

```

/******************
* first SETUP everything needed
******************/

import processing.phone.*; // import phone library to be able to go fullscreen
Phone myLG; // my phone's name reference

int fps = 5;

void setup()
{
    framerate(fps);

    myLG = new Phone(this); // create new phone instance/controller
    myLG.fullscreen(); // go full screen

    loadImages();

}

/******************
* CONSTANTS - mode, focus, options
******************/

int MODE_SPLASH = 0;
int MODE_CLOUDS_IN = 1;
int MODE_HAIKU = 2;
int MODE_CLOUDS_OUT = 3;
int MODE_MENU = 4;
int MODE_WRITEHAIKU = 5;
int MODE_SAVEHAIKU = 6;
int MODE_READHAIKU = 7;
int MODE_HAIKU_1 = 21;
int MODE_HAIKU_2 = 22;
int MODE_HAIKU_3 = 23;

int MENUFOCUS_WRITE = 0;
int MENUFOCUS_SAVE = 1;
int MENUFOCUS_READ = 2;

int READMENUFOCUS_1 = 11;
int READMENUFOCUS_2 = 12;
int READMENUFOCUS_3 = 13;
int READMENUFOCUS_4 = 14;
int READMENUFOCUS_5 = 15;

```

```

/***********************
* VARIABLES
***********************/

int mode = MODE_SPLASH;      // splash screen at the start, for a few seconds

int menuFocus = MENUFOCUS_WRITE; // menu screen, initial focus on write option

int readFocus = READMENUFOCUS_1; // read menu screen, initial focus on first haiku in the list

int splashTimeout = fps * 2;    // time duration of the splash screen
int cloudsInTimeout = fps * 3;
int haikuTimeout = fps * 2;
int cloudsOutTimeout = fps * 3;

/***********************
* define GRAPHICS and load them
***********************/

PImage splashScreen;

PImage cloudsIn;
PImage cloudsOut;
PImage clearSky;

PImage haikuLine_1;
PImage haikuLine_2;
PImage haikuLine_3;

PImage menuBackground;
PImage menuitemWrite;
PImage menuitemSave;
PImage menuitemRead;

PImage writeHaiku;
PImage saveHaiku;
PImage readHaikuBackground;
PImage readHaiku_1;
PImage readHaiku_2;
PImage readHaiku_3;
PImage readHaiku_4;
PImage readHaiku_5;

void loadImages(){
    splashScreen = loadImage("splashScreen.png");
}

```

```

cloudsIn = loadImage("cloudsIn.png");
cloudsOut = loadImage("cloudsOut.png");
clearSky = loadImage("clearSky.png");

menuBackground = loadImage("menuBackground.png");
menuItemWrite = loadImage("menuItemWrite.png");
menuItemSave = loadImage("menuItemSave.png");
menuItemRead = loadImage("menuItemRead.png");

haikuLine_1 = loadImage("haikuLine_1.png");
haikuLine_2 = loadImage("haikuLine_2.png");
haikuLine_3 = loadImage("haikuLine_3.png");

writeHaiku = loadImage("writeHaiku.png");
saveHaiku = loadImage("saveHaiku.png");
readHaikuBackground = loadImage("readHaikuBackground.png");
readHaiku_1 = loadImage("readHaiku_1.png");
readHaiku_2 = loadImage("readHaiku_2.png");
readHaiku_3 = loadImage("readHaiku_3.png");
readHaiku_4 = loadImage("readHaiku_4.png");
readHaiku_5 = loadImage("readHaiku_5.png");

}


