
}

// CORRER /////////////////////////////////
if(mode == CORRER) {
    // freccine
    image(frecce_sx, 5, 160);
    image(frecce_dx, 220, 160);

    //iamge
    modeX = easeTo(modeX, POSITION_CORRER, easeSpeed);
    image(gallery_musei, modeX, 100);

    textFont(din_light_15_brown);
    text("Museo Correr", 32, 87);
}

// CA PESARO ///////////////////////////////
if(mode == CAPESARO) {
    // freccine
    image(frecce_sx, 5, 160);

    // image
    modeX = easeTo(modeX, POSITION_CAPESARO, easeSpeed);
    image(gallery_musei, modeX, 100);

    textFont(din_light_15_brown);
    text("Museo dell'Accademia", 32, 87);
}
}

// ICONS SCREEN
*****
if(sezione == ICONS) {

    // titolo
    image(lunga_arancione, 0, 46);
    image(icona_museo, 6, 24);

    textAlign(LEFT);
    textFont(din_black_12);
    text("GALLERY", 32, 34);
    textFont(din_light_12);
    text("Museo Correr", 32, 46);

    //testo
    textFont(din_light_15_brown);
    text("Select a clue and browse your pictures", 32, 72, 180, 150);

    // grafica icone
    image(griglia_icone, 0, 0);

    // SKULL
    if(modeIcon == SKULL) {
        // image
        image(select_1_1, 32, 114);
    }

    // FOOD
    if(modeIcon == FOOD) {
        // image
        image(select_1_2, 92, 122);
    }
}

```

```

// SHIP
if(modeIcon == SHIP) {
    // image
    image(select_1_3, 150, 122);
}

// WEAPON
if(modeIcon == WEAPON) {
    // image
    image(select_2_1, 32, 182);
}

// JEWEL
if(modeIcon == JEWEL) {
    // image
    image(select_2_2, 92, 182);
}

// PLANT
if(modeIcon == PLANT) {
    // image
    image(select_2_3, 149, 182);
}

// FLAG
if(modeIcon == FLAG) {
    // image
    image(select_3_1, 32, 239);
}

// INSTRUMENT
if(modeIcon == INSTRUMENT) {
    // image
    image(select_3_2, 92, 239);
}

// ANIMAL
if(modeIcon == ANIMAL) {
    // image
    image(select_3_3, 149, 239);
}

// icone
image(i_skull, 46, 128);
image(i_food, 100, 129);
image(i_ship, 152, 127);
image(i_weapon, 37, 185);
image(i_jewel, 100, 185);
image(i_plant, 155, 186);
image(i_flag, 46, 242);
image(i_instrument, 100, 242);
image(i_animal, 153, 242);

drawSoftKeys(true,true,true);

}

// SELECT PICTURE
*****
if(sezione == PICS_BROWSING) {

    drawSoftKeys(true,true,false);

    // titolo
    image(linea_arancione, 0, 46);
    textFont(din_black_12);
    textAlign(LEFT);
    text("PICTURE BROWSING", 32, 34);
}

```

```

// SHIP /////////////////////////////////
if(mode == SHIP_PIC) {
    // freccine
    image(frecce_dx, 220, 160);

    // image
    modeX = easeTo(modeX, POSITION_SHIP_PIC, easeSpeed);
    image(gallery_foto, modeX, 100);

    textFont(din_black_12_brown);
    text("PALA DI SAN GIOBBE", 32, 78);
    textFont(din_light_12_brown);
    text("Bellini (1487)", 32, 90);
    textFont(din_light_12_brown);
    text("Bushes here were used as a mimetic pattern for soldiers sieging the town", 32, 250,
180, 60);
}

// FLAG /////////////////////////////////
if(mode == FLAG_PIC) {
    // freccine
    image(frecce_sx, 5, 160);
    image(frecce_dx, 220, 160);

    // iamge
    modeX = easeTo(modeX, POSITION_FLAG_PIC, easeSpeed);
    image(gallery_foto, modeX, 100);

    textFont(din_black_12_brown);
    text("SANTA VENERANDA IN TRONO", 32, 78);
    textFont(din_light_12_brown);
    text("Bastiani (1470)", 32, 90);
    textFont(din_light_12_brown);
    text("Aleppo Pine is an evergreen plant that Marco Polo has brought in Venice from Middle
East", 32, 250, 180, 60);
}

// PLANT ///////////////////////////////
if(mode == PLANT_PIC) {
    // freccine
    image(frecce_sx, 5, 160);

    // image
    modeX = easeTo(modeX, POSITION_PLANT_PIC, easeSpeed);
    image(gallery_foto, modeX, 100);

    textFont(din_black_12_brown);
    text("L'ARRIVO DEI PELLEGRINI", 32, 78);
    textFont(din_light_12_brown);
    text("Carpaccio (1490)", 32, 90);
    textFont(din_light_12_brown);
    text("Medlar trees are Chinese plants that Qubilay Khan loved", 32, 250, 180, 60);
}

}

// DRAW SOFTKEYS ///////////////////////////////
//// draws softkeys instruction (menu / OK / back) if true

void drawSoftKeys(boolean left, boolean center, boolean right) {
    textFont(din_black_12);
    if(left) {
        activeMenu = true;
        textAlign(LEFT);
        text("OTHER?", 10, 311);
    }
}

```

```

else activeMenu = false;
if(center) {
  textAlign(CENTER);
  text("GO", width/2, 311);
}
if(right) {
  textAlign(RIGHT);
  text("OOPS!", 230, 311);
}
}

// **** START SCREENS ****
// **** REGISTRATION ****
void drawScreens(int sezione, int mode) // sezione, sottosezione
{
  textAlign(LEFT);

  // START SCREEN
  if(sezione == LOGO_SCREEN) {

    // LOGO_SCREEN /////////////////////////////////
    background(0);
    image(logo, 0, 0);
  }

  // REGISTRATION
  if(sezione == REGISTRATION) {

    // screen
    // spook
    spook = new Spook("saluta", frameCount, true);

    drawSoftKeys(false,true,false);

    // text
    image(nuvola_piccola, 12, 75);
    textFont(din_light_15_brown);
    textAlign(LEFT);
    text("Hi! Choose a name to start playing:", 32, 104, 165, 40);

    // nickname
    textFont(din_black_15);
    textAlign(LEFT);
    text(nickname, 32, 150);

    // cursor distance ///////////////////
    distance = 0;
    for(i=0; i<=multitapBufferLength; i++) {
      if(multitapBuffer[i] == 'i' || multitapBuffer[i] == 'l') distance = distance + 4;
      else if(multitapBuffer[i] == 'j') distance = distance + 5;
      else if(multitapBuffer[i] == 'f' || multitapBuffer[i] == 't') distance = distance + 6;
      else if(multitapBuffer[i] == 'r' || multitapBuffer[i] == 's' || multitapBuffer[i] == 'I')
distance = distance + 7;
      else if(multitapBuffer[i] == 'c' || multitapBuffer[i] == 'z') distance = distance + 8;
      else if(multitapBuffer[i] == 'a' || multitapBuffer[i] == 'e' || multitapBuffer[i] == 'k'
|| multitapBuffer[i] == 'v' || multitapBuffer[i] == 'x' || multitapBuffer[i] == 'y' ||
multitapBuffer[i] == 'F' || multitapBuffer[i] == 'J' || multitapBuffer[i] == 'L') distance =
distance + 9;
      else if(multitapBuffer[i] == 'A' || multitapBuffer[i] == 'B' || multitapBuffer[i] == 'C'
|| multitapBuffer[i] == 'D' || multitapBuffer[i] == 'G' || multitapBuffer[i] == 'H' ||

```

```

multitapBuffer[i] == 'K' || multitapBuffer[i] == 'N' || multitapBuffer[i] == 'R' ||
multitapBuffer[i] == 'U' || multitapBuffer[i] == 'V' || multitapBuffer[i] == 'Y') distance =
distance + 11;
    else if(multitapBuffer[i] == 'w' || multitapBuffer[i] == 'N' || multitapBuffer[i] == 'Q')
distance = distance + 12;
    else if(multitapBuffer[i] == 'M') distance = distance + 13;
    else if(multitapBuffer[i] == 'W') distance = distance + 15;
    else if(multitapBuffer[i] == 'w') distance = distance + 16;
    else distance = distance + 10;
}

if(mode == REGISTRATION) {
    // cursor: appears only every 1/2 sec
    strokeWeight(2);
    stroke(brown);
    //if(frameCount%20<=10) line(32+(10*(nickname.length()))), 152,
42+(10*(nickname.length()))), 152);
    if(frameCount%20<=10) line(22+distance, 152, 32+distance, 152);
}

// POP-UP /////////////////////////////////
else if(mode == REGISTRATION_POPUP) {

    // ALERT nickname non inserito
    if(nickname.length() == 0) {
        drawSoftKeys(false, false, true);
        // popup
        image(pop_up_nome, 3, 100);
        textStyle(din_light_15_yellow);
        textAlign(LEFT);
        text("What?? You have no name? How is it possible?!?", 15, 127, 200, 70);
    }
    else {

        drawSoftKeys(false, true, true);

        // popup
        image(pop_up_nome, 3, 100);
        textStyle(din_light_15_yellow);
        textAlign(LEFT);
        text("Is your name "+nickname+"?", 15, 137, 190, 40);
    }
}

// titolo
image(linea_arancione, 0, 46);
textStyle(din_black_12);
textAlign(LEFT);
text("REGISTRATION", 32, 34);
image(icona_spook, 6, 24);

}

// STORY_01 ****
if(sezione == STORY_01) {
    moodSpook = "saluta";
    image(fumini,0,0);

    // HI IM SPOOK ///////////////////////
if(mode == HI_IM_SPOOK) {
    // text
    textStyle(din_light_15_brown);
    textAlign(LEFT);
    text("Hi "+nickname+", I'm Spook.", 32, 72, 190, 70);
}

```

```

// IM A DETECTIVE /////////////////////////////////
if(mode == IM_DETECTIVE) {
    moodSpook = "saluta";
    // text
    textFont(din_light_15_brown);
    textAlign(LEFT);
    text("Hi "+nickname+", I'm Spook.", 32, 72, 190, 70);
    text("I was a detective in the ancient Republic of Venice.", 32, 97, 175, 70);

    // image slide: venice skyline
    X_story = easeTo(X_story, POSITION_VENICE, easeSpeed);
    image(story_01, X_story, 0);
}

// HELP GHOSTS /////////////////////////////////
if(mode == HELP_GHOST) {
    moodSpook = "saluta";
    // text
    textFont(din_light_15_brown);
    textAlign(LEFT);
    text("Now I am trying to help other ghosts find out what happened to them.", 32, 72, 180,
150);

    // image slide
    X_story = easeTo(X_story, POSITION_GHOST, easeSpeed);
    image(story_01, X_story, 0);
}

// REST_IN_PEACE ///////////////////////////////
if(mode == REST_IN_PEACE) {
    moodSpook = "saluta";
    // text
    textFont(din_light_15_brown);
    textAlign(LEFT);
    text("Now I am trying to help other ghosts find out what happened to them.", 32, 72, 180,
150);
    text("They won't rest in peace until they remember their past.", 32, 127, 175, 150);

    // image slide
    X_story = easeTo(X_story, POSITION_GHOST, easeSpeed);
    image(story_01, X_story, 0);
}

// WOULD YOU HELP ///////////////////////////////
if(mode == WOULD_YOU_HELP) {
    moodSpook = "racconta";
    // text
    textFont(din_light_15_brown);
    textAlign(LEFT);
    text("Now I am trying to help other ghosts find out what happened to them.", 32, 72, 180,
150);
    text("They won't rest in peace until they remember their past.", 32, 127, 175, 150);
    text("Would you help me in this mission?", 32, 179, 130, 150);

    // image slide
    X_story = easeTo(X_story, -500, easeSpeed);
    image(story_01, X_story, 0);
}

// spook
spook = new Spook(moodSpook, frameCount, false);

// titolo
image(linea_arancione, 0, 46);
textFont(din_black_12);
textAlign(LEFT);
text("INTRODUCTION", 32, 34);
image(icona_spook, 6, 24);

```

```

    drawSoftKeys(false,true,false);
}

// PLAY_OR_GALLERY /////////////////////////////////
if(sezione == PLAY_OR_GALLERY) {

    // game options
    // PLAY /////////////////////////////////
    if(mode==PLAY_THE_GAME) {
        image(selezione_grande_1, 3, 190);
        textFont(din_black_12_white);
    }
    else {
        textFont(din_black_12_brown);
    }
    text("START PLAYING", 32, 217);

    // EXIT /////////////////////////////////
    if(mode==VIEW_GALLERY) {
        image(selezione_grande_2, 3, 236);
        textFont(din_black_12_white);
    }
    else {
        textFont(din_black_12_brown);
    }
    text("VIEW MY GALLERY", 32, 262);

    // titolo
    image(linea_arancione, 0, 46);
    textFont(din_black_12);
    textAlign(LEFT);
    text("GAME MENU", 32, 34);
    image(icona_spook, 6, 24);

    // spook
    spook = new Spook("racconta", frameCount, false);

