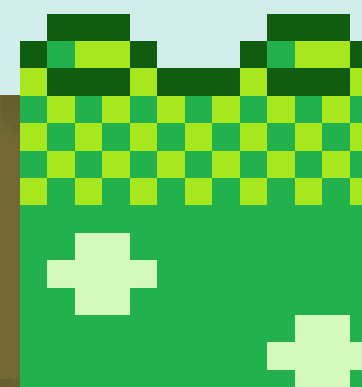
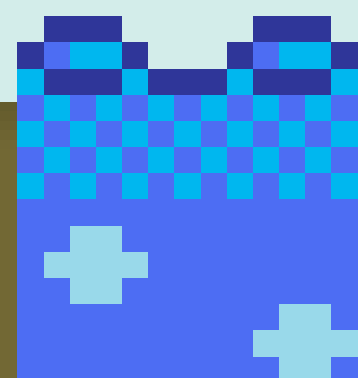
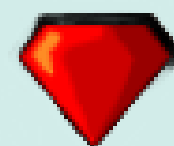


# FIRE BOY & WATER GIRL

JEU DE LABYRINTH



# *classes principales*

## Personnage

-nom: chaîne de caractère  
-pos: Vec2  
-type\_p: Type  
-pla: Plateau

+Personnage()  
~Personnage()  
+entremom()  
+getPos()  
+setPos(int)  
+Personnage(IN Type, int)  
+getType()  
+DeplacerD(IN Plateau)  
+DeplacerG(IN Plateau)  
+DeplacerH(IN Plateau)  
+Gravite(IN Plateau)  
+testRegression\_Per()

## Plateau

-dimx: entier  
-dimy: entier  
+plateau: tableau 2D de NomCase  
-tabObj: tableau de Objet  
-tabBloc: tableau de Objet  
-vitesse: entier

+Plateau()  
~Plateau()  
+getPlateau(int)  
+getDimx()  
+getDimy()  
+getObjet(IN int)  
+setObjet(int, IN Type, Vect2)  
+EstPosValide(int)  
+setPlateau(Vect2, IN NomCase)  
+bougeAuto()

## Jeu

-plat: Plateau  
-feu: Personnage  
-eau: Personnage  
+score: entier\_positif  
+tmp\_partie: entier

+Jeu()  
~Jeu()  
+actionClavier(char)  
+Gravite(bool)  
+getPlateau()  
+getPersonnageEau()  
+gePersonnageFeu()  
+succes(IN Objet)  
+perte(IN Objet)  
+collision(IN Personnage, IN Objet)  
+ajouteScore(Plateau)  
+testRegressionJeu()  
+ActionAuto()

# ***rules du jeu***

**Atteindre les deux portes**



**mouvements vers la  
droite, gauche, sauter**



**éviter les obstacles:**

**-rivière vs feu**

**-lava vs eau**

**-rivière verte vs feu et eau**



**gagner des bonus diamants  
correspondant à chaque  
personnage**

# *menu texte*

Menu
+Menu_Choix1: enum ChoixMenu
+Menu_Choix2: enum ChoixMenu
+Menu_Quit: enum ChoixMenu
+MENU_MAX: extern entier
+menuAff()
+menuQuestion()

```
Menu
1: Jeu mode texte
2: Jeu mode SDL
0: Exit
Votre choix?
```

# menu sdl

## SDLMenu dans MenuSdl

- fenetre: pointeur sur SDL\_Window
- rederer: pointeur sur SDL\_Renderer
- font: pointeur sur TTF\_Font
- font\_sim: Image
- font\_color: SDL\_Color
- titre: Image
- boutonSDL: Image
- boutonTxt: Image
- boutonQuit: Image
- rectBoutonSDL: SDL\_Rect
- rectBoutonTXT: SDL\_Rect
- rectBoutonQuit: SDL\_Rect

