

IUAV 2010

INTERACTION DESIGN STUDIO 1 | GILLIAN CRAMPTON SMITH + PHILIP TABOR

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

```
IMPORT PROCESSINGPHONE.*;
```

```
PIMAGE SFONDO;
```

```
PIMAGE BACK;
```

```
PIMAGE MIRINO;
```

```
PIMAGE MIRINOREVERSE;
```

```
PIMAGE MAPPA;
```

```
PHONE MYPHONE;
```

```
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;
    MYPHONE = NEW PHONE(THIS);
    MYPHONE.FULLSCREEN();
    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];

MIRINOX = 120;
MIRINOY = 160;

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], 2);
        BGY = EASEOUT(BGY, AREA[PAGINA][1], 2);
        IMAGE(SFONDO, BGX, BGY);
    }
}
```

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

```
}

IF(PAGINA > 1){

IMAGE(BACK,190,253);

}

IF(PAGINA > 0){

DRAWMIRINO();

}

IF(UPMOVE){

MIRINOY = MIRINOY - GAP;

}

IF(DOWNMOVE){

MIRINOY = MIRINOY + GAP;

}

IF(LEFTMOVE){

MIRINOX = MIRINOX - GAP;

}

IF(RIGHTMOVE){

MIRINOX = MIRINOX + GAP;

}

MIRINOXTEMP = MIRINOX + 40;
MIRINOYTEMP = MIRINOY + 46;
}

VOID ADDBACK(INT A){
```

```

ARRAYBACK[INDEXBACK] = A;

INDEXBACK++;

}

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

VOID KEYPRESSED() {
    IF(PAGINA == 0){
        IF(KEYCODE == FIRE){
            PAGINA = 1;
        }
    }
    ELSE IF(PAGINA == 1){
        IF(KEYCODE == FIRE){
            IF(MIRINOXTEMP > 4 && MIRINOXTEMP < 234 && MIRINOYTEMP > 244 && MIRINOYTEMP < 311){
                PAGINA = 5;
            }
            ELSE IF(MIRINOXTEMP > 85 && MIRINOXTEMP < 168 && MIRINOYTEMP > 130 && MIRINOYTEMP < 225){
                PAGINA = 2;
                ADDBACK(2);
            }
        }
    }
    ELSE IF(PAGINA == 2){

```

```

IF(KEYCODE == FIRE){

    IF(MIRINOXTEMP > 40 && MIRINOXTEMP < 234 && MIRINOYTEMP > 180 &&
MIRINOYTEMP < 247){

        PAGINA = 3;

        ADDBACK(3);

    }

    ELSE IF(MIRINOXTEMP > 40 && MIRINOXTEMP < 234 && MIRINOYTEMP > 93 &&
MIRINOYTEMP < 160){

        PAGINA = 8;

        ADDBACK(8);

    }

    ELSE IF(MIRINOXTEMP > 40 && MIRINOXTEMP < 234 && MIRINOYTEMP > 4 &&
MIRINOYTEMP < 71){

        VIEWMAP = TRUE;

    }

}

}

ELSE IF(PAGINA == 3){

    IF(KEYCODE == FIRE){

        IF(MIRINOXTEMP > 20 && MIRINOXTEMP < 180 && MIRINOYTEMP > 220 &&
MIRINOYTEMP < 255){

            PAGINA = 4;

            ADDBACK(4);

        }

    }

}

ELSE IF(PAGINA == 4){

    IF(KEYCODE == FIRE){

        IF(MIRINOXTEMP > 85 && MIRINOXTEMP < 168 && MIRINOYTEMP > 244 && MIRINOYTEMP
< 311 ){

            PAGINA = 2;

            RESETBACK();

            ADDBACK(2);

        }

    }

}