    // text
    image(nuvola_piccola, 12, 75);
    textFont(din_light_15_brown);
    textAlign(LEFT);
    text("Now, "+nickname+"... What do you want to do?", 32, 114, 160, 40);

    drawSoftKeys(false,true,false);
}

// MUSEUM LOCALIZATION
*****
if(sezione == MUSEUM_LOCALIZATION) {
    // titolo
    image(linea_arancione, 0, 46);
    textFont(din_black_12);
    textAlign(LEFT);
    text("GALLERIA DELL'ACADEMIA", 32, 34);

    // screen
    textFont(din_light_15_brown);
    textAlign(LEFT);
    text(nickname+", you're now in the Galleria dell'Accademia", 32, 240, 180, 60);
    image(museo, width/2-63, 80);

    drawSoftKeys(false,true,false);
}

```

```

// SELECT GAME MODE
*****
if(sezione == MENU_GAME_MODE) {

    drawSoftKeys(true,true,false);

    // titolo
    image(linea_arancione, 0, 46);
    textFont(din_black_12);
    textAlign(LEFT);
    text("SELECT GAME MODE", 32, 34);

    // SINGLE PLAYER /////////////
    if(mode == MODE_SINGLE_PLAYER) {
        // freccine
        image(frecce_dx, 220, 160);

        // image
        modeX = easeTo(modeX, POSITION_SINGLE, easeSpeed);
        image(game_mode, modeX, 100);

        textFont(din_light_15_brown);
        text("Single Player", 32, 87);
    }

    // TIME CHALLENGE ///////////
    if(mode == MODE_TIME_CHALLENGE) {
        // freccine
        image(frecce_sx, 5, 160);
        image(frecce_dx, 220, 160);

        // iamge
        modeX = easeTo(modeX, POSITION_TIME, easeSpeed);
        image(game_mode, modeX, 100);

        textFont(din_light_15_brown);
        text("Time Challenge", 32, 87);
    }

    // MULTIPLAYER ///////////
    if(mode == MODE_MULTIPLAYER) {
        // freccine
        image(frecce_sx, 5, 160);

        // image
        modeX = easeTo(modeX, POSITION_MULTY, easeSpeed);
        image(game_mode, modeX, 100);

        textFont(din_light_15_brown);
        text("Multiplayer", 32, 87);
    }
}

// ****
// **  MUTLIPLAYER      ****
// ****
void drawMultiplayer (int sezione, int mode) // sezione, sottosezione
{
}

```

```

// **** MENU ****
// ** MENU
// **** MENU ****
// **** MENU ****
void drawMenu (int mode) {
    drawSoftKeys(false,true,true);
    image(fumini,0,0);

    // titolo
    /*image(linea_arancione, 0, 46);
    textAlign(din_black_12);
    textFont(din_black_12);
    text("MENU", 32, 34);
    */
    textAlign(CENTER);

    pushMatrix();
    translate(0,-30);

    // BACK TO GAME /////////////////
    if(modeMenu==BACK_TO_GAME) {
        // selezione
        image(selezione_grande_1, 6, 106);
        textFont(din_black_12_white);
    }
    else {
        textFont(din_black_12_brown);
    }
    text("BACK TO GAME", 120, 133);

    // GALLERY ///////////////
    if(modeMenu==GALLERY) {
        image(selezione_grande_2, 6, 153);
        textFont(din_black_12_white);
    }
    else {
        textFont(din_black_12_brown);
    }
    text("GALLERY", 120, 178);

    // RESTART GAME ///////////////
    if(modeMenu==RESTART_THE_GAME) {
        image(selezione_grande_1, 6, 196);
        textFont(din_black_12_white);
    }
    else {
        textFont(din_black_12_brown);
    }
    text("RESTART GAME", 120, 223);

    // EXIT ///////////////
    if(modeMenu==EXIT) {
        image(selezione_grande_2, 6, 242);
        textFont(din_black_12_white);
    }
    else {
        textFont(din_black_12_brown);
    }
    text("EXIT", 120, 268);
    popMatrix();
}

```

```

// ****
// ** SINGLE PLAYER
// ****
// ****

void drawSinglePlayer (int sezione, int mode) // sezione, sottosezione
{

    // NARRATIVE
    ****
    if(sezione == NARRATIVE) {

        image(fumini,0,0);

        // IN_THIS_MUSEUM /////////////
        if(mode == IN_THIS_MUSEUM) {
            moodSpook = "saluta";           // changes spook's mood in the spook animation

            // text
            textAlign(LEFT);
            text("In this museum we can find some hints for the spirit of HaoDong, daughter of Qubilay Khan and bride of Marco Polo.", 32, 72, 180, 200);

            // image slide: museum
            X_story_2 = easeTo(X_story_2, POSITION_MUSEUM, easeSpeed);
            image(story_02, X_story_2, 0);
        }

        // SIGNORA MARCO POLO ///////////
        if(mode == MARCO_POLO_LEFT) {
            moodSpook = "triste";

            // text
            textAlign(LEFT);
            text("Someone made her think that Marco Polo had left her forever. She still cannot find peace about it... But I am sure there is something more...", 32, 72, 180, 200);

            // barchetta che passa
            if(Xbarchetta <= 300) Xbarchetta = Xbarchetta + 1;
            image(story_03, Xbarchetta, 208);

            // image slide: signora marco polo
            X_story_2 = easeTo(X_story_2, POSITION_KHAN, easeSpeed);
            image(story_02, X_story_2, 0);
        }

        // RECOGNIZE_CLUES ///////////
        if(mode == RECOGNIZE_CLUES) {
            moodSpook = "felice";

            // image slide: mobile phone
            //X_story_2 = easeTo(X_story_2, POSITION_PHONE, easeSpeed);
            //image(story_02, X_story_2, 0);

            // text
            textAlign(LEFT);
            text("Recognize the clues hidden in the details of the paintings.", 32, 72, 180, 150);
        }
    }
}

```

```

// AT_THE_END /////////////////////////////////
if(mode == AT_THE_END) {
    moodSpook = "felice";

    // image slide
    //X_story_2 = easeTo(X_story_2, -700, easeSpeed);
    //image(story_02, X_story_2, 0);

    // text
    textAlign(LEFT);
    text("Recognize the clues hidden in the details of the paintings.", 32, 72, 180, 150);
    text("At the end we'll try to piece together the story of the poor Hao Dong.", 32, 127,
175, 150);

}

// DONT_GET_WRONG ///////////////////////////////
if(mode == DONT_GET_WRONG) {
    moodSpook = "paura";

    // text
    textAlign(LEFT);
    text("Remember not to get the wrong clues otherwise we will not be able to use that
painting as evidence.", 32, 72, 180, 150);

    // image exclamation mark
    image(exclamation_mark, 86, 160);
}

// READY ///////////////////////////////
if(mode == READY) {
    moodSpook = "racconta";

    // text
    textAlign(LEFT);
    text("Remember not to get the wrong clues otherwise we will not be able to use that
painting as evidence.", 32, 72, 180, 150);
    text("Are you ready?", 32, 155, 175, 150);

}

// ENTER A ROOM ///////////////////////////////
if(mode == ENTER_A_ROOM) {
    moodSpook = "felice";

    // text
    textAlign(LEFT);
    text("Remember not to get the wrong clues otherwise we will not be able to use that
painting as evidence.", 32, 72, 180, 150);
    text("Are you ready?.", 32, 155, 175, 150);
    text("Enter the first room to start playing.", 32, 177, 120, 150);
}

// drawing spook
spook = new Spook(moodSpook, frameCount, false);

// titolo
image(linea_arancione, 0, 46);
textAlign(DATELINE);
text("INTRODUCTION", 32, 34);
image(icona_spook, 6, 24);

drawSoftKeys(false,true,false);

```

```

// STAND_BY /////////////////////////////////
if(mode == STAND_BY) {

    background(0);           // black background
    // text
    textFont(din_light_15_white);
    textAlign(LEFT);
    text("The application goes stand-by until the child enters a room.", 32, 157, 175, 150);
}

}

// MUSEUM_ROOM
*****
if(sezione == MUSEUM_ROOM) {

    drawSoftKeys(true,true,false);

    // titolo
    image(linea_arancione, 0, 46);
    textFont(din_black_12);
    textAlign(LEFT);
    text("ROOM 14", 32, 34);
    image(icona_stanza, 6, 24);

    // testo
    textFont(din_light_15_brown);
    text("Take a look around: you can find...", 32, 72, 190, 70);

    // paintings list
    // 1 /////////////////////////////////
    if(mode==PAINT_1) {
        // selezione
        image(selezione_grande_1, 3, 106);
        textFont(din_black_12_white);
    }
    else {
        textFont(din_black_12_brown);
    }
    if(paintings_found[PAINT_1] == 0) {
        image(icona_quadro, 6, 117);
    }
    text("L'ARRIVO DEI PELLEGRINI", 32, 128);

    if(mode==PAINT_1) {
        textFont(din_light_12_white);
    }
    else {
        textFont(din_light_12_brown);
    }
    text("Carpaccio (1490)", 32, 140);

    // 2 /////////////////////////////////
    if(mode==PAINT_2) {
        image(selezione_grande_2, 3, 153);
        textFont(din_black_12_white);
    }
    else {
        textFont(din_black_12_brown);
    }
    if(paintings_found[PAINT_2] == 0) {
        image(icona_quadro, 6, 162);
    }
    text("SANTA VENERANDA IN TRONO", 32, 173);
    if(mode==PAINT_2) {
        textFont(din_light_12_white);
    }
    else {

```

```

    textAlign(CENTER);
    textFont(din_light_12_brown);
}
text("Bastiani (1470)", 32, 185);

// 3 /////////////////////////////////
if(mode==PAINT_3) {
    image(selezione_grande_1, 3, 196);
    textFont(din_black_12_white);
}
else {
    textFont(din_black_12_brown);
}
if(paintings_found[PAINT_3] == 0) {
    image(icona_quadro, 6, 207);
}
text("APOTEOSI DEI DIECIMILA MARTIRI", 32, 218);
if(mode==PAINT_3) {
    textFont(din_light_12_white);
}
else {
    textFont(din_light_12_brown);
}
text("Carpaccio (1515)", 32, 230);

// 4 /////////////////////////////////
if(mode==PAINT_4) {
    image(selezione_grande_2, 3, 242);
    textFont(din_black_12_white);
}
else {
    textFont(din_black_12_brown);
}
if(paintings_found[PAINT_4] == 0) {
    image(icona_quadro, 6, 252);
}
text("PALA DI SAN GIOBBE", 32, 263);
if(mode==PAINT_4) {
    textFont(din_light_12_white);
}
else {
    textFont(din_light_12_brown);
}
text("Bellini (1487)", 32, 275);
}

// ICONS SCREEN
*****
if(sezione == ICONS) {

    // titolo
    image(linea_arancione, 0, 46);
    image(icona_quadro, 6, 24);

    textAlign(LEFT);
    textFont(din_black_12);
    text(titolo_quadro[mode], 32, 34);
    textFont(din_light_12);
    text(autore_quadro[mode], 32, 46);

    // testo
    textFont(din_light_15_brown);
    text("There are ", 32, 85);
    // conta indizi
    clues = 0;
    for(i=0;i<=8;i++) {
        if(Icons_painting[mode][i] == 1) clues += 1;
    }
    textFont(din_black_15);
}

```

```

text(""+clues+" ", 105, 85);
textFont(din_light_15_brown);
text("clues. Do you", 117, 85);
text("see any ", 32, 102);

// grafica icone
image(griglia_icone, 0, 0);

// SKULL
if(modeIcon == SKULL) {
    textFont(din_black_15);
    text("SKULL", 91, 102);
    textFont(din_light_15_brown);
    text("?", 142, 102);
    // image
    image(select_1_1, 32, 114);
}

// FOOD
if(modeIcon == FOOD) {
    textFont(din_black_15);
    text("FOOD", 91, 102);
    textFont(din_light_15_brown);
    text("?", 136, 102);
    // image
    image(select_1_2, 92, 122);
}

// SHIP
if(modeIcon == SHIP) {
    textFont(din_black_15);
    text("SHIP", 91, 102);
    textFont(din_light_15_brown);
    text("?", 130, 102);
    // image
    image(select_1_3, 150, 122);
}

// WEAPON
if(modeIcon == WEAPON) {
    textFont(din_black_15);
    text("WEAPON", 91, 102);
    textFont(din_light_15_brown);
    text("?", 162, 102);
    // image
    image(select_2_1, 32, 182);
}

// JEWEL
if(modeIcon == JEWEL) {
    textFont(din_black_15);
    text("JEWEL", 91, 102);
    textFont(din_light_15_brown);
    text("?", 142, 102);
    // image
    image(select_2_2, 92, 182);
}

// PLANT
if(modeIcon == PLANT) {
    textFont(din_black_15);
    text("PLANT", 91, 102);
    textFont(din_light_15_brown);
    text("?", 142, 102);
    // image
    image(select_2_3, 149, 182);
}

// FLAG
if(modeIcon == FLAG) {

```

```

    textFont(din_black_15);
    text("FLAG", 91, 102);
    textFont(din_light_15_brown);
    text("?", 132, 102);
    // image
    image(select_3_1, 32, 239);
}

// INSTRUMENT
if(modeIcon == INSTRUMENT) {
    textFont(din_black_15);
    text("INSTRUMENT", 91, 102);
    textFont(din_light_15_brown);
    text("?", 197, 102);
    // image
    image(select_3_2, 92, 239);
}