```

```

*****
* SCREEN drawing functions
*****
```

```

void drawSplash(){
    image(splashScreen,0,0);
}
```

```

void drawCloudsIn(){
    image(cloudsIn,0,0);
}
```

```

void drawHaikuLine_1(){
    image(clearSky,0,0);
    image(haikuLine_1,0,0);
}
```

```

void drawHaikuLine_2(){
    image(clearSky,0,0);
    image(haikuLine_2,0,0);
}
```

```
void drawHaikuLine_3(){
    image(clearSky,0,0);
    image(haikuLine_3,0,0);
}

void drawCloudsOut(){
    image(cloudsOut,0,0);
}

void drawMenu(int focus){
    if(focus == MENUFOCUS_WRITE){
        image(menuBackground,0,0);
        image(menuitemWrite,0,0);
    }
    else if(focus == MENUFOCUS_SAVE){
        image(menuBackground,0,0);
        image(menuitemSave,0,0);
    }
    else if(focus == MENUFOCUS_READ){
        image(menuBackground,0,0);
        image(menuitemRead,0,0);
    }
}

void drawWriteHaiku(){
    image(writeHaiku,0,0);
}

void drawSaveHaiku(){
    image(saveHaiku,0,0);
}

void drawReadHaiku(int readFocus){
    if(readFocus == READMENUFOCUS_1){
        image(readHaikuBackground,0,0);
        image(readHaiku_1,0,0);
    }
    else if(readFocus == READMENUFOCUS_2){
        image(readHaikuBackground,0,0);
        image(readHaiku_2,0,0);
    }
    else if(readFocus == READMENUFOCUS_3){
        image(readHaikuBackground,0,0);
        image(readHaiku_3,0,0);
    }
    else if(readFocus == READMENUFOCUS_4){
        image(readHaikuBackground,0,0);
        image(readHaiku_4,0,0);
    }
}
```

```

}

else if(readFocus == READMENUFOCUS_5){
    image(readHaikuBackground,0,0);
    image(readHaiku_5,0,0);
}

}

*****  

* DRAWING function  

*****/

```

void draw(){} // happens repeatedly (according to framerate)...

if(mode == MODE_SPLASH){

```

if(0 < splashTimeout){      // draws splash screen first
    splashTimeout--;
    drawSplash();
}
else{
    mode = MODE_CLOUDS_IN;
}
}
```

else if(mode == MODE_CLOUDS_IN){

```

if(0 < cloudsInTimeout){      // draws clouds-in screen
    cloudsInTimeout--;
    drawCloudsIn();
}
else{
    mode = MODE_HAIKU_1;
    cloudsInTimeout = fps * 3;
}
}
```

else if(mode == MODE_HAIKU_1){

```

if(0 < haikuTimeout){      // draws haiku screen 1
    drawHaikuLine_1();
    haikuTimeout--;
}
}
```

```
else{
    mode = MODE_HAIKU_2;
    haikuTimeout = fps * 2;
}
}

else if(mode == MODE_HAIKU_2){

if(0 < haikuTimeout){      // draws haiku screen 2
    drawHaikuLine_2();
    haikuTimeout--;
}

else{
    mode = MODE_HAIKU_3;
    haikuTimeout = fps * 2;
}
}

else if(mode == MODE_HAIKU_3){

if(0 < haikuTimeout){      // draws haiku screen 3
    drawHaikuLine_3();
    haikuTimeout--;
}

else{
    mode = MODE_CLOUDS_OUT;
    haikuTimeout = fps * 2;
}
}

else if(mode == MODE_CLOUDS_OUT){

if(0 < cloudsOutTimeout){      // draws clouds-out screen
    cloudsOutTimeout--;
    drawCloudsOut();

}

else{
    mode = MODE_CLOUDS_IN;
    cloudsOutTimeout = fps * 3;
}
}
```

```

else if(mode == MODE_MENU){
    drawMenu(menuFocus);      // then goes to main menu
}

else if(mode == MODE_WRITEHAIKU){
    drawWriteHaiku();        // draws write-haiku screen
}

else if(mode == MODE_SAVEHAIKU){
    drawSaveHaiku();         // draws save-haiku screen
}

else if(mode == MODE_READHAIKU){
    drawReadHaiku(readFocus); // draws read-haiku screen
}

} // close of draw

```

```

/******************
* USER INPUT from keypad
******************/

void keyPressed(){

    if((mode == MODE_CLOUDS_OUT)|| (mode == MODE_CLOUDS_IN)) {

        mode = MODE_MENU;
    }

    if(mode == MODE_MENU){

        if(keyCode == SOFTKEY1){
            mode = MODE_CLOUDS_IN;
        }

        if(menuFocus == MENUFOCUS_WRITE){
            if(keyCode == SOFTKEY2){
                mode = MODE_WRITEHAIKU;
            }
            else if(keyCode == RIGHT){
                menuFocus = MENUFOCUS_SAVE;
            }
        }
    }
}