```

```

    }

}

}

ELSE IF(PAGINA == 5){

    IF(KEYCODE == FIRE){

        IF(MIRINOXTEMP > 85 && MIRINOXTEMP < 168 && MIRINOYTEMP > 220 && MIRINOYTEMP
< 311 ){

            PAGINA = 6;

            ADDBACK(6);

        }

    }

    ELSE IF(PAGINA == 6){

        IF(KEYCODE == FIRE){

            IF(MIRINOXTEMP > 40 && MIRINOXTEMP < 234 && MIRINOYTEMP > 4 && MIRINOYTEMP <
71){

                VIEWMAP = TRUE;

            }

            IF(MIRINOXTEMP > 40 && MIRINOXTEMP < 234 && MIRINOYTEMP > 93 && MIRINOYTEMP
< 160){

                PAGINA = 7;

                ADDBACK(7);

            }

        }

    }

}

ELSE IF(PAGINA == 7){

    IF(KEYCODE == FIRE){

        PAGINA = 2;

        RESETBACK();

        ADDBACK(2);

    }

}

```

```

// *****

```

```

IF(PAGINA > 2 && VIEWMAP == FALSE){

    IF(KEYCODE == SOFTKEY2){

        PAGINA = ARRAYBACK[INDEXBACK-2];

        INDEXBACK--;
    }

}

```

```

// BACK

IF((PAGINA == 2 && VIEWMAP==TRUE) || (PAGINA == 6 && VIEWMAP==TRUE)) {

    IF(KEYCODE == SOFTKEY2){

        VIEWMAP = FALSE;
    }

}

```

```

// JOYSTICK

IF(PAGINA>0){

    IF(KEYCODE == UP){

        UPMOVE = TRUE;
    }

    IF(KEYCODE == DOWN){

        DOWNMOVE = TRUE;
    }

    IF(KEYCODE == LEFT){

```

```
LEFTMOVE = TRUE;

}

IF(KEYCODE == RIGHT){

    RIGHTMOVE = TRUE;

}

}
```

```
}
```

```
VOID KEYRELEASED(){

    IF(KEYCODE == UP){

        UPMOVE = FALSE;

    }

    IF(KEYCODE == DOWN){

        DOWNMOVE = FALSE;

    }

    IF(KEYCODE == LEFT){

        LEFTMOVE = FALSE;

    }

    IF(KEYCODE == RIGHT){

        RIGHTMOVE = FALSE;

    }

}
```

```
}
```

```
INT MIRINOXTMP;
```

```
INT MIRINOYTMP;
```

```
VOID DRAWMIRINO(){
```

```

//PRINTLN(PAGINA);

IF(PAGINA == 1){

    IF(MIRINOXTEMP > 4 && MIRINOXTEMP < 234 && MIRINOYTEMP > 244 && MIRINOYTEMP <
311){

        IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOX, -35, 195) ,CONSTRAIN(MIRINOY, -40,
270));

    }

    ELSE IF(MIRINOXTEMP > 85 && MIRINOXTEMP < 168 && MIRINOYTEMP > 130 &&
MIRINOYTEMP < 225){

        IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOX, -35, 195) ,CONSTRAIN(MIRINOY, -40,
270));

    }

    ELSE{

        IMAGE(MIRINO, CONSTRAIN(MIRINOX, -35, 195) ,CONSTRAIN(MIRINOY, -40, 270));

    }

}

IF(PAGINA == 2){

    IF(MIRINOXTEMP > 40 && MIRINOXTEMP < 234 && MIRINOYTEMP > 180 && MIRINOYTEMP <
247){

        IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOX, -35, 195) ,CONSTRAIN(MIRINOY, -40,
270));

    }

    ELSE IF(MIRINOXTEMP > 40 && MIRINOXTEMP < 234 && MIRINOYTEMP > 93 &&
MIRINOYTEMP < 160){

        IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOX, -35, 195) ,CONSTRAIN(MIRINOY, -40,
270));

    }

    ELSE IF(MIRINOXTEMP > 40 && MIRINOXTEMP < 234 && MIRINOYTEMP > 4 && MIRINOYTEMP
< 71){

        IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOX, -35, 195) ,CONSTRAIN(MIRINOY, -40,
270));

    }

    ELSE{