// ANIMAL
if(modeIcon == ANIMAL) {
    textFont(din_black_15);
    text("ANIMAL", 91, 102);
    textFont(din_light_15_brown);
    text("?", 154, 102);
    // image
    image(select_3_3, 149, 239);
}

// icone
if(Icons_painting[mode][SKULL] < 2) image(i_skull, 46, 128);
if(Icons_painting[mode][FOOD] < 2) image(i_food, 100, 129);
if(Icons_painting[mode][SHIP] < 2) image(i_ship, 152, 127);
if(Icons_painting[mode][WEAPON] < 2) image(i_weapon, 37, 185);
if(Icons_painting[mode][JEWEL] < 2) image(i_jewel, 100, 185);
if(Icons_painting[mode][PLANT] < 2) image(i_plant, 155, 186);
if(Icons_painting[mode][FLAG] < 2) image(i_flag, 46, 242);
if(Icons_painting[mode][INSTRUMENT] < 2) image(i_instrument, 100, 242);
if(Icons_painting[mode][ANIMAL] < 2) image(i_animal, 153, 242);

drawSoftKeys(true,true,true);

}

// TAKE PHOTOS
*****
if(sezione == TAKE_PHOTO) {

    // show camera
    showCamera(39, 122, 163, 147, imageBackground);

    drawSoftKeys(false,true,true);

    // titolo
    image(linea_arancione, 0, 46);
    image(icona_quadro, 6, 24);

    textAlign(LEFT);
    textFont(din_black_12);
    text(titolo_quadro[mode], 32, 34);
    textFont(din_light_12);
    text(autore_quadro[mode], 32, 46);

    // testo
    textFont(din_light_15_brown);
    text("Take a picture of the ", 32, 85);

    // icone
    if(modeIcon == SKULL) image(i_skull_piccolo, 183, 64);
}

```

```

if(modeIcon == FOOD) image(i_food_piccolo, 183, 62);
if(modeIcon == SHIP) image(i_ship_piccolo, 182, 62);
if(modeIcon == WEAPON) image(i_weapon_piccolo, 182, 64);
if(modeIcon == JEWEL) image(i_jewel_piccolo, 180, 62);
if(modeIcon == PLANT) image(i_plant_piccolo, 183, 64);
if(modeIcon == FLAG) image(i_flag_piccolo, 183, 64);
if(modeIcon == INSTRUMENT) image(i_instrument_piccolo, 183, 64);
if(modeIcon == ANIMAL) image(i_animal_piccolo, 183, 62);
}

// GOT CLUES
*****
if(sezione == GOT_CLUES) {

drawSoftKeys(true,true,false);

// titolo
image(linea_arancione, 0, 46);
image(icona_quadro, 6, 24);

textAlign(LEFT);
textFont(din_black_12);
text(titolo_quadro[mode], 32, 34);
textFont(din_light_12);
text(autore_quadro[mode], 32, 46);

// WELL DONE      /////////////
println("MODE="+mode);
println("MODEICON="+modeIcon);
println("ICONA="+icons_painting[mode][modeIcon]);

if(icons_painting[mode][modeIcon] == 1) {

// cornice con l'indizio
immagineIndizio = mode*10+modeIcon;
if(immagineIndizio == 2)    image(quadro02, 0,0);
if(immagineIndizio == 3)    image(quadro03, 0,0);
if(immagineIndizio == 5)    image(quadro05, 0,0);
if(immagineIndizio == 6)    image(quadro06, 0,0);
if(immagineIndizio == 8)    image(quadro08, 0,0);
if(immagineIndizio == 14)   image(quadro14, 0,0);
if(immagineIndizio == 15)   image(quadro15, 0,0);
if(immagineIndizio == 17)   image(quadro17, 0,0);
if(immagineIndizio == 18)   image(quadro18, 0,0);
if(immagineIndizio == 23)   image(quadro23, 0,0);
if(immagineIndizio == 25)   image(quadro25, 0,0);
if(immagineIndizio == 26)   image(quadro26, 0,0);
if(immagineIndizio == 28)   image(quadro28, 0,0);
if(immagineIndizio == 33)   image(quadro33, 0,0);
if(immagineIndizio == 35)   image(quadro35, 0,0);
if(immagineIndizio == 37)   image(quadro37, 0,0);
image(cornice_storta,0,0);

// spook
spook = new Spook("occhei", frameCount, false);
// text
image(nuvola_piccola, 12, 75);
textFont(din_light_15_brown);
textAlign(LEFT);
text("Well done!!", 32, 104, 165, 40);
text("You have collected a", 32, 120, 165, 40);

// icone
if(modeIcon == SKULL) image(i_skull_piccolo, 98, 138);
if(modeIcon == FOOD) image(i_food_piccolo, 98, 138);
if(modeIcon == SHIP) image(i_ship_piccolo, 98, 138);
if(modeIcon == WEAPON) image(i_weapon_piccolo, 98, 138);
if(modeIcon == JEWEL) image(i_jewel_piccolo, 98, 138);
if(modeIcon == PLANT) image(i_plant_piccolo, 98, 138);
if(modeIcon == FLAG) image(i_flag_piccolo, 98, 138);
}
}

```

```

    if(modeIcon == INSTRUMENT) image(i_instrument_piccolo, 98, 138);
    if(modeIcon == ANIMAL) image(i_animal_piccolo, 98, 138);
}

// ALAS!! /////////////////////////////////
else if(Icons_painting[mode][modeIcon] == 0) {

    //neve(48);
    // spook
    spook = new Spook("piange", frameCount, true);
    // text
    image(nuvola_grande, 12, 75);
    textFont(din_light_15_brown);
    textAlign(LEFT);
    text("Alas!", 100, 104);
    text("No", 32, 143);
    text("in here...", 95, 143);
    text("You've lost the clues hidden in this painting!", 32, 145, 165, 40);

    // icone
    if(modeIcon == SKULL) image(i_skull_piccolo, 60, 109);
    if(modeIcon == FOOD) image(i_food_piccolo, 60, 109);
    if(modeIcon == SHIP) image(i_ship_piccolo, 56, 109);
    if(modeIcon == WEAPON) image(i_weapon_piccolo, 60, 109);
    if(modeIcon == JEWEL) image(i_jewel_piccolo, 59, 109);
    if(modeIcon == PLANT) image(i_plant_piccolo, 60, 109);
    if(modeIcon == FLAG) image(i_flag_piccolo, 60, 109);
    if(modeIcon == INSTRUMENT) image(i_instrument_piccolo, 61, 109);
    if(modeIcon == ANIMAL) image(i_animal_piccolo, 57, 109);

    // annullo il quadro
    paintings_found[mode] =1;
    paintings_wrong[mode] =1;
}
}

// ROOM COMPLETE
*****
if(sezione == ROOM_COMPLETE) {

    drawSoftKeys(true,true,false);

    // disegno stanzina di sfondo
    image(room_complete, 0, 93);

    // coriandoli
    coriandoli(50, "discesa");

    // titolo
    image(linea_arancione, 0, 46);
    image(icona_stanza, 6, 24);
    textAlign(LEFT);
    textFont(din_black_12);
    text("14", 32, 34);

    // spook
    spook = new Spook("esulta", frameCount, false);
    // text
    image(nuvola_piccola, 12, 75);
    textFont(din_light_15_brown);
    textAlign(LEFT);
    text("Ok, "+nickname+", you've completed this room! Run to the next one!", 32, 104, 165,
70);
}

// STAND_BY *****
if(sezione == STAND_BY_TO_EXIT) {

    background(0);           // black background

```

```

// text
textFont(din_light_15_white);
textAlign(LEFT);
text("The application goes stand-by until the child enters another room or exits the
musem.", 32, 127, 175, 150);
}

// EXIT MUSEUM
*****
if(sezione == EXIT_MUSEUM) {

    // spook
    spook = new Spook("giravolta", frameCount, true);
    // text
    image(nuvola_grande, 12, 75);
    textFont(din_light_15_brown);
    textAlign(LEFT);
    text("We made it!!", 62, 120);
    text("Now we can use the clues you found and solve Hao Dong case! Are you ready?", 32, 128,
165, 100);

    // titolo
    image(linea_arancione, 0, 46);
    image(icona_spook, 6, 24);
    textAlign(LEFT);
    textFont(din_black_12);
    text("INVESTIGATION COMPLETE!", 32, 34);

    drawSoftKeys(true,true,false);
}

// FINAL QUESTION
*****
if(sezione == FINAL_QUESTION) {

    // scrolling bar
    strokeWeight(4);
    //// sfondo
    stroke(dark_yellow);
    line(232,82,232,210);
    //// bar
    stroke(orange);
    if(mode > QUESTION_1) { // barra + corta
        pushMatrix();
        translate(0, 24*scrollingText);
        line(232,82+24*mode,232,210);           // lunghezza barra = tolgo 1/5 di barra per ogni
parte di quiz (5 in tutto) caricata
        popMatrix();
    }
    else line(232,82,232,210);

    // final question test //////////////////////

    pushMatrix();                                // in questo modo (matrix + translate) posso spostare TUTTI i
layer di testo nella matrix
    if(modeXbarra==QUESTION_1) {
        modeYquestion = easeTo(modeYquestion, POSITION_QUESTION_1, easeSpeed);
    }
    if(modeXbarra == QUESTION_2) {
        modeYquestion = easeTo(modeYquestion, POSITION_QUESTION_2, easeSpeed);
    }
    else if(modeXbarra == QUESTION_3) {
        modeYquestion = easeTo(modeYquestion, POSITION_QUESTION_3, easeSpeed);
    }
    else if(modeXbarra == QUESTION_4) {
        modeYquestion = easeTo(modeYquestion, POSITION_QUESTION_4, easeSpeed);
    }
    else if(modeXbarra == QUESTION_5) {
        modeYquestion = easeTo(modeYquestion, POSITION_QUESTION_5, easeSpeed);
    }
}

```

```

}

else if(modeXbarra == QUESTION_6) {
    modeYquestion = easeTo(modeYquestion, POSITION_QUESTION_6, easeSpeed);
}
translate(0, modeYquestion);

textFont(din_light_15_brown);
textAlign(LEFT);
text("Marco Polo, as we", 32, 72);
text("guessed, had not", 32, 96);
text("left Hao Dong...", 32, 120);
if(mode > QUESTION_1) {
    text("He just", 155, 120);
    text(" sailed to Asia with his", 32, 144);
    text("fleet in order to get,", 32, 168);
    text("from Qubilay Khan, the", 32, 192);
    text("wonderful", 32, 216);
    emptyImage = new emptyImage(147-37, 216-19);
}
if(mode > QUESTION_2) {
    if(STARTING_QUESTION_2 < 10) STARTING_QUESTION_2 += 1;
    selectPicture(147-37, 216-19, given_answers[QUESTION_2], STARTING_QUESTION_2);
    text("that", 153, 216);
    text("she had loved since", 32, 240);
    text("she was a child. On his", 32, 264);
    text("way back, Marco's", 32, 288);
    emptyImage = new emptyImage(171, 288-19);
}
if(mode > QUESTION_3) {
    if(STARTING_QUESTION_3 < 10) STARTING_QUESTION_3 += 1;
    selectPicture(171, 288-19, given_answers[QUESTION_3], STARTING_QUESTION_3);
    text("showing the Venetian", 32, 312);
    emptyImage = new emptyImage(32, 336-19);
}
if(mode > QUESTION_4) {
    if(STARTING_QUESTION_4 < 10) STARTING_QUESTION_4 += 1;
    selectPicture(32, 336-19, given_answers[QUESTION_4], STARTING_QUESTION_4);
    text(", was attacked by", 73, 336);
    text("the terrible Turkish", 32, 360);
    text("army, famous for its", 32, 382);
    text("lethal", 32, 406);
    emptyImage = new emptyImage(76, 406-19);
}
if(mode > QUESTION_5) {
    if(STARTING_QUESTION_5 < 10) STARTING_QUESTION_5 += 1;
    selectPicture(76, 406-19, given_answers[QUESTION_5], STARTING_QUESTION_5);
    text(". Marco was", 114, 406);
    text("captured and he spent", 32, 430);
    text("the rest of his life", 32, 454);
    text("thinking about her.", 32, 478);
}
popMatrix();

// mask scrolling text
image(final_mask_testo, 0, 0);      // nell'ultima domanda non devo mascherare il testo in basso!