```

```
else if(keyCode == LEFT){
    menuFocus = MENUFOCUS_READ;
}
}

else if(menuFocus == MENUFOCUS_SAVE){
if(keyCode == SOFTKEY2){
    mode = MODE_SAVEHAIKU;
}
else if(keyCode == RIGHT){
    menuFocus = MENUFOCUS_READ;
}
else if(keyCode == LEFT){
    menuFocus = MENUFOCUS_WRITE;
}
}

else if(menuFocus == MENUFOCUS_READ){
if(keyCode == SOFTKEY2){
    mode = MODE_READHAIKU;
}
else if(keyCode == RIGHT){
    menuFocus = MENUFOCUS_WRITE;
}
else if(keyCode == LEFT){
    menuFocus = MENUFOCUS_SAVE;
}
}

}

if((mode == MODE_WRITEHAIKU)|| (mode == MODE_SAVEHAIKU)) {

if(keyCode == SOFTKEY1){
    mode = MODE_MENU;
}
}

if(mode == MODE_READHAIKU) {

if(keyCode == SOFTKEY1){
    mode = MODE_MENU;
}

if(readFocus == READMENUFOCUS_1){
if(keyCode == UP){
```

```
    readFocus = READMENUFOCUS_5;
}

else if(keyCode == DOWN){
    readFocus = READMENUFOCUS_2;
}
}

else if(readFocus == READMENUFOCUS_2){
    if(keyCode == UP){
        readFocus = READMENUFOCUS_1;
    }
    else if(keyCode == DOWN){
        readFocus = READMENUFOCUS_3;
    }
}

else if(readFocus == READMENUFOCUS_3){
    if(keyCode == UP){
        readFocus = READMENUFOCUS_2;
    }
    else if(keyCode == DOWN){
        readFocus = READMENUFOCUS_4;
    }
}

else if(readFocus == READMENUFOCUS_4){
    if(keyCode == UP){
        readFocus = READMENUFOCUS_3;
    }
    else if(keyCode == DOWN){
        readFocus = READMENUFOCUS_5;
    }
}

else if(readFocus == READMENUFOCUS_5){
    if(keyCode == UP){
        readFocus = READMENUFOCUS_4;
    }
    else if(keyCode == DOWN){
        readFocus = READMENUFOCUS_1;
    }
}
}
```

```
void keyReleased(){
    if(mode == MODE_SAVEHAIKU){
        mode = MODE_MENU;
        menuFocus = MENUFOCUS_SAVE;
    }
}

// This builds on the Mobile Processing code developed for the IUAV Interaction Design
// Programme by David Mellis, Vinay Ventrakamen and Nicholas Zambetti 2005-07. See
// www.interaction-venice.com/resources/?page_id=5.
```

// In our prototype we inspired from this code written by Nicholas:

```
/*
/////////////////////////////////////////////////////////////////////////
// Names Of Graphics & How Load Them
/////////////////////////////////////////////////////////////////////////
```

// named references to graphics

```
PIImage menuGioca;
PIImage menuAgenda;
PIImage menuProfilo;
PIImage menuClassifica;
PIImage giocaSestiereCannaregio;
```

// function to load all the images for the interface

```
void loadImages()
{
    // menu graphics
    menuGioca = loadImage("menuGioca.png");
    menuAgenda = loadImage("menuAgenda.png");
    menuProfilo = loadImage("menuProfilo.png");
    menuClassifica = loadImage("menuClassifica.png");
```

// gioca sestiere graphics

```
giocaSestiereCannaregio = loadImage("giocaSestiereCannaregio.png");
}
```

```
/////////////////////////////////////////////////////////////////////////
```

// Screen Drawing Functions

```
/////////////////////////////////////////////////////////////////////////
```