- +SDLMenu()
- ~SDLMenu()
- +estclicque(int, SDL\_Rect)
- +afficherMenu(SDL\_Renderer)
- +getRec()
- +getRecBoutonSDL(IN-OUT SDL\_Rect)
- +getRecBoutonTXT(IN-OUT SDL\_Rect)
- +getRecBoutonQUIT(IN-OUT SDL\_Rect)
- +sdlBoucle()

## Image dans MenuSdl

- surface: pointeur sur SDL\_Surface
- texture: pointeur sur SDL\_Texture
- has\_changed: booléen

- +Image()
- ~Image()
- +loadFromFile(IN char, SDL\_Renderer)
- +loadFromCurrentSurface(SDL\_Renderer)
- +getTexture()
- +draw(SDL\_Renderer, int)
- +setSurface(SDL\_Surface)

## Fireboy & Watergirl ELEMENTS



JEU SDL



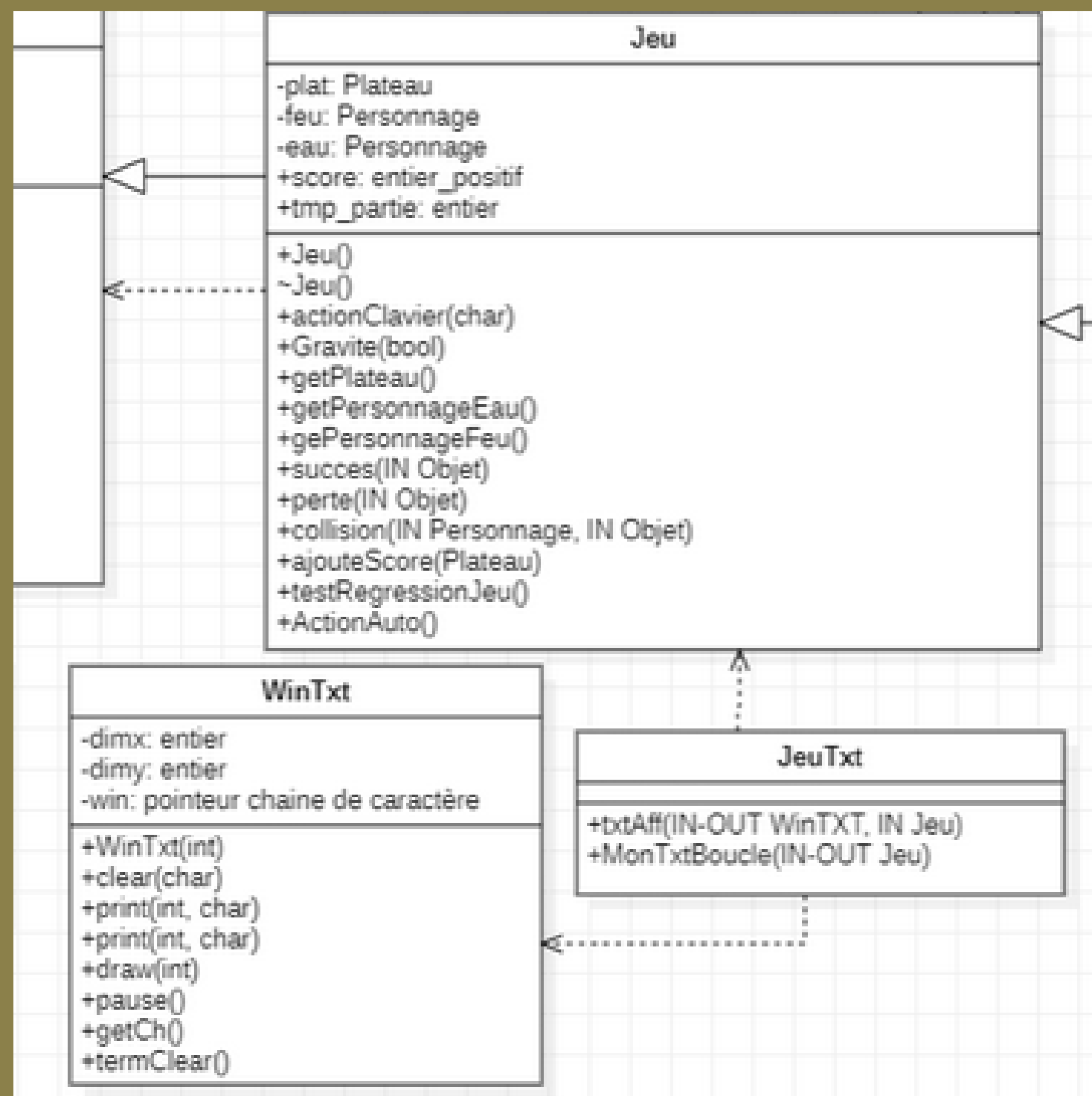
JEU TXT



QUIT



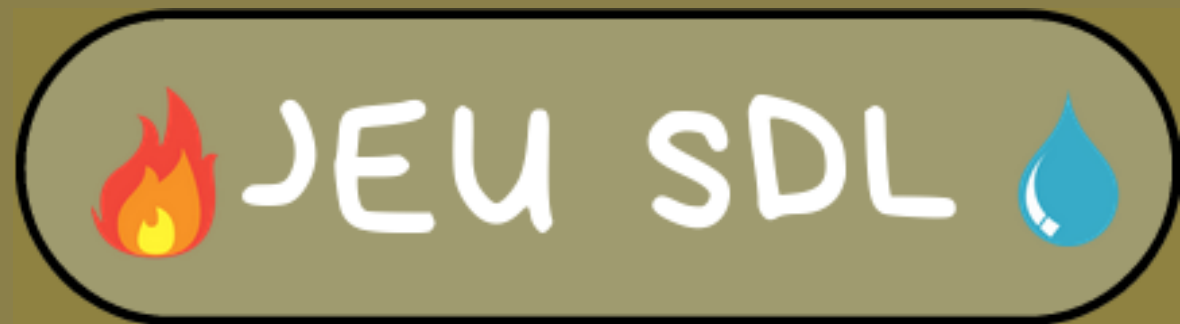
# JEU TXT



```

