

LOST

Génie des systèmes embarqués et
informatique industrielle

Réalisé par :
Aabour Driss
Ardouz Rachid
Laissaoui Ismail

Encadré par :
Y.I.Khamlichi

1

22/11/2020



Plan

- Présentation du jeu
- Les bibliothèques utilisées
- Les classes

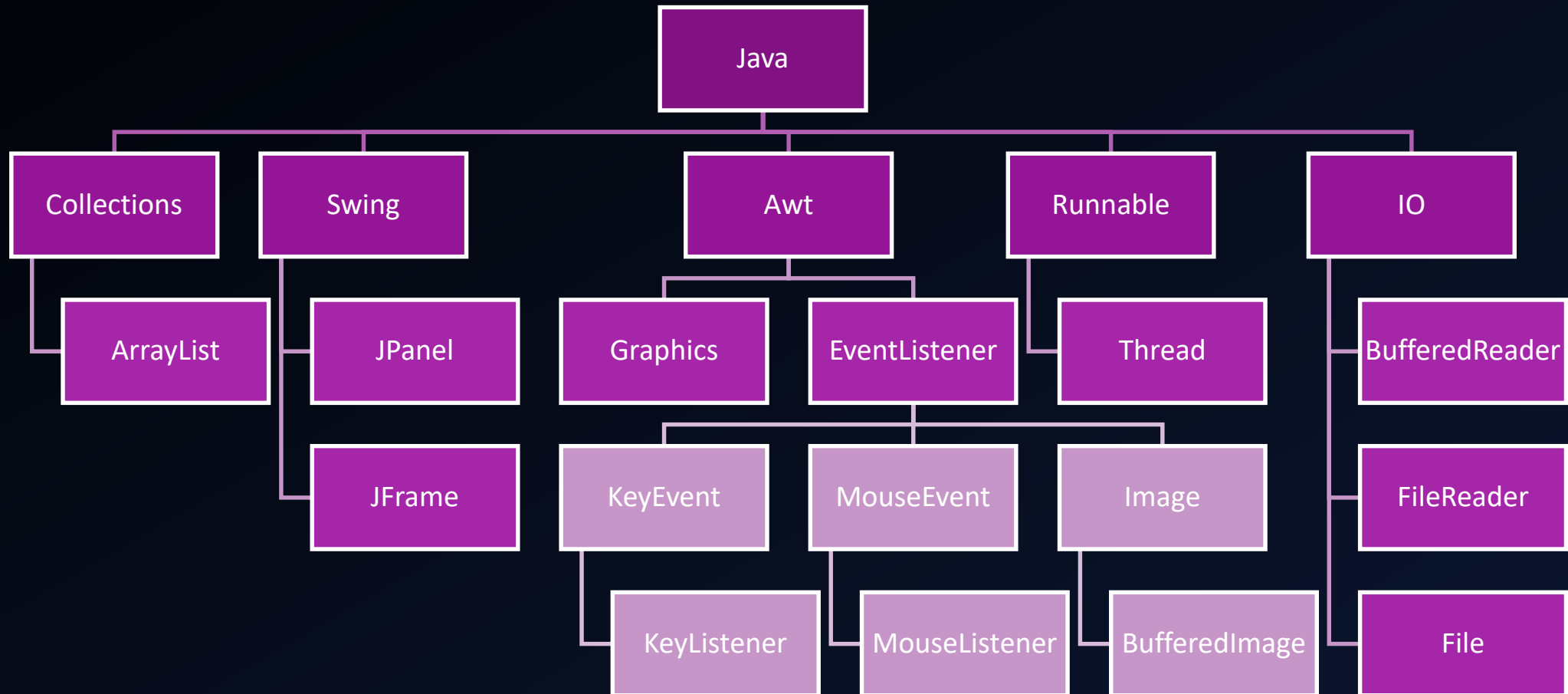


Lost

- Application java 2D
- Basée sur java Swing
- Le Bouton Espace pour démarrer le jeu
- Le Bouton Espace pour le Shoot
- Le Bouton UP pour Jump
- Le Bouton Right pour la marche à droite
- Le Bouton Left pour la marche à gauche
- Le Bouton Entrer pour play et stop du son



Les bibliothèques





Les classes

La classe Menu

```
1 package PROJETJAVA;
2
3 import java.awt.event.MouseEvent;
4
5 public class Menu {
6
7     boolean mousePress;
8
9     void mousePress(MouseEvent e) {
10         int x = e.getX();
11         int y = e.getY();
12
13         if (x >= 60 && x < 210 && y > 250 && y < 290) // Play button
14             // play ==> size(150,40) , 60<=x =<210 et 250<=y=<290
15             StartingClass.State = "game";
16         else if (x >= 60 && x <= 210 && y >= 300 && y <= 340) // exit button
17             // size exit == (150,40) , 60<=x =<210 et 300<=y=<340
18             System.exit(1);
19     }
20 }
21
22
```