// ripristino la upper bar
textAlign(LEFT);
textFont(din_light_12_light_brown);
text("Spook", 6, 13);           // application title
textAlign(RIGHT);
text(totPunti+" pt", 234, 13); // points

// the end (se sono all'ultimo quesito
if(mode == QUESTION_6) {
    textFont(din_black_15_brown);
    textAlign(CENTER);
}

```

```

    text("The end", 120, 252);
}

// titolo
image(linea_arancione, 0, 46);
image(icona_spook, 6, 24);
textAlign(LEFT);
textFont(din_black_12);
text("LET'S SOLVE THE CASE", 32, 34);
textFont(din_light_12);
text("Use the clues to complete the story", 32, 46);

// disegno la barra delle icone /////////////
// solo se devo selezionarne una XD (quindi non in QUESTION_1 e 6)
if(mode > QUESTION_1 && mode < QUESTION_6) {

    // selezionatore
    image(final_selection, 85, 217);

    // icone
    // SKULL /**
    if(modeIcon == SKULL) {
        // image
        modeXicon = easeTo(modeXicon, POSITION_SKULL, easeSpeed);
        image(final_icone, modeXicon, 232);
    }

    // FOOD /**
    if(modeIcon == FOOD) {
        // image
        modeXicon = easeTo(modeXicon, POSITION_FOOD, easeSpeed);
        image(final_icone, modeXicon, 232);
    }

    // SHIP /**
    if(modeIcon == SHIP) {
        // image
        modeXicon = easeTo(modeXicon, POSITION_SHIP, easeSpeed);
        image(final_icone, modeXicon, 232);
    }

    // WEAPON /**
    if(modeIcon == WEAPON) {
        // image
        modeXicon = easeTo(modeXicon, POSITION_WEAPON, easeSpeed);
        image(final_icone, modeXicon, 232);
    }

    // JEWEL /**
    if(modeIcon == JEWEL) {
        // image
        modeXicon = easeTo(modeXicon, POSITION_JEWEL, easeSpeed);
        image(final_icone, modeXicon, 232);
    }

    // PLANT /**
    if(modeIcon == PLANT) {
        // image
        modeXicon = easeTo(modeXicon, POSITION_PLANT, easeSpeed);
        image(final_icone, modeXicon, 232);
    }

    // FLAG /**
    if(modeIcon == FLAG) {
        // image
        modeXicon = easeTo(modeXicon, POSITION_FLAG, easeSpeed);
        image(final_icone, modeXicon, 232);
    }
}

```

```

}

// INSTRUMENT /**
if(modeIcon == INSTRUMENT) {
    // image
    modeXicon = easeTo(modeXicon, POSITION_INSTRUMENT, easeSpeed);
    image(final_icone, modeXicon, 232);
}

// ANIMAL /**
if(modeIcon == ANIMAL) {
    // image
    modeXicon = easeTo(modeXicon, POSITION_ANIMAL, easeSpeed);
    image(final_icone, modeXicon, 232);
}

// finta maschera per le icone
image(final_mask, 0, 227);

// frecce
if(modeIcon < 8) image(frecce_dx, 220, 246);
if(modeIcon > 0) image(frecce_sx, 5, 246);

}
drawSoftKeys(true,true,false);
}

// LAST SCREEN
*****
if(sezione == LAST_SCREEN) {

    // coriandoli
    coriandoli(100, "salita");

    // titolo
    image(linea_arancione, 0, 46);
    image(icona_spook, 6, 24);
    textAlign(LEFT);
    textFont(din_black_12);
    text("CONGRATULATIONS!!", 32, 34);

    if(mode==CASE_SOLVED) {
        drawSoftKeys(false,true,false);
        moodSpook = "giravolta";
        image(final_screen, 0, 0);
        // text
        textFont(din_light_15_brown);
        textAlign(LEFT);
        text("Congratulations, "+nickname+"! We solved the case and now Hao Dong can rest happily and in peace!", 32, 72, 190, 200);
    }

    if(mode==GAME_COMPLETE) {
        moodSpook = "saluta";
        textFont(din_light_15_brown);
        textAlign(LEFT);
        text("You've completed the game with", 32, 72, 190, 200);
        textFont(din_black_15_brown);
        textAlign(CENTER);
        text(totPunti+" points", 120, 119);
        textFont(din_light_15_brown);
        textAlign(LEFT);
        text("It was a real pleasure being a detective with you!", 32, 130, 190, 200);
        text("See you!!", 32, 230);
    }

    // spook
    spook = new Spook(moodSpook, frameCount, false);
}

```

```

}

// **** TIME CHALLENGE ****
// **** NARRATIVE ****
void drawTimeChallenge (int sezione, int mode) // sezione, sottosezione
{
    if(sezione == NARRATIVE) {
        image(fumini,0,0);

        if(mode == IN_THIS_MUSEUM) {
            moodSpook = "saluta";           // changes spook's mood in the spook animation

            // text
            textAlign(din_light_15_brown);
            text("In this museum we can find some hints for the spirit of HaoDong, daughter of Qubilay Khan and bride of Marco Polo.", 32, 72, 180, 200);

            // image slide: museum
            X_story_2 = easeTo(X_story_2, POSITION_MUSEUM, easeSpeed);
            image(story_02, X_story_2, 0);
        }

        // SIGNORA MARCO POLO ****
        if(mode == MARCO_POLO_LEFT) {
            moodSpook = "triste";

            // text
            textAlign(din_light_15_brown);
            text("Someone made her think that Marco Polo had left her forever. She still cannot find peace about it... But I am sure there is something more...", 32, 72, 180, 200);

            // barchetta che passa
            if(Xbarchetta <= 300) Xbarchetta = Xbarchetta + 1;
            image(story_03, Xbarchetta, 208);

            // image slide: signora marco polo
            X_story_2 = easeTo(X_story_2, POSITION_KHAN, easeSpeed);
            image(story_02, X_story_2, 0);
        }

        // RECOGNIZE_CLUES ****
        if(mode == RECOGNIZE_CLUES) {
            moodSpook = "felice";

            // image slide: mobile phone
            //X_story_2 = easeTo(X_story_2, POSITION_PHONE, easeSpeed);
            //image(story_02, X_story_2, 0);

            // text
            textAlign(din_light_15_brown);
            text("The mobile phone is a key element in this challenge. It represents the connection between the past and the present, between the spirit of HaoDong and the living world. The phone is also a symbol of communication and technology, which has changed the way we interact with the world around us.", 32, 72, 180, 200);
        }
    }
}

```

```

    text("Recognize the clues in the paintings and take a picture of them.", 32, 72, 180,
150);
}

// AT_THE_END /////////////////////////////////
if(mode == AT_THE_END) {
    moodSpook = "felice";

    // image slide
    //X_story_2 = easeTo(X_story_2, -700, easeSpeed);
    //image(story_02, X_story_2, 0);

    // text
    textFont(din_light_15_brown);
    textAlign(LEFT);
    text("Recognize the clues in the paintings and take a picture of them.", 32, 72, 180,
150);
    text("At the end we'll try to piece together the story of the poor Hao Dong.", 32, 127,
175, 150);

}

// DONT_GET_WRONG ///////////////////////////////
if(mode == DONT_GET_WRONG) {
    moodSpook = "paura";

    // text
    textFont(din_light_15_brown);
    textAlign(LEFT);
    text("Remember not to get the wrong clues otherwise we will not be able to use that
painting as evidence.", 32, 72, 180, 150);

    // image exclamation mark
    image(exclamation_mark, 86, 160);
}

// READY /////////////////////////////////
if(mode == READY) {
    moodSpook = "racconta";

    // text
    textFont(din_light_15_brown);
    textAlign(LEFT);
    text("Remember not to get the wrong clues otherwise we will not be able to use that
painting as evidence.", 32, 72, 180, 150);
    text("Are you ready?", 32, 155, 175, 150);

}

// TIME /////////////////////////////////
if(mode == TIME) {
    moodSpook = "racconta";

    // text
    textFont(din_light_15_brown);
    textAlign(LEFT);
    text("Remember not to get the wrong clues otherwise we will not be able to use that
painting as evidence.", 32, 72, 180, 150);
    text("Find all the clues in time or you will lose the room!", 32, 155, 175, 150);

}

// TIME_READY ///////////////////////////////
if(mode == TIME_READY) {
    moodSpook = "racconta";

    // text
    textFont(din_light_15_brown);
    textAlign(LEFT);

```

```

        text("Remember not to get the wrong clues otherwise we will not be able to use that
painting as evidence.", 32, 72, 180, 150);
        text("Find all the clues in time or you will lose the room!", 32, 155, 170, 150);
        text("Are you ready?", 32, 207, 175, 150);

    }

// TIME_ENTER A ROOM /////////////////////////////////
if(mode == TIME_ENTER_A_ROOM) {
    moodSpook = "felice";

    // text
    textFont(din_light_15_brown);
    textAlign(LEFT);
    text("Remember not to get the wrong clues otherwise we will not be able to use that
painting as evidence.", 32, 72, 180, 150);
    text("Find all the clues in time or you will lose the room!", 32, 155, 170, 150);
    text("Are you ready?", 32, 207, 170, 150);
    text("Enter the first room to start playing.", 32, 229, 120, 150);
}

// ENTER A ROOM ///////////////////////////////
if(mode == ENTER_A_ROOM) {
    moodSpook = "felice";

    // text
    textFont(din_light_15_brown);
    textAlign(LEFT);
    text("Remember not to get the wrong clues otherwise we will not be able to use that
painting as evidence.", 32, 72, 180, 150);
    text("Are you ready?.", 32, 155, 170, 150);
    text("Enter the first room to start playing.", 32, 177, 120, 150);
}

// drawing spook
spook = new Spook(moodSpook, frameCount, false);

// titolo
image(linea_arancione, 0, 46);
textFont(din_black_12);
textAlign(LEFT);
text("INTRODUCTION", 32, 34);
image(icona_spook, 6, 24);

drawSoftKeys(false,true,false);

// STAND_BY ///////////////////////////////
if(mode == STAND_BY) {

    background(0);           // black background
    // text
    textFont(din_light_15_white);
    textAlign(LEFT);
    text("The application goes stand-by until the child enters a room.", 32, 157, 175, 150);
}

// MUSEUM_ROOM
*****
if(sezione == MUSEUM_ROOM) {
    timeCheck();
    drawSoftKeys(true,true,false);

    // titolo
    image(linea_arancione, 0, 46);
    drawCursor();
    textFont(din_black_12);
}

```

```

textAlign(LEFT);
text("ROOM 14", 32, 34);
image(icona_stanza, 6, 24);

// testo
textFont(din_light_15_brown);
text("Take a look around: you can find...", 32, 72, 190, 70);

// paintings list
// 1 /////////////////////////////////
if(mode==PAINT_1) {
  // selezione
  image(selezione_grande_1, 3, 106);
  textFont(din_black_12_white);
}
else {
  textFont(din_black_12_brown);
}
if(paintings_found[PAINT_1] == 0) {
  image(icona_quadro, 6, 117);
}
text("L'ARRIVO DEI PELLEGRINI", 32, 128);

if(mode==PAINT_1) {
  textFont(din_light_12_white);
}
else {
  textFont(din_light_12_brown);
}
text("Carpaccio (1490)", 32, 140);

// 2 /////////////////////////////////
if(mode==PAINT_2) {
  image(selezione_grande_2, 3, 153);
  textFont(din_black_12_white);
}
else {
  textFont(din_black_12_brown);
}
if(paintings_found[PAINT_2] == 0) {
  image(icona_quadro, 6, 162);
}
text("SANTA VENERANDA IN TRONO", 32, 173);
if(mode==PAINT_2) {
  textFont(din_light_12_white);
}
else {
  textFont(din_light_12_brown);
}
text("Bastiani (1470)", 32, 185);

// 3 /////////////////////////////////
if(mode==PAINT_3) {
  image(selezione_grande_1, 3, 196);
  textFont(din_black_12_white);
}
else {
  textFont(din_black_12_brown);
}
if(paintings_found[PAINT_3] == 0) {
  image(icona_quadro, 6, 207);
}
text("APOTEOSI DEI DIECIMILA MARTIRI", 32, 218);
if(mode==PAINT_3) {
  textFont(din_light_12_white);
}
else {
  textFont(din_light_12_brown);
}
text("Carpaccio (1515)", 32, 230);

```

```

// 4 /////////////////////////////////
if(mode==PAINT_4) {
    image(selezione_grande_2, 3, 242);
    textFont(din_black_12_white);
}
else {
    textFont(din_black_12_brown);
}
if(paintings_found[PAINT_4] == 0) {
    image(icona_quadro, 6, 252);
}
text("PALA DI SAN GIOBBE", 32, 263);
if(mode==PAINT_4) {
    textFont(din_light_12_white);
}
else {
    textFont(din_light_12_brown);
}
text("Bellini (1487)", 32, 275);
}

// ICONS SCREEN
*****
if(sezione == ICONS) {

timeCheck();
// titolo
image(linea_arancione, 0, 46);
drawCursor();
image(icona_quadro, 6, 24);

textAlign(LEFT);
textFont(din_black_12);
text(titolo_quadro[mode], 32, 34);
textFont(din_light_12);
text(autore_quadro[mode], 32, 46);

// testo
textFont(din_light_15_brown);
text("There are ", 32, 85);
// conta indizi
clues = 0;
for(i=0;i<=8;i++) {
    if(Icons_painting[mode][i] == 1) clues += 1;
}
textFont(din_black_15);
text(""+clues+" ", 105, 85);
textFont(din_light_15_brown);
text("clues. Do you", 117, 85);
text("see any ", 32, 102);

// grafica icone
image(griglia_icone, 0, 0);

// SKULL
if(modeIcon == SKULL) {
    textFont(din_black_15);
    text("SKULL", 91, 102);
    textFont(din_light_15_brown);
    text("?", 142, 102);
    // image
    image(select_1_1, 32, 114);
}

// FOOD
if(modeIcon == FOOD) {
    textFont(din_black_15);
}

```

```

text("FOOD", 91, 102);
textFont(din_light_15_brown);
text("?", 136, 102);
// image
image(select_1_2, 92, 122);
}

// SHIP
if(modeIcon == SHIP) {
  textFont(din_black_15);
  text("SHIP", 91, 102);
  textFont(din_light_15_brown);
  text("?", 130, 102);
  // image
  image(select_1_3, 150, 122);
}