// function to draw the menu with specified focus

```
void drawMenu(int focus)
{
    if(focus == MENUFOCUS_GIOCA){
        image(menuGioca, 0, 0);
    }
}
```

```
else if(focus == MENUFOCUS_AGENDA){
    image(menuAgenda, 0, 0);
}
else if(focus == MENUFOCUS_PROFILO){
    image(menuProfilo, 0, 0);
}
else if(focus == MENUFOCUS_CLASSIFICA){
    image(menuClassifica, 0, 0);
}
}

// function to draw the Sestiere selector in the Gioca section
void drawGiocaSestiere()
{
    image(giocaSestiereCannaregio, 0, 0);
}

*****
* ZóGame Logic Section
* This section of the program is for the logic; how we decide what graphics to show.
* You can think of it as the section for code that captures and interprets user input (actions)
*****
```

||||| // Setup, Executes Once When Started, Prepares Program to Run (Logic Initialization) |||||

```
import processing.phone.*; // import phone library to go fullscreen  
Phone myPhone; // named reference to phone instance
```

`void setup() // happens only once, when the program starts...`

```
// go fullscreen  
myPhone = new Phone(this); // create new phone instance/  
myPhone.fullscreen(); // tell phone to go fullscreen  
  
loadImages(); // load images  
}
```

```
// Mode, Focus & Option Names (Constants)
```

```
// names for each possible mode  
// tip: one mode for each screen is easy to program for a demo but less easy to make into a real  
// application  
// one mode per logical group/flow of screens (e.g. registration, menu) is difficult to program
```

```

// but easier to make real
int MODE_MENU = 0;
int MODE_GIOCASESTIERE = 1;

// names for each possible focus option of the main menu
int MENUFOCUS_GIOCA = 0;
int MENUFOCUS_AGENDA = 1;
int MENUFOCUS_PROFILo = 2;
int MENUFOCUS_CLASSIFICA = 3;

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

// main menu information
int mode = MODE_MENU; // initially, we are showing the main menu

// main menu information
int menuFocus = MENUFOCUS_GIOCA; // initially, the main menu focus is on the first item
"Gioca"

///////////////////////////////
// Draw, Executes Forever, Provides User Feedback (Logic Repetition)
///////////////////////////////

void draw() // happens repeatedly (according to framerate)...
{
    if(mode == MODE_MENU){ // if we are in "Menu" mode...
        drawMenu(menuFocus); // draw image for menu with a variable focus
    }
    else if(mode == MODE_GIOCASESTIERE){ // if we are in "Sestiere" mode...
        drawGiocaSestiere(); // draw image for the sestiere selector
    }
}

///////////////////////////////
// Keypad Event (User Input Capture & Interpretation)
///////////////////////////////

void keyReleased() // whenever a key is pressed...
{
    if(mode == MODE_MENU) // if we are at the main menu...
    {
        if(menuFocus == MENUFOCUS_GIOCA) // if the menu is focused on "Gioca"...
        {
            if(keyCode == DOWN){ // if the user pressed down...
                menuFocus = MENUFOCUS_AGENDA; // put the menu focus on "Agenda"
            }
        }
    }
}

```

```

else if(keyCode == RIGHT){      // if the user pressed right...
    menuFocus = MENUFOCUS_CLASSIFICA; // put the menu focus on "Classifica"
}
else if(keyCode == FIRE){ // if the user pressed fire/center...
    mode = MODE_GIOCASESTIERE; // put the menu focus on "Classifica"
}
}
else if(menuFocus == MENUFOCUS_AGENDA) // if the menu is focused on "Agenda"...
{
    if(keyCode == UP){      // if the user pressed up...
        menuFocus = MENUFOCUS_GIOCA; // put the menu focus on "Gioca"
    }
    else if(keyCode == RIGHT){ // if the user pressed right...
        menuFocus = MENUFOCUS_PROFIL0; // put the menu focus on "Profilo"
    }
}
}
else if(mode == MODE_GIOCASESTIERE) // if we are at the sestiere selector...
{
    if(keyCode == '1'){ // if the user pressed "Indietro"...
        mode = MODE_MENU; // bring the user back to the main menu
    }
}
}

*/

```

// and he help us even to create the timer :

```

/*
if(mode == MODE_SPLASH){

    if(0 < splashTimeout){ // draws splash screen first
        splashTimeout--;
        drawSplash();
    }
    else{
        mode = MODE_CLOUDS_IN;
    }
}

*/

```