La classe Menu sert à mettre en place les options Play,exit
ainsi que le logo du jeu

La classe Death

```
package PROJETJAVA;

import java.awt.event.MouseEvent;

public class Death {
    void mousePress(MouseEvent e) {
        int mx = e.getX();
        int my = e.getY();

        if (mx > 60 && mx < 210 && my > 350 && my < 390) {
            StartingClass.State = "menu";
        } else if (mx > 60 && mx < 210 && my > 400 && my < 440) {
            StartingClass.restart();
            StartingClass.State = "game";
        }
    }
}
```



La classe Death sert à mettre en place les options
Menu, PlayAgain ainsi que le logo du jeu



La classe Background

```
package PROJETJAVA;

public class Background {

    private int bgX, bgY, speedX;

    public Background(int x, int y) {
        bgX = x;
        bgY = y;
        speedX = 0;
    }

    public void update() {
        bgX += speedX;

        if (bgX < -1920 * 3) {
            bgX = 1920;
        }
        if (bgX > 1920 * 2) {
            bgX = -1920 * 2;
        }
    }
}
```



- La classe Enemy

```
public static void update() {  
  
    for (Enemy i : enemies) {  
  
        i.follow();  
        i.centerX += i.speedX;  
        i.speedX = i.bg.getSpeedX() * 5 + i.movementSpeed;  
        i.r.setBounds(i.centerX - 30, i.centerY - 10, 85, 60);  
  
        if (i.r.intersects(Robot.tete))  
            StartingClass.State = "dead";  
    }  
}
```

```
public void follow() {  
  
    if (Math.abs(StartingClass.getRobot().getCenterX() - centerX) < 5) {  
        this.movementSpeed = 0; }  
  
    else {  
  
        if (StartingClass.getRobot().getCenterX() >= centerX) {  
            this.direction = "right";  
            this.movementSpeed = 2;  
        } else {  
            this.direction = "left";  
            this.movementSpeed = -2;  
        }  
    }  
}
```



La classe Projectile

```
private void checkCollision() {
    ArrayList tiles = StartingClass.getTileArray();
    for (int i = 0; i < tiles.size(); i++) {
        Tile p = (Tile) tiles.get(i);
        if (r != null) {
            if (r.intersects(p.getRectangle()) && (p.getType() == 2 || p.getType() == 3 || p.getType() == 6)) {
                visible = false;
            }
        }
    }
    for (Enemy i : Enemy.enemies) {
        if (r.intersects(i.r)) {
            visible = false;
            if (i.health > 0) {
                i.health -= 1;
            }
            if (i.health == 0) {
                i.setIsDead(true);
                StartingClass.score += 5;
            }
        }
    }
}
```

```
package PROJETJAVA;

import java.awt.Rectangle;

public class Projectile {

    private int x, y, speedX;
    private boolean visible;
    private Rectangle r;
```



La classe Tile

```
package PROJETJAVA;

import java.awt.Image;

public class Tile {

    private int tileX, tileY, speedX, type;
    public Image tileImage;
    private Robot robot = StartingClass.getRobot();
    private Background bg = StartingClass.getBgl();
    private Rectangle r;

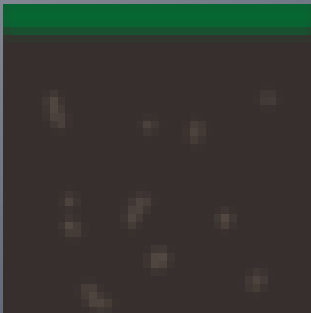
    public Tile(int x, int y, int typeint){
        tileX = x*40;
        tileY = y*40;
        type = typeint;
        r = new Rectangle();
        if (type == 2)
            tileImage = StartingClass.grasstop;
        else if (type == 3)
            tileImage = StartingClass.tiledirt;
        else if (type == 4)
            tileImage = StartingClass.tilestone;
        else if (type == 5)
            tileImage = StartingClass.tiletree;
        else if (type == 6)
            tileImage = StartingClass.tilerock;
        else {
            type = 0;
        }
    }
}
```

