

IUAV 2010

INTERACTION DESIGN STUDIO 1 | GILLIAN CRAMPTON SMITH + PHILIP TABOR

"HAI FEGATO?", BY ISABELLA BALZANO | ALICE MORTARO | NICHOLAS RESTIVO

PIIMAGE SFONDO;

PIIMAGE BACK;

PIIMAGE MIRINO;

PIIMAGE MIRINOREVERSE;

PIIMAGE MAPPA;

INT BGX;

INT BGY;

INT MIRINOX;

INT MIRINOY;

INT GAP;

BOOLEAN UPMOVE;

BOOLEAN DOWNMOVE;

BOOLEAN LEFTMOVE;

BOOLEAN RIGHTMOVE;

INT[] ARRAYBACK;

INT INDEXBACK;

INT[][] AREA;

INT PAGINA;

INT COLORE = 0;

BOOLEAN VIEWMAP;

VOID SETUP() {

SIZE(240,320);

```
PAGINA = 0;

GAP = 5;

AREA = NEW INT[9][2]; // [x][y]

ARRAYBACK = NEW INT[10];

INDEXBACK = 0;

UPMOVE = FALSE;

DOWNMOVE = FALSE;

LEFTMOVE = FALSE;

RIGHTMOVE = FALSE;

AREA[0][0] = -240;

AREA[0][1] = -320;

AREA[1][0] = -480;

AREA[1][1] = 0;

AREA[2][0] = -240;

AREA[2][1] = -640;

AREA[3][0] = 0;

AREA[3][1] = -320;

AREA[4][0] = 0;

AREA[4][1] = -640;

AREA[5][0] = 0;

AREA[5][1] = 0;

AREA[6][0] = -240;

AREA[6][1] = 0;

AREA[7][0] = -480;

AREA[7][1] = -320;

AREA[8][0] = -480;

AREA[8][1] = -640;

VIEWMAP = FALSE;

BGX = AREA[0][0];

BGY = AREA[0][1];
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```

SFONDO = LOADIMAGE("IMAGEOK.JPG");
BACK = LOADIMAGE("BACK.PNG");
MIRINO = LOADIMAGE("00MIRINO.PNG");
MIRINOREVERSE = LOADIMAGE("01MIRINO.PNG");
MAPPA = LOADIMAGE("MAPPABASE.JPG");
}

VOID DRAW() {

IF(PAGINA==0) {
    IMAGE(SFONDO, AREA[0][0], AREA[0][1]);
}

IF(PAGINA > 0) {
    BGX = EASEOUT(BGX, AREA[PAGINA][0], 6);
    BGY = EASEOUT(BGY, AREA[PAGINA][1], 6);
    IMAGE(SFONDO, BGX, BGY);
}

// SHOW MAP
IF(VIEWMAP) {
    IMAGE(MAPPA, -240, -320);
}

IF((PAGINA > 1 && PAGINA < 6) || (PAGINA > 6 && PAGINA == 8)) {
    IMAGE(BACK, 190, 253);
}

IF(PAGINA > 0) {
    DRAWMIRINO();
}

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}

VOID ADDBACK(INT A) {
    ARRAYBACK[INDEXBACK] = A;
    INDEXBACK++;
}

VOID RESETBACK() {
    FOR(INT I=0; I< ARRAYBACK.LENGTH; I++) {
        ARRAYBACK[I] = 0;
    }
    INDEXBACK = 0;
}

VOID MOUSEPRESSED() {
    IF(PAGINA > 2 && VIEWMAP == FALSE) {
        IF(MIRINOX > 190 && MIRINOX < 240 && MIRINOY > 253 && MIRINOY < 320) {
            PAGINA = ARRAYBACK[INDEXBACK-2];
            INDEXBACK--;
        }
    }

    IF((PAGINA == 2 && VIEWMAP==TRUE) || (PAGINA == 6 && VIEWMAP==TRUE)) {
        IF(MIRINOX > 190 && MIRINOX < 240 && MIRINOY > 253 && MIRINOY < 320) {
            VIEWMAP = FALSE;
        }
    }

    IF(PAGINA == 0) {

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PAGINA = 1;

}

ELSE IF(PAGINA == 1) {

    IF(MIRINOX > 4 && MIRINOX < 234 && MIRINOY > 244 && MIRINOY < 311) {

        PAGINA = 5;

    }

    ELSE IF(MIRINOX > 85 && MIRINOX < 168 && MIRINOY > 130 && MIRINOY < 225) {