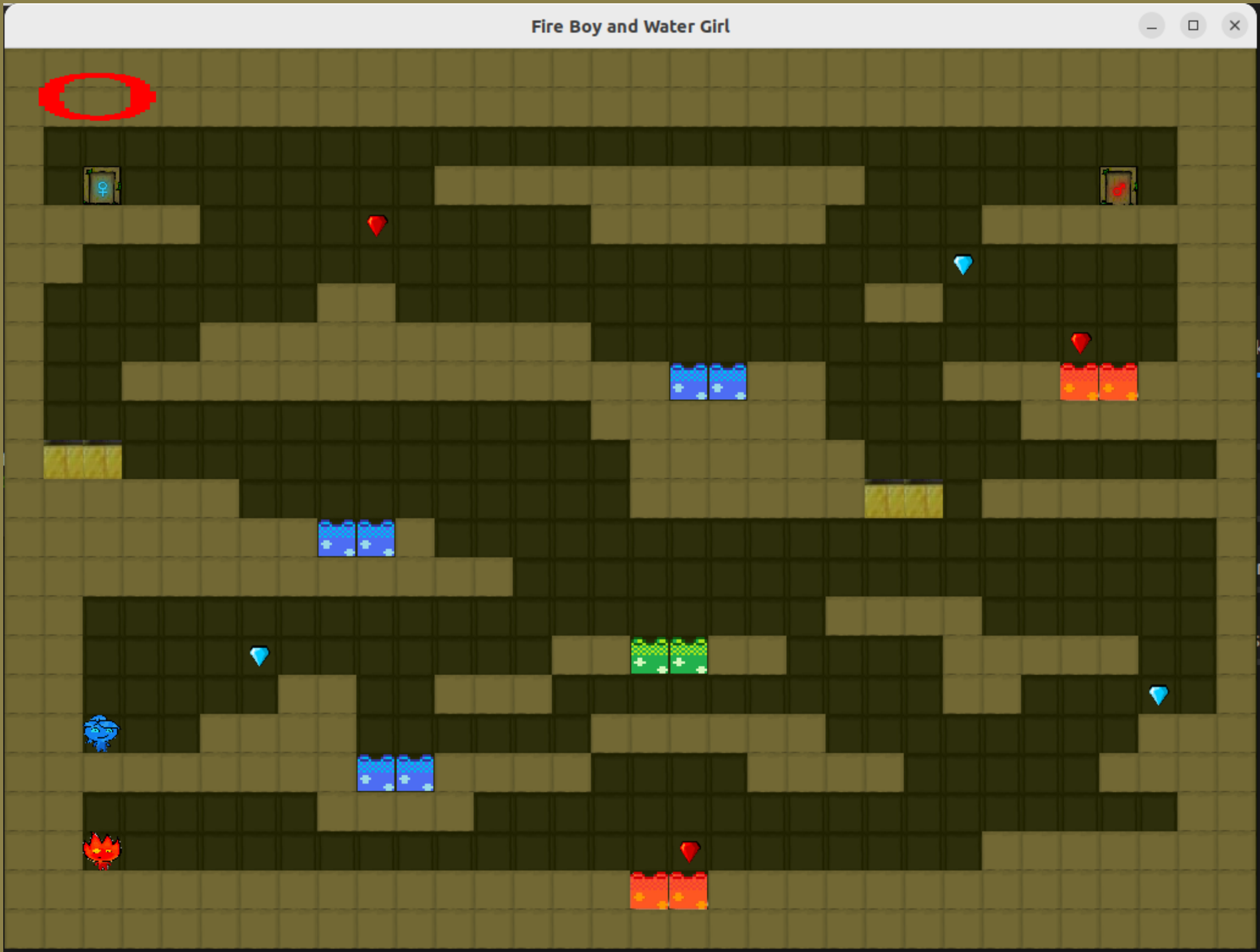
#####
#####
#                                     ##
# E          #####                F ##
#####      r          #####      #####
##                                     b      ##
#          ##                ##      ##
#          #####                r      ##
# #####ee##          ##ff###
#          #####          #####
#__          #####          #
#####          #####__ #####
#####ee#          #
#####          #
##          #####          #
##      b          ##vv##          #####  #
##          ##  ###          ##      b  #
##e  #####          #####          ###
##ff#####ee#####          #####
##          #####          ##
##          r          #####
#####ff#####
#####