```

```

    IMAGE(MIRINO, CONSTRAIN(MIRINOX, -35, 195) ,CONSTRAIN(MIRINOY, -40, 270));

}

}

IF(PAGINA == 3){

    //TROMBA

    IF(MIRINOXTEMP > 20 && MIRINOXTEMP < 60 && MIRINOYTEMP > 50 && MIRINOYTEMP < 70
) {

        IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOX, -35, 195) ,CONSTRAIN(MIRINOY, -40,
270));

    }

    //SCARPA

    ELSE IF(MIRINOXTEMP > 67 && MIRINOXTEMP < 103 && MIRINOYTEMP > 50 &&
MIRINOYTEMP < 79){

        IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOX, -35, 195) ,CONSTRAIN(MIRINOY, -40,
270));

    }

    //POLLO

    ELSE IF(MIRINOXTEMP > 120 && MIRINOXTEMP < 155 && MIRINOYTEMP > 46 &&
MIRINOYTEMP < 70){

        IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOX, -35, 195) ,CONSTRAIN(MIRINOY, -40,
270));

    }

    //SPRITZ

    ELSE IF(MIRINOXTEMP > 165 && MIRINOXTEMP < 180 && MIRINOYTEMP > 46 &&
MIRINOYTEMP < 79){

        IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOX, -35, 195) ,CONSTRAIN(MIRINOY, -40,
270));

    }

    //FANTASMA

    ELSE IF(MIRINOXTEMP > 200 && MIRINOXTEMP < 235 && MIRINOYTEMP > 46 &&
MIRINOYTEMP < 70){

        IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOX, -35, 195) ,CONSTRAIN(MIRINOY, -40,
270));

    }

    //VIEW CALENDER

    ELSE IF(MIRINOXTEMP > 20 && MIRINOXTEMP < 180 && MIRINOYTEMP > 220 &&
MIRINOYTEMP < 255){

```

```

    IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOX, -35, 195) ,CONSTRAIN(MIRINOY, -40,
270));

}

ELSE{

    IMAGE(MIRINO, CONSTRAIN(MIRINOX, -35, 195) ,CONSTRAIN(MIRINOY, -40, 270));

}

IF(PAGINA == 4){

    IF(MIRINOXTEMP > 85 && MIRINOXTEMP < 168 && MIRINOYTEMP > 244 && MIRINOYTEMP <
311 ){

        IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOX, -35, 195) ,CONSTRAIN(MIRINOY, -40,
270));

    }

    ELSE{

        IMAGE(MIRINO, CONSTRAIN(MIRINOX, -35, 195) ,CONSTRAIN(MIRINOY, -40, 270));

    }

}

IF(PAGINA == 5){

    IF(MIRINOXTEMP > 85 && MIRINOXTEMP < 168 && MIRINOYTEMP > 220 && MIRINOYTEMP <
311 ){

        IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOX, -35, 195) ,CONSTRAIN(MIRINOY, -40,
270));

    }

    ELSE{

        IMAGE(MIRINO, CONSTRAIN(MIRINOX, -35, 195) ,CONSTRAIN(MIRINOY, -40, 270));

    }

}

IF(PAGINA == 6){

//MAP

    IF(MIRINOXTEMP > 40 && MIRINOXTEMP < 234 && MIRINOYTEMP > 4 && MIRINOYTEMP <
71){

        IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOX, -35, 195) ,CONSTRAIN(MIRINOY, -40,
270));

    }

}

```

```

//T-SHIRT

ELSE IF(MIRINOXTEMP > 40 && MIRINOXTEMP < 234 && MIRINOYTEMP > 93 &&
MIRINOYTEMP < 160){

    IMAGE(MIRINOREVERSE, CONSTRAIN(MIRINOX, -35, 195) ,CONSTRAIN(MIRINOY, -40,
270));

}

ELSE{

    IMAGE(MIRINO, CONSTRAIN(MIRINOX, -35, 195) ,CONSTRAIN(MIRINOY, -40, 270));

}

}

INT EASEOUT(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)
```

```
}
```