        PAGINA = 2;

        ADDBACK(2);

    }

}

ELSE IF(PAGINA == 2) {

    IF(MIRINOX > 40 && MIRINOX < 234 && MIRINOY > 180 && MIRINOY < 247) {

        PAGINA = 3;

        ADDBACK(3);

    }

    ELSE IF(MIRINOX > 40 && MIRINOX < 234 && MIRINOY > 93 && MIRINOY < 160) {

        PAGINA = 8;

        ADDBACK(8);

    }

    ELSE IF(MIRINOX > 40 && MIRINOX < 234 && MIRINOY > 4 && MIRINOY < 71) {

        VIEWMAP = TRUE;

    }

}

ELSE IF(PAGINA == 3) {

    IF(MIRINOX > 20 && MIRINOX < 180 && MIRINOY > 220 && MIRINOY < 255) {

        PAGINA = 4;

        ADDBACK(4);

    }

}

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```
}

}

ELSE IF(PAGINA == 4) {

    IF(MIRINOX > 85 && MIRINOX < 168 && MIRINOY > 244 && MIRINOY < 311 ) {

        PAGINA = 2;

        RESETBACK();

        ADDBACK(2);

    }

}

ELSE IF(PAGINA == 5) {

    IF(MIRINOX > 85 && MIRINOX < 168 && MIRINOY > 220 && MIRINOY < 311 ) {

        PAGINA = 6;

        ADDBACK(6);

    }

}

ELSE IF(PAGINA == 6) {

    IF(MIRINOX > 40 && MIRINOX < 234 && MIRINOY > 4 && MIRINOY < 71) {

        VIEWMAP = TRUE;

    }

    IF(MIRINOX > 40 && MIRINOX < 234 && MIRINOY > 93 && MIRINOY < 160) {

        PAGINA = 7;

        ADDBACK(7);

    }

}

ELSE IF(PAGINA == 7) {
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```

PAGINA = 2;

RESETBACK();

ADDBACK(2);

}

}

INT MIRINOXTEMP;
INT MIRINOYTEMP;

VOID DRAWMIRINO(){

    MIRINOXTEMP = MIRINOX -40;
    MIRINOYTEMP = MIRINOY -46;

    MIRINOX = MOUSEX;
    MIRINOY = MOUSEY;

    IF(PAGINA == 1){

        IF(MIRINOX > 4 && MIRINOX < 234 && MIRINOY > 244 && MIRINOY < 311){
            IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOXTEMP, -35, 195) ,CONSTRAIN(MIRINOYTEMP,
-40, 270));
        }

        ELSE IF(MIRINOX > 85 && MIRINOX < 168 && MIRINOY > 130 && MIRINOY < 225){
            IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOXTEMP, -35, 195) ,CONSTRAIN(MIRINOYTEMP,
-40, 270));
        }

        ELSE{
    
```

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IMAGE(MIRINO, CONSTRAIN(MIRINOXTEMP, -35, 195) ,CONSTRAIN(MIRINOYTEMP, -40,
270));
}

}

IF(PAGINA == 2){

IF(MIRINOX > 40 && MIRINOX < 234 && MIRINOY > 180 && MIRINOY < 247){

IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOXTEMP, -35, 195) ,CONSTRAIN(MIRINOYTEMP,
-40, 270));

}

ELSE IF(MIRINOX > 40 && MIRINOX < 234 && MIRINOY > 93 && MIRINOY < 160){

IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOXTEMP, -35, 195) ,CONSTRAIN(MIRINOYTEMP,
-40, 270));

}

ELSE IF(MIRINOX > 40 && MIRINOX < 234 && MIRINOY > 4 && MIRINOY < 71){

IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOXTEMP, -35, 195) ,CONSTRAIN(MIRINOYTEMP,
-40, 270));