```



JeuSdl
<ul style="list-style-type: none"><li>-surface: pointeur SDL_Surface</li><li>-texture: pointeur SDL_Texture</li><li>-has_changed: booléen</li></ul>
<ul style="list-style-type: none"><li>+Image()</li><li>~Image()</li><li>+loadFromFile(IN Char)</li><li>+loadFromCurrentSurface()</li><li>+draw(int)</li><li>+getTexture()</li><li>+setSurface()</li></ul>

SDLSimple
<ul style="list-style-type: none"><li>-jeu: Jeu</li><li>-window: pointeur SDL_Window</li><li>-renderer: pointeur SDL_Renderer</li><li>-font: TTF_Font</li><li>-font_im: Image</li><li>-font_color: SDL_Color</li><li>-musique: pointeur Mix_Music</li><li>-withsound: booléen</li><li>-time: SDL_TimerID</li><li>-im_chrono: Image</li><li>-chrono_couleur: SDL_Color</li><li>-riviere1: Image</li><li>-lava1: Image</li><li>-vert1: Image</li><li>-im_perso_eau: Image</li><li>-im_perso_feu: Image</li><li>-im_mur: Image</li><li>-im_fond: Image</li><li>-im_bloc: Image</li><li>-im_porte_eau: Image</li><li>-im_porte_feu: Image</li><li>-souris: booléen</li><li>-touche: booléen</li></ul>
<ul style="list-style-type: none"><li>+SDLSimple()</li><li>~SDLSimple()</li><li>+sdlBoucle()</li><li>+sdlAff()</li></ul>



