

Séance 4 (jeudi 2 octobre 2014)

Partie 1 : Interactivité (utilisation de la souris)

Raquette

```
void setup(){ size(600,400); }
float ballX = 200;      float ballY = 100;
float speedX = 10;      float speedY = 5;
int gagne = 0;          int rate = 0;

void draw(){
  ballX = ballX + speedX;
  ballY = ballY + speedY;
  if(ballX<0 || ballX>width) {speedX=-speedX;}
  if(ballY<0) {speedY = -speedY;}
  if(ballY>height-10 && speedY>0) {
    if(ballX>=mouseX-50 && ballX+50<=mouseX+100) {gagne = gagne + 1;speedY = -speedY;}
    if(ballY>height-10) {rate = rate +1;    speedY = -speedY;}
  }
  background(55,11,155);
  ellipse(ballX,ballY,50,50);
  rect(mouseX-50,height-10,100,10);
  text("marqué : " + gagne,10,20);
  text("raté :"+ rate,10,40);
}
```

Partie 2 : Scary monsters and nice sprites

Walking sonic

```
PImage weblmg;
PImage[][] walking = new PImage[4][2] ;
PImage[] backwalking = new PImage[4] ;
PImage[] rightwalking = new PImage[4] ;
PImage[] leftwalking = new PImage[4] ;
float vit = 0;
int i,j,k = 0;
int ypos = 5;
int xpos = 14;
int largeurprofil = 33;
int largeurface = 32;
int hauteur = 50;
int xsonic = 320;
int direction = 0;
```

```
void setup() {
```

```

size(640,480);
background(255);
String url = "http://www.sonicworld.net/site/media/sprites/large/sadxchaominigame";
webImg = loadImage(url + ".gif");
image(webImg,0,0);
for (i=0;i<4;i++){ walking[i][0] = get(14+largeurprofil*i,148,largeurprofil,46); }
for (i=0;i<4;i++){ walking[i][1] = get(153+largeurprofil*i,148,largeurprofil,46); }
}

```

```

void draw() {
background(255);
image(walking[j%4][0], 0, 100); image(walking[j%4][1], 64, 100);
j=int(vit);
vit=vit +0.1;
image(walking[xsonic%4][direction], (xsonic-320)*10+320, 200);
}

```

```

void keyPressed() {
if (key=='q') {xsonic--; direction = 1;};
if (key=='d') {xsonic++; direction = 0;}; }

```

Running Mario

```

PImage webImg;
PImage[][] walking = new PImage[4][2];
float vit = 0;
int i,j,k = 0;
int ypos = 5;
int xpos = 14;
int largeurprofil = 66; int largeurface = 32; int hauteur = 50;
int xsonic = 320;
int direction = 0;

```

```

void setup() {
size(1280,960);
background(255);
String url = "http://www.mariouniverse.com/images/sprites/snes/smw/mario.png";
webImg = loadImage(url);
image(webImg,0,0);
webImg = get(0,0,640,480);
image(webImg,0,0,1280,960);
walking[0][0] = get(168*2,75*2,16*2,27*2);
walking[1][0] = get(8*2,75*2,16*2,27*2);
walking[2][0] = get(48*2,75*2,16*2,27*2);
walking[0][1] = get(208*2,75*2,16*2,27*2);
walking[1][1] = get(328*2,75*2,16*2,27*2);
walking[2][1] = get(368*2,75*2,16*2,27*2);
}

```

```
void draw() {  
  background(255);  
  image(walking[j%3][0], 0, 100); image(walking[j%3][1], 64, 100);  
  j=int(vit);  
  vit=vit +0.1;  
  image(walking[xsonic%3][direction], (xsonic-320)*10+320, 200);  
}
```

```
void keyPressed() {  
  if (key=='q') {xsonic--; direction = 0;};  
  if (key=='d') {xsonic++; direction = 1;};}
```