}

ELSE{

IMAGE(MIRINO, CONSTRAIN(MIRINOXTEMP, -35, 195) ,CONSTRAIN(MIRINOYTEMP, -40,
270));

}

}

IF(PAGINA == 3){

IF(MIRINOX > 20 && MIRINOX < 60 && MIRINOY > 50 && MIRINOY < 70 ){

IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOXTEMP, -35, 195) ,CONSTRAIN(MIRINOYTEMP,
-40, 270));

}

ELSE IF(MIRINOX > 67 && MIRINOX < 103 && MIRINOY > 50 && MIRINOY < 79){

IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOXTEMP, -35, 195) ,CONSTRAIN(MIRINOYTEMP,
-40, 270));
}
}
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    }

    ELSE IF(MIRINOX > 120 && MIRINOX < 155 && MIRINOY > 46 && MIRINOY < 70){

        IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOXTEMP, -35, 195) ,CONSTRAIN(MIRINOYTEMP,
-40, 270));

    }

    ELSE IF(MIRINOX > 165 && MIRINOX < 180 && MIRINOY > 46 && MIRINOY < 79){

        IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOXTEMP, -35, 195) ,CONSTRAIN(MIRINOYTEMP,
-40, 270));

    }

    ELSE IF(MIRINOX > 200 && MIRINOX < 235 && MIRINOY > 46 && MIRINOY < 70){

        IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOXTEMP, -35, 195) ,CONSTRAIN(MIRINOYTEMP,
-40, 270));

    }

    ELSE IF(MIRINOX > 20 && MIRINOX < 180 && MIRINOY > 220 && MIRINOY < 255){

        IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOXTEMP, -35, 195) ,CONSTRAIN(MIRINOYTEMP,
-40, 270));

    }

    ELSE{

        IMAGE(MIRINO, CONSTRAIN(MIRINOXTEMP, -35, 195) ,CONSTRAIN(MIRINOYTEMP, -40,
270));

    }

}

IF(PAGINA == 4){

    IF(MIRINOX > 85 && MIRINOX < 168 && MIRINOY > 244 && MIRINOY < 311 ){

        IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOXTEMP, -35, 195) ,CONSTRAIN(MIRINOYTEMP,
-40, 270));

    }

    ELSE{

        IMAGE(MIRINO, CONSTRAIN(MIRINOXTEMP, -35, 195) ,CONSTRAIN(MIRINOYTEMP, -40,
270));

    }

}

```

```

}

IF(PAGINA == 5){

    IF(MIRINOX > 85 && MIRINOX < 168 && MIRINOY > 220 && MIRINOY < 311 ){

        IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOXTEMP, -35, 195) ,CONSTRAIN(MIRINOYTEMP,
-40, 270));

    }

    ELSE{

        IMAGE(MIRINO, CONSTRAIN(MIRINOXTEMP, -35, 195) ,CONSTRAIN(MIRINOYTEMP, -40,
270));

    }

}

IF(PAGINA == 6){

    IF(MIRINOX > 40 && MIRINOX < 234 && MIRINOY > 4 && MIRINOY < 71){

        IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOXTEMP, -35, 195) ,CONSTRAIN(MIRINOYTEMP,
-40, 270));

    }

    ELSE IF(MIRINOX > 40 && MIRINOX < 234 && MIRINOY > 93 && MIRINOY < 160){

        IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOXTEMP, -35, 195) ,CONSTRAIN(MIRINOYTEMP,
-40, 270));

    }

    ELSE{

        IMAGE(MIRINO, CONSTRAIN(MIRINOXTEMP, -35, 195) ,CONSTRAIN(MIRINOYTEMP, -40,
270));

    }

}

IF(PAGINA == 8){

    IMAGE(MIRINO, CONSTRAIN(MIRINOXTEMP, -35, 195) ,CONSTRAIN(MIRINOYTEMP, -40,
270));

}

INT EASEOUT(INT CURRENTORIGINAL, INT TARGETORIGINAL, INT SPEED)

{

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```
// 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)

}
```