# difficultés rencontrées

1. Création Plateau

2. Mouvement Automatique

3. Affichage Menu SDL

4. Affichage des diamants

5. Problèmes en Memoire

```
(base) acil@acil-ZenBook-UX431FAC-UX431FA:~/Documents/L2/LIFAP4/jeu-de-labyrinthe$ valgrind bin/sdl
==5616== Memcheck, a memory error detector
==5616== Copyright (C) 2002-2017, and GNU GPL'd, by Julian Seward et al.
==5616== Using Valgrind-3.18.1 and LibVEX; rerun with -h for copyright info
==5616== Command: bin/sdl
==5616==
==5616== Invalid read of size 8
==5616==    at 0x40286C8: strcmp (strcmp.S:172)
==5616==    by 0x400668D: is_dst (dl-load.c:216)
==5616==    by 0x400810E: _dl_dst_count (dl-load.c:253)
==5616==    by 0x400810E: expand_dynamic_string_token (dl-load.c:395)
==5616==    by 0x40082B7: fillin_rpath.isra.0 (dl-load.c:483)
==5616==    by 0x4008602: decompose_rpath (dl-load.c:654)
==5616==    by 0x400ABF5: cache_rpath (dl-load.c:696)
==5616==    by 0x400ABF5: cache_rpath (dl-load.c:677)
==5616==    by 0x400ABF5: _dl_map_object (dl-load.c:2165)
==5616==    by 0x4003494: openaux (dl-deps.c:64)
==5616==    by 0x4F1AC27: _dl_catch_exception (dl-error-skeleton.c:208)
==5616==    by 0x4003C7B: _dl_map_object_deps (dl-deps.c:248)
==5616==    by 0x400EA0E: dl_open_worker_begin (dl-open.c:592)
==5616==    by 0x4F1AC27: _dl_catch_exception (dl-error-skeleton.c:208)
==5616==    by 0x400DF99: dl_open_worker (dl-open.c:782)
==5616== Address 0x73beb49 is 9 bytes inside a block of size 15 alloc'd
==5616==    at 0x4848899: malloc (in /usr/libexec/valgrind/vgpreload_memcheck-amd64-linux.so)
==5616==    by 0x40271FF: malloc (rtld-malloc.h:56)
==5616==    by 0x40271FF: strdup (strdup.c:42)
==5616==    by 0x4008594: decompose_rpath (dl-load.c:629)
==5616==    by 0x400ABF5: cache_rpath (dl-load.c:696)
==5616==    by 0x400ABF5: cache_rpath (dl-load.c:677)
==5616==    by 0x400ABF5: _dl_map_object (dl-load.c:2165)
==5616==    by 0x4003494: openaux (dl-deps.c:64)
==5616==    by 0x4F1AC27: _dl_catch_exception (dl-error-skeleton.c:208)
==5616==    by 0x4003C7B: _dl_map_object_deps (dl-deps.c:248)
==5616==    by 0x400EA0E: dl_open_worker_begin (dl-open.c:592)
==5616==    by 0x4F1AC27: _dl_catch_exception (dl-error-skeleton.c:208)
==5616==    by 0x400DF99: dl_open_worker (dl-open.c:782)
==5616==    by 0x4F1AC27: _dl_catch_exception (dl-error-skeleton.c:208)
==5616==    by 0x400E34D: _dl_open (dl-open.c:883)
==5616==
```