

classes.py

△ from random import randrange

import pygame

from includes.constants import (FILE_TEXT, IMG_ETHER,
IMG_GUARDIAN, IMG_MAC, IMG_NEDDLE,
IMG_SPRITES, IMG_TUBE, OBJECTS, SPRITE_NUMBER,
SPRITE_SIZE)

class Maze:

"""Open the text file and generates the structure of the
labyrinth.
"""

```
def __init__(self, txt_file=FILE_TEXT):  
    self.txt_file = txt_file  
    self.structure = 0  
    self.macgyver_pos = ()
```

```
# Launch private method  
self.__generate()  
self.__get_position_mac()
```

def __generate(self):

...

def __get_position_mac(self):

...

def display_maze(self, window):

...

macgyver_maze_game.py Programme principal

labyrinth_scheme.txt

△ Contient la structure du labyrinthe:

```
s wwwwww  
www www w  
w   w w  
www wwwwww  
w   w  
www w w w  
w w w  
w w www www  
w w w w  
wwwwww www  
w w w  
w w w wwwwww  
w   w  
wwwwwwwwwweg
```

macgiver.py

△ import pygame

from includes.constants import IMG_MAC,
SPRITE_NUMBER, SPRITE_SIZE

class MacGyver:

"""MacGyver movement management."""

```
def __init__(self, level):  
    self.level = level
```

```
# Initial position of MacGyver  
self.case_x, self.case_y = level.macgyver_pos  
self.x = self.case_x * SPRITE_SIZE  
self.y = self.case_y * SPRITE_SIZE
```

def move(self, direction):

...

constants.py

△ SPRITE_NUMBER = 15
SPRITE_SIZE = 30
WIDTH = HEIGHT = SPRITE_NUMBER * SPRITE_SIZE
DISPLAY_SIZE = (WIDTH, HEIGHT)

TITLE_WINDOW = "MacGyver Maze Game"
ICON_GAME = "includes/img/MacGyver.png"

IMG_SPRITES = "includes/img/floor-tiles-20x20.png"
IMG_MAC = "includes/img/MacGyver.png"
IMG_GUARDIAN = "includes/img/Gardien.png"

OBJECTS = ["ether", "needle", "tube"]
IMG_NEDDLE = "includes/img/aiguille.png"
IMG_TUBE = "includes/img/tube_plastique.png"
IMG_ETHER = "includes/img/ether.png"

COLOR_BG = (255, 255, 255)
COLOR_FG = (0, 0, 0)

FONT = ("includes/font/IndieFlower.ttf")
FILE_TEXT = ("includes/labyrinth_scheme.txt")