// WEAPON
if(modeIcon == WEAPON) {
  textFont(din_black_15);
  text("WEAPON", 91, 102);
  textFont(din_light_15_brown);
  text("?", 162, 102);
  // image
  image(select_2_1, 32, 182);
}

// JEWEL
if(modeIcon == JEWEL) {
  textFont(din_black_15);
  text("JEWEL", 91, 102);
  textFont(din_light_15_brown);
  text("?", 142, 102);
  // image
  image(select_2_2, 92, 182);
}

// PLANT
if(modeIcon == PLANT) {
  textFont(din_black_15);
  text("PLANT", 91, 102);
  textFont(din_light_15_brown);
  text("?", 142, 102);
  // image
  image(select_2_3, 149, 182);
}

// FLAG
if(modeIcon == FLAG) {
  textFont(din_black_15);
  text("FLAG", 91, 102);
  textFont(din_light_15_brown);
  text("?", 132, 102);
  // image
  image(select_3_1, 32, 239);
}

// INSTRUMENT
if(modeIcon == INSTRUMENT) {
  textFont(din_black_15);
  text("INSTRUMENT", 91, 102);
  textFont(din_light_15_brown);
  text("?", 197, 102);
  // image
  image(select_3_2, 92, 239);
}

// ANIMAL
if(modeIcon == ANIMAL) {
  textFont(din_black_15);

```

```

    text("ANIMAL", 91, 102);
    textFont(din_light_15_brown);
    text("?", 154, 102);
    // image
    image(select_3_3, 149, 239);
}

// icone
if(Icons_painting[mode][SKULL] < 2) image(i_skull, 46, 128);
if(Icons_painting[mode][FOOD] < 2) image(i_food, 100, 129);
if(Icons_painting[mode][SHIP] < 2) image(i_ship, 152, 127);
if(Icons_painting[mode][WEAPON] < 2) image(i_weapon, 37, 185);
if(Icons_painting[mode][JEWEL] < 2) image(i_jewel, 100, 185);
if(Icons_painting[mode][PLANT] < 2) image(i_plant, 155, 186);
if(Icons_painting[mode][FLAG] < 2) image(i_flag, 46, 242);
if(Icons_painting[mode][INSTRUMENT] < 2) image(i_instrument, 100, 242);
if(Icons_painting[mode][ANIMAL] < 2) image(i_animal, 153, 242);

drawSoftKeys(true,true,true);

}

// TAKE PHOTOS
*****
if(sezione == TAKE_PHOTO) {

    timeCheck();
    // show camera
    showCamera(39, 122, 163, 147, imageBackground);

    drawSoftKeys(false,true,true);

    // titolo
    image(linea_arancione, 0, 46);
    drawCursor();
    image(icona_quadro, 6, 24);

    textAlign(LEFT);
    textFont(din_black_12);
    text(titolo_quadro[mode], 32, 34);
    textFont(din_light_12);
    text(autore_quadro[mode], 32, 46);

    // testo
    textFont(din_light_15_brown);
    text("Take a picture of the ", 32, 85);

    // icone
    if(modeIcon == SKULL) image(i_skull_piccolo, 183, 64);
    if(modeIcon == FOOD) image(i_food_piccolo, 183, 62);
    if(modeIcon == SHIP) image(i_ship_piccolo, 182, 62);
    if(modeIcon == WEAPON) image(i_weapon_piccolo, 182, 64);
    if(modeIcon == JEWEL) image(i_jewel_piccolo, 180, 62);
    if(modeIcon == PLANT) image(i_plant_piccolo, 183, 64);
    if(modeIcon == FLAG) image(i_flag_piccolo, 183, 64);
    if(modeIcon == INSTRUMENT) image(i_instrument_piccolo, 183, 64);
    if(modeIcon == ANIMAL) image(i_animal_piccolo, 183, 62);
}

// GOT CLUES
*****
if(sezione == GOT_CLUES) {

    timeCheck();
    drawSoftKeys(true,true,false);

    // titolo
    image(linea_arancione, 0, 46);
}

```

```

drawCursor();
image(icona_quadro, 6, 24);

textAlign(LEFT);
textFont(din_black_12);
text(titolo_quadro[mode], 32, 34);
textFont(din_light_12);
text(autore_quadro[mode], 32, 46);

// WELL DONE    /////////////////////////
println("MODE="+mode);
println("MODEICON="+modeIcon);
println("ICONA="+icons_painting[mode][modeIcon]);

if(icons_painting[mode][modeIcon] == 1) {

    // cornice con l'indizio
    immagineIndizio = mode*10+modeIcon;
    if(immagineIndizio == 2)      image(quadro02, 0,0);
    if(immagineIndizio == 3)      image(quadro03, 0,0);
    if(immagineIndizio == 5)      image(quadro05, 0,0);
    if(immagineIndizio == 6)      image(quadro06, 0,0);
    if(immagineIndizio == 8)      image(quadro08, 0,0);
    if(immagineIndizio == 14)     image(quadro14, 0,0);
    if(immagineIndizio == 15)     image(quadro15, 0,0);
    if(immagineIndizio == 17)     image(quadro17, 0,0);
    if(immagineIndizio == 18)     image(quadro18, 0,0);
    if(immagineIndizio == 23)     image(quadro23, 0,0);
    if(immagineIndizio == 25)     image(quadro25, 0,0);
    if(immagineIndizio == 26)     image(quadro26, 0,0);
    if(immagineIndizio == 28)     image(quadro28, 0,0);
    if(immagineIndizio == 33)     image(quadro33, 0,0);
    if(immagineIndizio == 35)     image(quadro35, 0,0);
    if(immagineIndizio == 37)     image(quadro37, 0,0);
    image(cornice_storta,0,0);

    // spook
    spook = new Spook("occhei", frameCount, false);
    // text
    image(nuvola_piccola, 12, 75);
    textFont(din_light_15_brown);
    textAlign(LEFT);
    text("Well done!!", 32, 104, 165, 40);
    text("You have collected a", 32, 120, 165, 40);

    // icone
    if(modeIcon == SKULL) image(i_skull_piccolo, 98, 138);
    if(modeIcon == FOOD) image(i_food_piccolo, 98, 138);
    if(modeIcon == SHIP) image(i_ship_piccolo, 98, 138);
    if(modeIcon == WEAPON) image(i_weapon_piccolo, 98, 138);
    if(modeIcon == JEWEL) image(i_jewel_piccolo, 98, 138);
    if(modeIcon == PLANT) image(i_plant_piccolo, 98, 138);
    if(modeIcon == FLAG) image(i_flag_piccolo, 98, 138);
    if(modeIcon == INSTRUMENT) image(i_instrument_piccolo, 98, 138);
    if(modeIcon == ANIMAL) image(i_animal_piccolo, 98, 138);
}

// ALAS!!  /////////////////////////
else if(icons_painting[mode][modeIcon] == 0) {
    //neve(48);
    // spook
    spook = new Spook("piange", frameCount, true);
    // text
    image(nuvola_grande, 12, 75);
    textFont(din_light_15_brown);
    textAlign(LEFT);
    text("Alas!", 100, 104);
    text("No", 32, 143);
    text("in here...", 95, 143);
    text("You've lost the clues hidden in this painting!", 32, 145, 165, 40);
}

```

```

// icone
if(modeIcon == SKULL) image(i_skull_piccolo, 60, 109);
if(modeIcon == FOOD) image(i_food_piccolo, 60, 109);
if(modeIcon == SHIP) image(i_ship_piccolo, 56, 109);
if(modeIcon == WEAPON) image(i_weapon_piccolo, 60, 109);
if(modeIcon == JEWEL) image(i_jewel_piccolo, 59, 109);
if(modeIcon == PLANT) image(i_plant_piccolo, 60, 109);
if(modeIcon == FLAG) image(i_flag_piccolo, 60, 109);
if(modeIcon == INSTRUMENT) image(i_instrument_piccolo, 61, 109);
if(modeIcon == ANIMAL) image(i_animal_piccolo, 57, 109);

// annullo il quadro
paintings_found[mode] =1;
paintings_wrong[mode] =1;
}

}

// ROOM COMPLETE
*****
if(sezione == ROOM_COMPLETE) {
    if(endTime == 0){
        endTime = millis();
        for (i=0; i<=3; i++){
            if(paintings_wrong[i] == 1){
                sbaglio++;
            }
        }
        totPunti += ((360000 - (endTime - starTime)) / 1000)-(90*sbaglio);
    }
    drawSoftKeys(true,true,false);
}

// disegno stanzina di sfondo
image(room_complete, 0, 93);

// coriandoli
coriandoli(50, "discesa");

// titolo
image(linea_arancione, 0, 46);
image(icona_stanza, 6, 24);
textAlign(LEFT);
textFont(din_black_12);
text("14", 32, 34);

// spook
spook = new Spook("esulta", frameCount, true);
// text
image(nuvola_piccola, 12, 75);
textFont(din_light_15_brown);
textAlign(LEFT);
text("Ok, "+nickname+", you've completed this room! Run to the next one!", 32, 104, 165,
70);
}

// TIME IS UP
*****
if(sezione == TIME_IS_UP) {

    drawSoftKeys(false,true,false);

    // titolo
    image(linea_arancione, 0, 46);
    image(icona_stanza, 6, 24);
    textAlign(LEFT);
    textFont(din_black_12);
    text("14", 32, 34);

    // spook
    spook = new Spook("paura", frameCount, true);
}

```

```

// text
image(nuvola_piccola, 12, 75);
textFont(din_light_15_brown);
textAlign(LEFT);
text("No! "+nickname+", your time is up! Enter the next room.", 32, 104, 155, 70);
}

// STAND_BY ****
if(sezione == STAND_BY_TO_EXIT) {

background(0); // black background
// text
textFont(din_light_15_white);
textAlign(LEFT);
text("The application goes stand-by until the child enters another room or exits the museum.", 32, 127, 175, 150);
}

// EXIT MUSEUM ****
if(sezione == EXIT_MUSEUM) {

// spook
spook = new Spook("giravolta", frameCount, true);
// text
image(nuvola_grande, 12, 75);
textFont(din_light_15_brown);
textAlign(LEFT);
text("We made it!!", 62, 120);
text("Now we can use the clues you found and solve Hao Dong case! Are you ready?", 32, 128, 165, 100);

// titolo
image(linea_arancione, 0, 46);
image(icona_spook, 6, 24);
textAlign(LEFT);
textFont(din_black_12);
text("INVESTIGATION COMPLETE!", 32, 34);

drawSoftKeys(true,true,false);

}

// FINAL QUESTION ****
if(sezione == FINAL_QUESTION) {

// scrolling bar
strokeWeight(4);
//// sfondo
stroke(dark_yellow);
line(232,82,232,210);
//// bar
stroke(orange);
if(mode > QUESTION_1) { // barra + corta
pushMatrix();
translate(0, 24*scrollingText);
line(232,82+24*mode,232,210); // lunghezza barra = tolgo 1/5 di barra per ogni parte di quiz (5 in tutto) caricata
popMatrix();
}
else line(232,82,232,210);

// final question test //////////////////////

pushMatrix(); // in questo modo (matrix + translate) posso spostare TUTTI i layer di testo nella matrix
if(modeXbarra==QUESTION_1) {
modeYquestion = easeTo(modeYquestion, POSITION_QUESTION_1, easeSpeed);
}
}

```

```

}

if(modeXbarra == QUESTION_2) {
    modeYquestion = easeTo(modeYquestion, POSITION_QUESTION_2, easeSpeed);
}
else if(modeXbarra == QUESTION_3) {
    modeYquestion = easeTo(modeYquestion, POSITION_QUESTION_3, easeSpeed);
}
else if(modeXbarra == QUESTION_4) {
    modeYquestion = easeTo(modeYquestion, POSITION_QUESTION_4, easeSpeed);
}
else if(modeXbarra == QUESTION_5) {
    modeYquestion = easeTo(modeYquestion, POSITION_QUESTION_5, easeSpeed);
}
else if(modeXbarra == QUESTION_6) {
    modeYquestion = easeTo(modeYquestion, POSITION_QUESTION_6, easeSpeed);
}
translate(0, modeYquestion);

textFont(din_light_15_brown);
textAlign(LEFT);
text("Marco Polo, as we", 32, 72);
text("guessed, had not", 32, 96);
text("left Hao Dong...", 32, 120);
if(mode > QUESTION_1) {
    text("He just", 155, 120);
    text("sailed to Asia with his", 32, 144);
    text("fleet in order to get,", 32, 168);
    text("from Qubilay Khan, the", 32, 192);
    text("wonderful", 32, 216);
    emptyImage = new emptyImage(147-37, 216-19);
}
if(mode > QUESTION_2) {
    if(STARTING_QUESTION_2 < 10) STARTING_QUESTION_2 += 1;
    selectPicture(147-37, 216-19, given_answers[QUESTION_2], STARTING_QUESTION_2);
    text("that", 153, 216);
    text("she had loved since", 32, 240);
    text("she was a child. On his", 32, 264);
    text("way back, Marco's", 32, 288);
    emptyImage = new emptyImage(171, 288-19);
}
if(mode > QUESTION_3) {
    if(STARTING_QUESTION_3 < 10) STARTING_QUESTION_3 += 1;
    selectPicture(171, 288-19, given_answers[QUESTION_3], STARTING_QUESTION_3);
    text("showing the Venetian", 32, 312);
    emptyImage = new emptyImage(32, 336-19);
}
if(mode > QUESTION_4) {
    if(STARTING_QUESTION_4 < 10) STARTING_QUESTION_4 += 1;
    selectPicture(32, 336-19, given_answers[QUESTION_4], STARTING_QUESTION_4);
    text(", was attacked by", 73, 336);
    text("the terrible Turkish", 32, 360);
    text("army, famous for its", 32, 382);
    text("lethal", 32, 406);
    emptyImage = new emptyImage(76, 406-19);
}
if(mode > QUESTION_5) {
    if(STARTING_QUESTION_5 < 10) STARTING_QUESTION_5 += 1;
    selectPicture(76, 406-19, given_answers[QUESTION_5], STARTING_QUESTION_5);
    text(". Marco was", 114, 406);
    text("captured and he spent", 32, 430);
    text("the rest of his life", 32, 454);
    text("thinking about her.", 32, 478);
}
popMatrix();