Les types de Tile

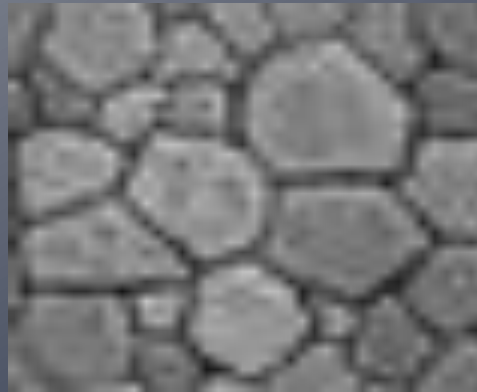
- *Tiletree type 5*



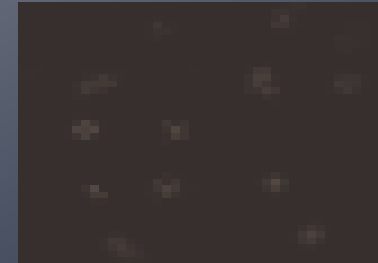
Grasstop type 2



Tilerock type 6



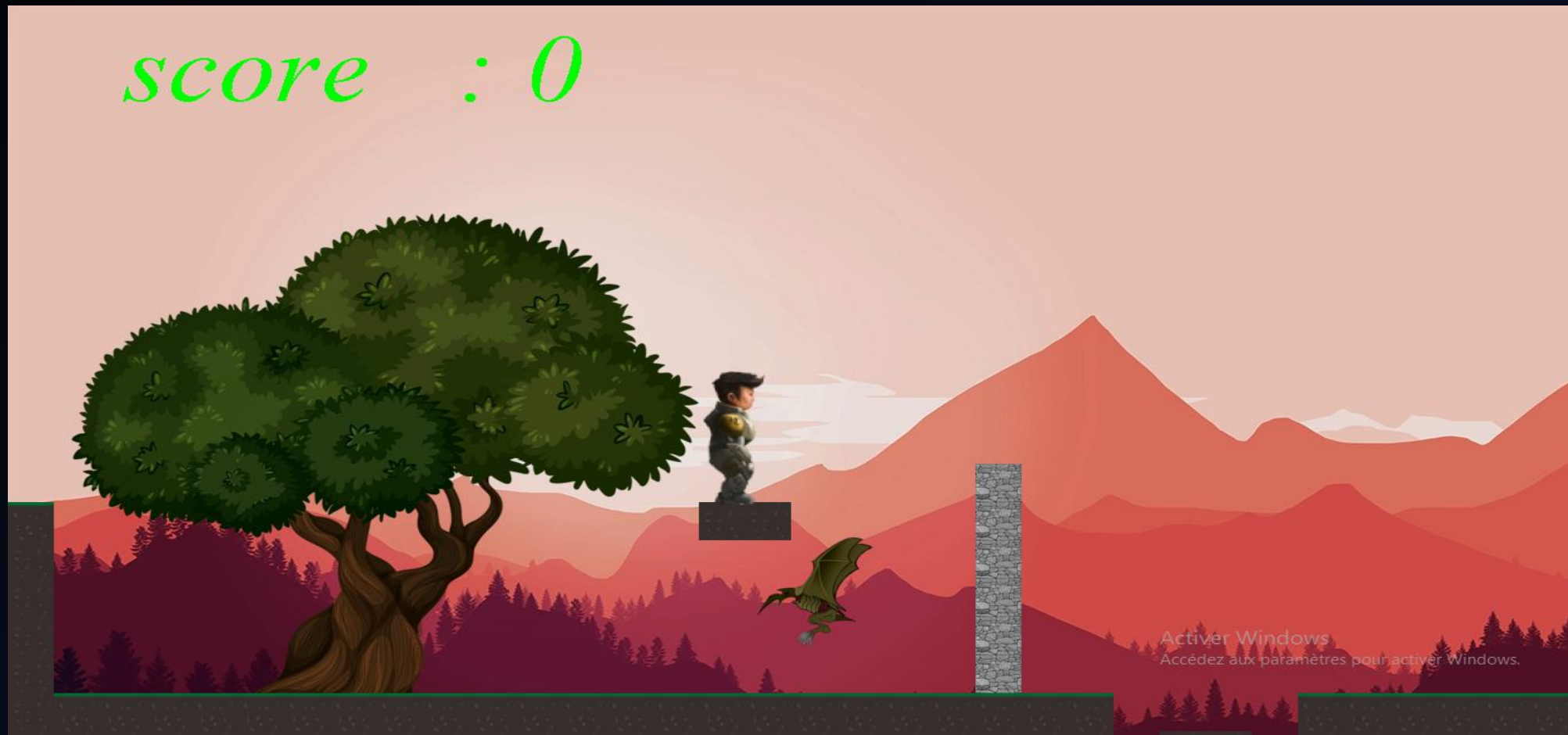
Tiledirt type 3



Tilestone type 4



La classe StartingClass





Merci pour votre attention