// mask scrolling text
image(final_mask_testo, 0, 0);      // nell'ultima domanda non devo mascherare il testo in basso!

```

```

// ripristino la upper bar
textAlign(LEFT);
textFont(din_light_12_light_brown);
text("Spook", 6, 13); // application title
textAlign(RIGHT);
text(totPunti+" pt", 234, 13); // points

// the end (se sono all'ultimo quesito
if(mode == QUESTION_6) {
    textFont(din_black_15_brown);
    textAlign(CENTER);
    text("The end", 120, 252);
}

// titolo
image(liniea_arancione, 0, 46);
image(icona_spook, 6, 24);
textAlign(LEFT);
textFont(din_black_12);
text("LET'S SOLVE THE CASE", 32, 34);
textFont(din_light_12);
text("Use the clues to complete the story", 32, 46);

// disegno la barra delle icone ///////////
// solo se devo selezionarne una XD (quindi non in QUESTION_1 e 6)
if(mode > QUESTION_1 && mode < QUESTION_6) {

    // selezionatore
    image(final_selection, 85, 217);

    // icone
    // SKULL /**
    if(modeIcon == SKULL) {
        // image
        modeXicon = easeTo(modeXicon, POSITION_SKULL, easeSpeed);
        image(final_icone, modeXicon, 232);
    }

    // FOOD /**
    if(modeIcon == FOOD) {
        // image
        modeXicon = easeTo(modeXicon, POSITION_FOOD, easeSpeed);
        image(final_icone, modeXicon, 232);
    }

    // SHIP /**
    if(modeIcon == SHIP) {
        // image
        modeXicon = easeTo(modeXicon, POSITION_SHIP, easeSpeed);
        image(final_icone, modeXicon, 232);
    }

    // WEAPON /**
    if(modeIcon == WEAPON) {
        // image
        modeXicon = easeTo(modeXicon, POSITION_WEAPON, easeSpeed);
        image(final_icone, modeXicon, 232);
    }

    // JEWEL /**
    if(modeIcon == JEWEL) {
        // image
        modeXicon = easeTo(modeXicon, POSITION_JEWEL, easeSpeed);
        image(final_icone, modeXicon, 232);
    }
}

```

```

// PLANT /**
if(modeIcon == PLANT) {
    // image
    modeXicon = easeTo(modeXicon, POSITION_PLANT, easeSpeed);
    image(final_icone, modeXicon, 232);
}

// FLAG /**
if(modeIcon == FLAG) {
    // image
    modeXicon = easeTo(modeXicon, POSITION_FLAG, easeSpeed);
    image(final_icone, modeXicon, 232);
}

// INSTRUMENT /**
if(modeIcon == INSTRUMENT) {
    // image
    modeXicon = easeTo(modeXicon, POSITION_INSTRUMENT, easeSpeed);
    image(final_icone, modeXicon, 232);
}

// ANIMAL /**
if(modeIcon == ANIMAL) {
    // image
    modeXicon = easeTo(modeXicon, POSITION_ANIMAL, easeSpeed);
    image(final_icone, modeXicon, 232);
}

// finta maschera per le icone
image(final_mask, 0, 227);

// frecce
if(modeIcon < 8) image(frecce_dx, 220, 246);
if(modeIcon > 0) image(frecce_sx, 5, 246);

}
drawSoftKeys(true,true,false);
}

// LAST SCREEN
*****
if(sezione == LAST_SCREEN) {

    // coriandoli
    coriandoli(100, "salita");

    // titolo
    image(linea_arancione, 0, 46);
    image(icona_spook, 6, 24);
    textAlign(LEFT);
    textFont(din_black_12);
    text("CONGRATULATIONS!!", 32, 34);

    if(mode==CASE_SOLVED) {
        drawSoftKeys(false,true,false);
        moodSpook = "giravolta";
        image(final_screen, 0, 0);
        // text
        textFont(din_light_15_brown);
        textAlign(LEFT);
        text("Congratulations, "+nickname+"! We solved the case and now Hao Dong can rest happily
and in peace!", 32, 72, 190, 200);
    }

    if(mode==GAME_COMPLETE) {
        moodSpook = "saluta";
        textFont(din_light_15_brown);
        textAlign(LEFT);
    }
}

```

```

text("You've completed the game with", 32, 72, 190, 200);
textFont(din_black_15_brown);
textAlign(CENTER);
text(totPunti+" points", 120, 119);
textFont(din_light_15_brown);
textAlign(LEFT);
text("It was a real pleasure being a detective with you!", 32, 130, 190, 200);
text("See you!!", 32, 230);
}

// spook
spook = new Spook(moodSpook, frameCount, false);
}

/*
* LOGIC SECTION
*/
import java.lang.Math;
import processing.video.*;
import processing.image2.*;
import processing.phone.*; // import phone library to go fullscreen
Phone myPhone;           // named reference to phone instance
Capture myCapture;        // to use a capture object

///////////////////////////////
// SETUP ///////////////////
///////////////////////////////

void setup() {
    // go fullscreen
    myPhone = new Phone(this); // create new phone instance/controller
    myPhone.fullscreen();      // tell phone to go fullscreen

    myCapture = new Capture(this); //for using the camera
    framerate(30);

    // COLORS //////////////////
    brown = color(132,83,42);
    orange = color(246,146,30);
    white = color(255,255,255);
    yellow = color(255,255,210);
    black = color(0,0,0);
    light_brown = color(188,141,51);
    dark_yellow = color(255,228,0);

    // FUNZIONI //////////////////
    loadImages();
    loadFonts();
    multitap();           // tastiera (numerica del cell) attiva per scrivere il nickname

    // CREO I PALLINI
    for(int p=0;p<=100;p++) {
        //create random coords
        int randomX = random(0, width);
        int randomY = random(330, 350);
        int randomW = random(1,8);
        int randomT = random(20,255);
        //randomX = constrain(randomX,0+randomW,width);
        //randomY = constrain(randomY,0,height-randomW);

        // store data
        pallinoX = append(pallinoX, randomX);
    }
}

```

```

pallinoY = append(pallinoY, randomY);
pallinoW = append(pallinoW, randomW);
pallinoT = append(pallinoT, randomT);
pallinoTime = append(pallinoTime, random(0,10));
pallinoDirection = append(pallinoDirection, -1);
pallinoSpeed = append(pallinoSpeed, random(5,10));
pallinoColor = append(pallinoColor, 100);
}

/*
// CREO LA NEVE
for(int p=0;p<=50;p++) {
    //create random coords
    int randomX = random(0, width);
    int randomY = random(-30, -50);
    int randomW = random(8,14);
    int randomT = random(20,255);

    // store data
    neveX = append(neveX, randomX);
    neveY = append(neveY, randomY);
    neveW = append(neveW, randomW);
    neveT = append(neveT, randomT);
    neveTime = append(neveTime, random(0,50));
    neveDirection = append(neveDirection, -1);
    neveSpeed = append(neveSpeed, 1);
    neveColor = append(neveColor, 283);
}
*/
}

///////////////////////////////
// Draw
///////////////////////////////

void draw() {

    // LOGO SCREEN ///////////////////////
    // the logo automatically fades after tot frames

    if(sezione == START_SCREEN && mode == LOGO_SCREEN) {
        if(countseconds <= 90) ++countseconds;
        else countseconds = 0;
        if(countseconds == 90) {
            sezione = REGISTRATION;
            mode = LOGIN;
            myPhone.vibrate(800);           // spook vibrates!
        }
    }

    image(sfondo, 0, 0);                // background

    // upper bar
    textAlign(LEFT);
    textFont(din_light_12_light_brown);
    text("Spook", 6, 13);             // application title
    textAlign(RIGHT);
    text(totPunti+" pt", 234, 13);   // points
    if(totPunti < 0) totPunti = 0;

    // MENU ///////////////////////
    if(viewMenu) {
        drawMenu(mode);
    }
    else {
        // STARTING SCREENS ///////////////////////
        if(gameMode == 0) {
            drawScreens(sezione, mode);
        }
    }
}

```

```

        }
    // SINGLE PLAYER  /////////////////////////////////
    else if(gameMode == MODE_SINGLE_PLAYER) {
        drawSinglePlayer(sezione, mode);
    }
    // TIME CHALLENGE  ///////////////////////////////
    else if(gameMode == MODE_TIME_CHALLENGE) {
        drawTimeChallenge(sezione, mode);
    }
    // MULTIPLAYER  ///////////////////////////////
    else if(gameMode == MODE_MULTIPLAYER) {
        drawMultiplayer(sezione, mode);
    }
    // GALLERY  ///////////////////////////////
    else if(gameMode == MODE_GALLERY) {
        drawGallery(sezione, mode);
    }
}

}

///////////////////////////////
// Keypad Event
///////////////////////////////

void keyPressed() {
    if(keyCode == FIRE) {
        k=0;
        j=0;
        i=0;
    }

    //
    **** MENU
    ****
    //
    ****
}

// ATTIVA MENU ****
if(activeMenu) {
    if(keyCode == SOFTKEY1) {
        reset_coriandoli();
        //reset_neve();
        viewMenu = true;
        modeMenu = BACK_TO_GAME;
    }
}

// VISUAL MENU ****
if(viewMenu) {
    if(modeMenu == BACK_TO_GAME) {
        if(keyCode == DOWN) {
            modeMenu = GALLERY;
            return;
        }
        if(keyCode == FIRE) {
            viewMenu = false;
            return;
        }
    }
    if(modeMenu == GALLERY) {
        if(keyCode == DOWN) {
            modeMenu = RESTART_THE_GAME;
            return;
        }
        if(keyCode == UP) {
            modeMenu = BACK_TO_GAME;
        }
    }
}

```

```

        return;
    }
    if(keyCode == FIRE) {
        gameMode = MODE_GALLERY;
        sezione = MUSEUM_SELECTION;
        mode = 0;
        viewMenu = false;
        return;
    }
}
if(modeMenu == RESTART_THE_GAME) {
    if(keyCode == DOWN) {
        modeMenu = EXIT;
        return;
    }
    if(keyCode == UP) {
        modeMenu = GALLERY;
        return;
    }
    if(keyCode == FIRE) {
        sezione = PLAY_OR_GALLERY;
        mode = PLAY_THE_GAME;
        gameMode = 0;
        viewMenu = false;
        return;
    }
}
if(modeMenu == EXIT) {
    if(keyCode == UP) {
        modeMenu = RESTART_THE_GAME;
        return;
    }
    if(keyCode == FIRE) {
        exit();
        return;
    }
}
}
else {

    //
***** // ** INTRO *****
    //
***** // REGISTRATION *****
if(sezione == REGISTRATION) {

    // LOGIN ///////////////
    if(mode == LOGIN) {
        nickname = multitapText;          // sets nickname's value as text entered by the phone
        if(keyCode == FIRE) {
            nickname = nickname;
            mode = REGISTRATION_POPUP;
            return;
        }
    }

    // POP-UP ///////////////
    if(mode == REGISTRATION_POPUP) {
        if(keyCode == SOFTKEY2) {
            mode = LOGIN;
            return;
        }
        if(nickname.length() > 0) {      // if a nickname has been set, it gives u an alert
            if(keyCode == FIRE) {
                sezione = STORY_01;
            }
        }
    }
}
}

```

```

        mode = HI_IM_SPOOK;
        return;
    }
}
}

// STORY_01 ****
if(sezione == STORY_01) {
    // HI IM SPOOK /////////////
    if(mode==HI_IM_SPOOK) {
        if(nickname.length() > 0) {
            if(keyCode == FIRE) {
                mode = IM_DETECTIVE;
                return;
            }
        }
    }
    // IM A DETECTIVE ///////////
    if(mode==IM_DETECTIVE) {
        if(nickname.length() > 0) {
            if(keyCode == FIRE) {
                mode = HELP_GHOST;
                return;
            }
        }
    }
    // HELP GHOST ///////////
    if(mode==HELP_GHOST) {
        if(nickname.length() > 0) {
            if(keyCode == FIRE) {
                mode = REST_IN_PEACE;
                return;
            }
        }
    }
    // REST IN PEACE ///////////
    if(mode==REST_IN_PEACE) {
        if(nickname.length() > 0) {
            if(keyCode == FIRE) {
                mode = WOULD_YOU_HELP;
                return;
            }
        }
    }
    // WOULD U HELP ///////////
    if(mode==WOULD_YOU_HELP) {
        if(nickname.length() > 0) {
            if(keyCode == FIRE) {
                sezione = PLAY_OR_GALLERY;
                mode = PLAY_THE_GAME;
                return;
            }
        }
    }
}

// PLAY_OR_GALLERY ****
if(sezione == PLAY_OR_GALLERY) {
    if(mode==PLAY_THE_GAME) {
        if(keyCode == DOWN) {
            mode = VIEW_GALLERY;
            return;
        }
        if(keyCode == FIRE) {
            gameMode = 0;
            sezione = MUSEUM_LOCALIZATION;
            return;
        }
    }
}

```

```

if(mode==VIEW_GALLERY) {
    if(keyCode == UP) {
        mode = PLAY_THE_GAME;
        return;
    }
    if(keyCode == FIRE) {
        sezione = MUSEUM_SELECTION;
        gameMode = MODE_GALLERY;
        mode = 0;
        return;
    }
}
}

// MUSEUM LOCALIZATION ****
if(sezione == MUSEUM_LOCALIZATION) {
    if(keyCode == FIRE) {
        sezione = MENU_GAME_MODE;
        mode = MODE_SINGLE_PLAYER;
        return;
    }
}

// SELECT GAME MODE ****
if(sezione == MENU_GAME_MODE) {

    // SINGLE PLAYER ///////////
    if(mode == MODE_SINGLE_PLAYER) {
        if(keyCode == RIGHT) {
            mode = MODE_TIME_CHALLENGE;
            return;
        }
    }

    // TIME_CHALLENGE ///////////
    if(mode == MODE_TIME_CHALLENGE) {
        if(keyCode == LEFT) {
            mode = MODE_SINGLE_PLAYER;
            return;
        }
        if(keyCode == RIGHT) {
            mode = MODE_MULTIPLAYER;
            return;
        }
    }

    // MULTIPLAYER ///////////
    if(mode == MODE_MULTIPLAYER) {
        if(keyCode == LEFT) {
            mode = MODE_TIME_CHALLENGE;
            return;
        }
    }

    if(keyCode == FIRE) {
        gameMode = mode;           // setto il gameMode secondo al schermata single/time/multi
selezionata
        sezione = NARRATIVE;
        mode = IN_THIS_MUSEUM;
        reset_paintings();
        println(paintings_found[0]+ "-" +paintings_found[1]+ "-" +paintings_found[2]+ "-"
+paintings_found[3]);           // resetto tutti i quadri e le risposte già date
        myPhone.vibrate(800);
        return;
    }
}
}

```

```

// ****
// ** SINGLE PLAYER
// ****
// ****
if(gameMode == MODE_SINGLE_PLAYER || gameMode == MODE_TIME_CHALLENGE) {

    // NARRATIVE
// ****
if(sezione == NARRATIVE) {

    // IN_THIS_MUSEUM /////////////
if(mode == IN_THIS_MUSEUM) {
    if(keyCode == FIRE) {
        mode = MARCO_POLO_LEFT;
        return;
    }
}
// MARCO_POLO_LEFT /////////////
if(mode == MARCO_POLO_LEFT) {
    if(keyCode == FIRE) {
        mode = RECOGNIZE_CLUES;
        return;
    }
}
// RECOGNIZE_CLUES /////////////
if(mode == RECOGNIZE_CLUES) {
    if(keyCode == FIRE) {
        mode = AT_THE_END;
        return;
    }
}
// AT_THE_END /////////////
if(mode == AT_THE_END) {
    if(keyCode == FIRE) {
        mode = DONT_GET_WRONG;
        return;
    }
}
// DONT_GET_WRONG /////////////
if(mode == DONT_GET_WRONG) {
    if(keyCode == FIRE) {
        if(gameMode == MODE_TIME_CHALLENGE){
            mode = TIME;
        }
        else if(gameMode == MODE_SINGLE_PLAYER){
            mode = READY;
        }
        return;
    }
}
// TIME /////////////
if(mode == TIME) {
    if(keyCode == FIRE) {
        mode = TIME_READY;
        return;
    }
}
// TIME_ENTER_A_ROOM /////////////
if(mode == TIME_ENTER_A_ROOM) {
    if(keyCode == FIRE) {
        mode = STAND_BY;
        return;
    }
}
// TIME_READY /////////////
if(mode == TIME_READY) {
    if(keyCode == FIRE) {

```

```

        mode = TIME_ENTER_A_ROOM;
        return;
    }
}
// READY /////////////////////////////////
if(mode == READY) {
    if(keyCode == FIRE) {
        mode = ENTER_A_ROOM;
        return;
    }
}
// ENTER_A_ROOM ///////////////////////////////
if(mode == ENTER_A_ROOM) {
    if(keyCode == FIRE) {
        mode = STAND_BY;
        return;
    }
}
// STAND_BY ///////////////////////////////
if(mode == STAND_BY) {
    if(keyCode == FIRE) {
        sezione = MUSEUM_ROOM;
        mode = PAINT_1;
        if(gameMode == MODE_TIME_CHALLENGE){
            starTime = millis();
        }
        return;
    }
}
// MUSEUM_ROOM
*****
if(sezione == MUSEUM_ROOM) {

    // 1      ///////////////////////////////
    if(mode == PAINT_1) {

        if(paintings_found[PAINT_2] == 0) {           // blocco la selezione
            if(keyCode == DOWN) {
                mode = PAINT_2;
                return;
            }
        }
        else if(paintings_found[PAINT_3] == 0) {           // blocco la selezione
            if(keyCode == DOWN) {
                mode = PAINT_3;
                return;
            }
        }
        else if(paintings_found[PAINT_4] == 0) {           // blocco la selezione
            if(keyCode == DOWN) {
                mode = PAINT_4;
                return;
            }
        }
    }

    // 2      ///////////////////////////////
    if(mode == PAINT_2) {
        if(paintings_found[PAINT_3] == 0) {           // blocco la selezione
            if(keyCode == DOWN) {
                mode = PAINT_3;
                return;
            }
        }
        else if(paintings_found[PAINT_4] == 0) {           // blocco la selezione
            if(keyCode == DOWN) {
                mode = PAINT_4;
            }
        }
    }
}

```

```

        return;
    }
}
if(paintings_found[PAINT_1] == 0) {           // blocco la selezione
    if(keyCode == UP) {
        mode = PAINT_1;
        return;
    }
}
// 3      /////////////////////////////////
if(mode == PAINT_3) {
    if(paintings_found[PAINT_4] == 0) {           // blocco la selezione
        if(keyCode == DOWN) {
            mode = PAINT_4;
            return;
        }
    }
    if(paintings_found[PAINT_2] == 0) {           // blocco la selezione
        if(keyCode == UP) {
            mode = PAINT_2;
            return;
        }
    }
    else if(paintings_found[PAINT_1] == 0) {       // blocco la selezione
        if(keyCode == UP) {
            mode = PAINT_1;
            return;
        }
    }
}
// 4      /////////////////////////////////
if(mode == PAINT_4) {
    if(paintings_found[PAINT_3] == 0) {           // blocco la selezione
        if(keyCode == UP) {
            mode = PAINT_3;
            return;
        }
    }
    else if(paintings_found[PAINT_2] == 0) {       // blocco la selezione
        if(keyCode == UP) {
            mode = PAINT_2;
            return;
        }
    }
    else if(paintings_found[PAINT_1] == 0) {       // blocco la selezione
        if(keyCode == UP) {
            mode = PAINT_1;
            return;
        }
    }
}
// SELEZIONA QUADRO
if(keyCode == FIRE) {
    sezione = ICONS;
    modeIcon = SKULL;
    return;
}
// ICONS
*****
if(sezione == ICONS) {
    if(keyCode == SOFTKEY2) {
        sezione = MUSEUM_ROOM;
    }
}

```

```

        return;
    }

    if(keyCode == FIRE) {
        sezione = GOT_CLUES;
        return;
    }

    // SKULL
    if(modeIcon == SKULL) {
        if(Icons_painting[mode][FOOD] < 2) { // blocco l'icona se è già stata usata
            if(keyCode == RIGHT) {
                modeIcon = FOOD;
                return;
            }
        }
        else if(Icons_painting[mode][SHIP] < 2) { // blocco l'icona se è già stata usata
            if(keyCode == RIGHT) {
                modeIcon = SHIP;
                return;
            }
        }
        if(Icons_painting[mode][WEAPON] < 2) { // blocco l'icona se è già stata usata
            if(keyCode == DOWN) {
                modeIcon = WEAPON;
                return;
            }
        }
        else if(Icons_painting[mode][FLAG] < 2) { // blocco l'icona se è già stata usata
            if(keyCode == DOWN) {
                modeIcon = FLAG;
                return;
            }
        }
    }

    // FOOD
    if(modeIcon == FOOD) {
        if(Icons_painting[mode][SHIP] < 2) { // blocco l'icona se è già stata usata
            if(keyCode == RIGHT) {
                modeIcon = SHIP;
                return;
            }
        }
        if(Icons_painting[mode][SKULL] < 2) { // blocco l'icona se è già stata usata
            if(keyCode == LEFT) {
                modeIcon = SKULL;
                return;
            }
        }
        if(Icons_painting[mode][JEWEL] < 2) { // blocco l'icona se è già stata usata
            if(keyCode == DOWN) {
                modeIcon = JEWEL;
                return;
            }
        }
        else if(Icons_painting[mode][INSTRUMENT] < 2) { // blocco l'icona se è già stata usata
            if(keyCode == DOWN) {
                modeIcon = INSTRUMENT;
                return;
            }
        }
    }

    // SHIP
    if(modeIcon == SHIP) {
        if(Icons_painting[mode][FOOD] < 2) { // blocco l'icona se è già stata usata
            if(keyCode == LEFT) {
                modeIcon = FOOD;
                return;
            }
        }
    }
}

```

```

        }
    }
    else if(Icons_Painting[mode][SKULL] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == LEFT) {
            modeIcon = SKULL;
            return;
        }
    }
    if(Icons_Painting[mode][PLANT] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == DOWN) {
            modeIcon = PLANT;
            return;
        }
    }
    else if(Icons_Painting[mode][ANIMAL] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == DOWN) {
            modeIcon = ANIMAL;
            return;
        }
    }
}

// WEAPON
if(modeIcon == WEAPON) {
    if(Icons_Painting[mode][JEWEL] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == RIGHT) {
            modeIcon = JEWEL;
            return;
        }
    }
    else if(Icons_Painting[mode][PLANT] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == RIGHT) {
            modeIcon = PLANT;
            return;
        }
    }
    if(Icons_Painting[mode][SKULL] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == UP) {
            modeIcon = SKULL;
            return;
        }
    }
    if(Icons_Painting[mode][FLAG] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == DOWN) {
            modeIcon = FLAG;
            return;
        }
    }
}

// JEWEL
if(modeIcon == JEWEL) {
    if(Icons_Painting[mode][PLANT] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == RIGHT) {
            modeIcon = PLANT;
            return;
        }
    }
    if(Icons_Painting[mode][WEAPON] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == LEFT) {
            modeIcon = WEAPON;
            return;
        }
    }
    if(Icons_Painting[mode][FOOD] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == UP) {
            modeIcon = FOOD;
            return;
        }
    }
}

```

```

if(Icons_Painting[mode][INSTRUMENT] < 2) { // blocco l'icona se è già stata usata
    if(keyCode == DOWN) {
        modeIcon = INSTRUMENT;
        return;
    }
}
}

// PLANT
if(modeIcon == PLANT) {
    if(Icons_Painting[mode][JEWEL] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == LEFT) {
            modeIcon = JEWEL;
            return;
        }
    }
    else if(Icons_Painting[mode][WEAPON] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == LEFT) {
            modeIcon = WEAPON;
            return;
        }
    }
    if(Icons_Painting[mode][SHIP] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == UP) {
            modeIcon = SHIP;
            return;
        }
    }
    if(Icons_Painting[mode][ANIMAL] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == DOWN) {
            modeIcon = ANIMAL;
            return;
        }
    }
}

// FLAG
if(modeIcon == FLAG) {
    if(Icons_Painting[mode][INSTRUMENT] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == RIGHT) {
            modeIcon = INSTRUMENT;
            return;
        }
    }
    else if(Icons_Painting[mode][ANIMAL] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == RIGHT) {
            modeIcon = ANIMAL;
            return;
        }
    }
    if(Icons_Painting[mode][WEAPON] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == UP) {
            modeIcon = WEAPON;
            return;
        }
    }
    else if(Icons_Painting[mode][SKULL] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == UP) {
            modeIcon = SKULL;
            return;
        }
    }
}

// INSTRUMENT
if(modeIcon == INSTRUMENT) {
    if(Icons_Painting[mode][ANIMAL] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == RIGHT) {
            modeIcon = ANIMAL;
            return;
        }
    }
}

```

```

        }
    }
    if(Icons_painting[mode][JEWEL] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == UP) {
            modeIcon = JEWEL;
            return;
        }
    }
    else if(Icons_painting[mode][FOOD] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == UP) {
            modeIcon = FOOD;
            return;
        }
    }
    if(Icons_painting[mode][FLAG] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == LEFT) {
            modeIcon = FLAG;
            return;
        }
    }
}

// ANIMAL
if(modeIcon == ANIMAL) {
    if(Icons_painting[mode][PLANT] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == UP) {
            modeIcon = PLANT;
            return;
        }
    }
    else if(Icons_painting[mode][SHIP] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == UP) {
            modeIcon = SHIP;
            return;
        }
    }
    if(Icons_painting[mode][INSTRUMENT] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == LEFT) {
            modeIcon = INSTRUMENT;
            return;
        }
    }
    else if(Icons_painting[mode][FLAG] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == LEFT) {
            modeIcon = FLAG;
            return;
        }
    }
}
}

// TAKE PHOTO
*****
if(sezione == TAKE_PHOTO) {
    if(keyCode == SOFTKEY2) {
        hideCamera();
        sezione = ICONS;
        return;
    }
    if(keyCode == FIRE) {
        //readCamera();
        hideCamera();
        sezione = GOT_CLUES;
        return;
    }
}

// GOT CLUES
*****
if(sezione == GOT_CLUES) {

```

```

if(keyCode == FIRE) {
    //reset_neve();

    // setto l'icona interessata come già trovata (quindi non selezionabile)
    if(Icons_painting[mode][modeIcon] == 1) {
        totPunti = totPunti + 10;
        Icons_painting[mode][modeIcon] = 2;
    }
    else { // controllo quanti indizi aveva trovato e tolgo i punti!!!
        for(i=0;i<=8;i++) {
            if(Icons_painting[mode][i] == 2) {
                totPunti = totPunti - 10;
                if(totPunti < 0) totPunti = 0;
            }
        }
    }
}

// se ci sono ancora indizi da trovare E se non ho sbagliato un indizio, torno al
quadro...
if(clues > 1 && paintings_found[mode] == 0) {
    sezione = ICONS;
    // controllo quali icone sono ancora 'disponibili' nella lista, e metto il focus su
una di esse
    for(i=0;i<=8;i++) {
        if(Icons_painting[mode][i] < 2) {
            modeIcon = i;
            break;
        }
    }
    else { //... se no torno alla stanza dei musei!
        if(clues==1) {
            paintings_found[mode] = 1;      // se ho trovato tutti gli indizi, disattivo il
quadro selezionato
        }
    }

    // controllo quali quadri sono ancora 'disponibili' nella lista, e metto il focus su
uno di essi
    if(paintings_found[PAINT_1] == 0) {
        mode = PAINT_1;
        sezione = MUSEUM_ROOM;
    }
    else if(paintings_found[PAINT_2] == 0) {
        mode = PAINT_2;
        sezione = MUSEUM_ROOM;
    }
    else if(paintings_found[PAINT_3] == 0) {
        mode = PAINT_3;
        sezione = MUSEUM_ROOM;
    }
    else if(paintings_found[PAINT_4] == 0) {
        mode = PAINT_4;
        sezione = MUSEUM_ROOM;
    }
    // se son passati tutti, vado alla schermata di STANZA COMPLETATA
    else {
        sezione = ROOM_COMPLETE;
        myPhone.vibrate(800);           // spook vibrates!
        return;
    }
}
return;
}

// ROOM_COMPLETE
*****
if(sezione == ROOM_COMPLETE) {
    if(keyCode == FIRE) {
        reset_coriandoli();
    }
}

```

```

        sezione = STAND_BY_TO_EXIT;
        return;
    }
}

// STAND BY TO EXIT
*****
if(sezione == STAND_BY_TO_EXIT) {
    if(keyCode == FIRE) {
        sezione = EXIT_MUSEUM;
        myPhone.vibrate(800);           // spook vibrates!
        return;
    }
}

// EXIT MUSEUM
*****
if(sezione == EXIT_MUSEUM) {
    if(keyCode == FIRE) {
        sezione = FINAL_QUESTION;
        mode = QUESTION_1;
        modeIcon = SKULL;
        return;
    }
}

// FINAL QUESTION
*****
if(sezione == FINAL_QUESTION) {
    println("modeXbarra="+modeXbarra);
    println("scrollingText="+scrollingText);
    println("mode="+mode);
    // con up/down muovo il testo
    if(keyCode == UP) {
        if(scrollingText > mode*-1 && scrollingText <= 0) {
            scrollingText = scrollingText -1;
            modeXbarra = modeXbarra -1;
        }
    }
    if(keyCode == DOWN) {
        if(scrollingText >= mode*-1 && scrollingText < 0) {
            scrollingText = scrollingText +1;
            modeXbarra = modeXbarra +1;
        }
    }
    // con destra e sinistra mi muovo nella barra delle icone
    if(keyCode == LEFT) {
        if(modeIcon>0) modeIcon = modeIcon-1;
        return;
    }
    if(keyCode == RIGHT) {
        if(modeIcon<8) modeIcon = modeIcon+1;
        return;
    }
    if(keyCode == FIRE) {
        if(mode < QUESTION_6) {
            // setto la risposta
            given_answers[mode] = modeIcon;
            // punti
            if(mode > QUESTION_1) {
                if(given_answers[mode] == correct_answers[mode]) totPunti += 30;
                else totPunti -= 20;
            }
            mode += 1;           // passo alla prox question (a meno che nn sia già all'ultima)
            modeXbarra = mode;
            scrollingText = 0;
            return;
        }
        if(mode == QUESTION_6) {

```

```

        sezione = LAST_SCREEN;
        mode = CASE_SOLVED;
        //myPhone.vibrate(800);           // spook vibrates!
        myPhone.vibrate(100);           // final vibration!!!
        myPhone.vibrate(100);
        myPhone.vibrate(100);
        myPhone.vibrate(800);
        return;
    }
}

}
// LAST_SCREEN
*****
if(sezione == LAST_SCREEN) {
    if(keyCode == FIRE){
        if(mode==CASE_SOLVED) {
            mode = GAME_COMPLETE;
            return;
        }
    }
}

// GALLERY ****
// ****
***** if(gameMode == MODE_GALLERY) {

    // GALLERY: SELECT MUSEUM
***** if(sezione == MUSEUM_SELECTION) {

        // ACCADEMIA /////////////
        if(mode == ACCADEMIA) {
            if(keyCode == RIGHT) {
                mode = CORRER;
                return;
            }
        }

        // CORRER /////////////
        if(mode == CORRER) {
            if(keyCode == LEFT) {
                mode = ACCADEMIA;
                return;
            }
            if(keyCode == RIGHT) {
                mode = CAPESARO;
                return;
            }
        }

        // CA PESARO ///////////
        if(mode == CAPESARO) {
            if(keyCode == LEFT) {
                mode = CORRER;
                return;
            }
        }

        // SELEZIONA MUSEO
        if(keyCode == FIRE) {
            sezione = ICONS;
            modeIcon = SKULL;
            return;
        }
    }
}

```

```

        }

    }

// GALLERY ICONS
*****
if(sezione == ICONS) {
    if(keyCode == FIRE) {
        sezione = PICS_BROWSING;
        return;
    }

// SKULL
if(modeIcon == SKULL) {
    if(Icons_painting[mode][FOOD] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == RIGHT) {
            modeIcon = FOOD;
            return;
        }
    }
    else if(Icons_painting[mode][SHIP] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == RIGHT) {
            modeIcon = SHIP;
            return;
        }
    }
    if(Icons_painting[mode][WEAPON] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == DOWN) {
            modeIcon = WEAPON;
            return;
        }
    }
    else if(Icons_painting[mode][FLAG] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == DOWN) {
            modeIcon = FLAG;
            return;
        }
    }
}

// FOOD
if(modeIcon == FOOD) {
    if(Icons_painting[mode][SHIP] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == RIGHT) {
            modeIcon = SHIP;
            return;
        }
    }
    if(Icons_painting[mode][SKULL] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == LEFT) {
            modeIcon = SKULL;
            return;
        }
    }
    if(Icons_painting[mode][JEWEL] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == DOWN) {
            modeIcon = JEWEL;
            return;
        }
    }
    else if(Icons_painting[mode][INSTRUMENT] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == DOWN) {
            modeIcon = INSTRUMENT;
            return;
        }
    }
}
}

```

```

// SHIP
if(modeIcon == SHIP) {
    if(Icons_painting[mode][FOOD] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == LEFT) {
            modeIcon = FOOD;
            return;
        }
    }
    else if(Icons_painting[mode][SKULL] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == LEFT) {
            modeIcon = SKULL;
            return;
        }
    }
    if(Icons_painting[mode][PLANT] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == DOWN) {
            modeIcon = PLANT;
            return;
        }
    }
    else if(Icons_painting[mode][ANIMAL] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == DOWN) {
            modeIcon = ANIMAL;
            return;
        }
    }
}
}

// WEAPON
if(modeIcon == WEAPON) {
    if(Icons_painting[mode][JEWEL] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == RIGHT) {
            modeIcon = JEWEL;
            return;
        }
    }
    else if(Icons_painting[mode][PLANT] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == RIGHT) {
            modeIcon = PLANT;
            return;
        }
    }
    if(Icons_painting[mode][SKULL] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == UP) {
            modeIcon = SKULL;
            return;
        }
    }
    if(Icons_painting[mode][FLAG] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == DOWN) {
            modeIcon = FLAG;
            return;
        }
    }
}

// JEWEL
if(modeIcon == JEWEL) {
    if(Icons_painting[mode][PLANT] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == RIGHT) {
            modeIcon = PLANT;
            return;
        }
    }
    if(Icons_painting[mode][WEAPON] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == LEFT) {
            modeIcon = WEAPON;
            return;
        }
    }
}

```

```

if(icons_painting[mode][FOOD] < 2) { // blocco l'icona se è già stata usata
    if(keyCode == UP) {
        modeIcon = FOOD;
        return;
    }
}
if(icons_painting[mode][INSTRUMENT] < 2) { // blocco l'icona se è già stata usata
    if(keyCode == DOWN) {
        modeIcon = INSTRUMENT;
        return;
    }
}
}

// PLANT
if(modeIcon == PLANT) {
    if(icons_painting[mode][JEWEL] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == LEFT) {
            modeIcon = JEWEL;
            return;
        }
    }
    else if(icons_painting[mode][WEAPON] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == LEFT) {
            modeIcon = WEAPON;
            return;
        }
    }
    if(icons_painting[mode][SHIP] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == UP) {
            modeIcon = SHIP;
            return;
        }
    }
    if(icons_painting[mode][ANIMAL] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == DOWN) {
            modeIcon = ANIMAL;
            return;
        }
    }
}
}

// FLAG
if(modeIcon == FLAG) {
    if(icons_painting[mode][INSTRUMENT] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == RIGHT) {
            modeIcon = INSTRUMENT;
            return;
        }
    }
    else if(icons_painting[mode][ANIMAL] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == RIGHT) {
            modeIcon = ANIMAL;
            return;
        }
    }
    if(icons_painting[mode][WEAPON] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == UP) {
            modeIcon = WEAPON;
            return;
        }
    }
    else if(icons_painting[mode][SKULL] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == UP) {
            modeIcon = SKULL;
            return;
        }
    }
}
}

```

```

// INSTRUMENT
if(modeIcon == INSTRUMENT) {
    if(Icons_painting[mode][ANIMAL] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == RIGHT) {
            modeIcon = ANIMAL;
            return;
        }
    }
    if(Icons_painting[mode][JEWEL] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == UP) {
            modeIcon = JEWEL;
            return;
        }
    }
    else if(Icons_painting[mode][FOOD] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == UP) {
            modeIcon = FOOD;
            return;
        }
    }
    if(Icons_painting[mode][FLAG] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == LEFT) {
            modeIcon = FLAG;
            return;
        }
    }
}

// ANIMAL
if(modeIcon == ANIMAL) {
    if(Icons_painting[mode][PLANT] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == UP) {
            modeIcon = PLANT;
            return;
        }
    }
    else if(Icons_painting[mode][SHIP] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == UP) {
            modeIcon = SHIP;
            return;
        }
    }
    if(Icons_painting[mode][INSTRUMENT] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == LEFT) {
            modeIcon = INSTRUMENT;
            return;
        }
    }
    else if(Icons_painting[mode][FLAG] < 2) { // blocco l'icona se è già stata usata
        if(keyCode == LEFT) {
            modeIcon = FLAG;
            return;
        }
    }
}
}

// GALLERY: BROWSE PICTURES
*****
if(sezione == PICS_BROWSING) {
    if(keyCode == SOFTKEY2) {

```

```

    sezione = ICONS;
    mode = SKULL;
    return;
}

// ANIMAL ///////////////
if(mode == SHIP_PIC) {
    if(keyCode == RIGHT) {
        mode = FLAG_PIC;
        return;
    }
}

// WEAPON ///////////////
if(mode == FLAG_PIC) {
    if(keyCode == LEFT) {
        mode = SHIP_PIC;
        return;
    }
    if(keyCode == RIGHT) {
        mode = PLANT_PIC;
        return;
    }
}

// PLANT ///////////////
if(mode == PLANT_PIC) {
    if(keyCode == LEFT) {
        mode = FLAG_PIC;
        return;
    }
}

// shortcut
if(keyCode=='#') {
    nickname = "Malka";
    gameMode = MODE_SINGLE_PLAYER;
    sezione = FINAL_QUESTION;
    mode = QUESTION_1;
    totPunti = 420;
    return;
}
if(keyCode=='0') {
    nickname = "Malka";
    sezione = PLAY_OR_GALLERY;
    mode = PLAY_THE_GAME;
    gameMode = 0;
}
}
}

```