Project Cypherynth

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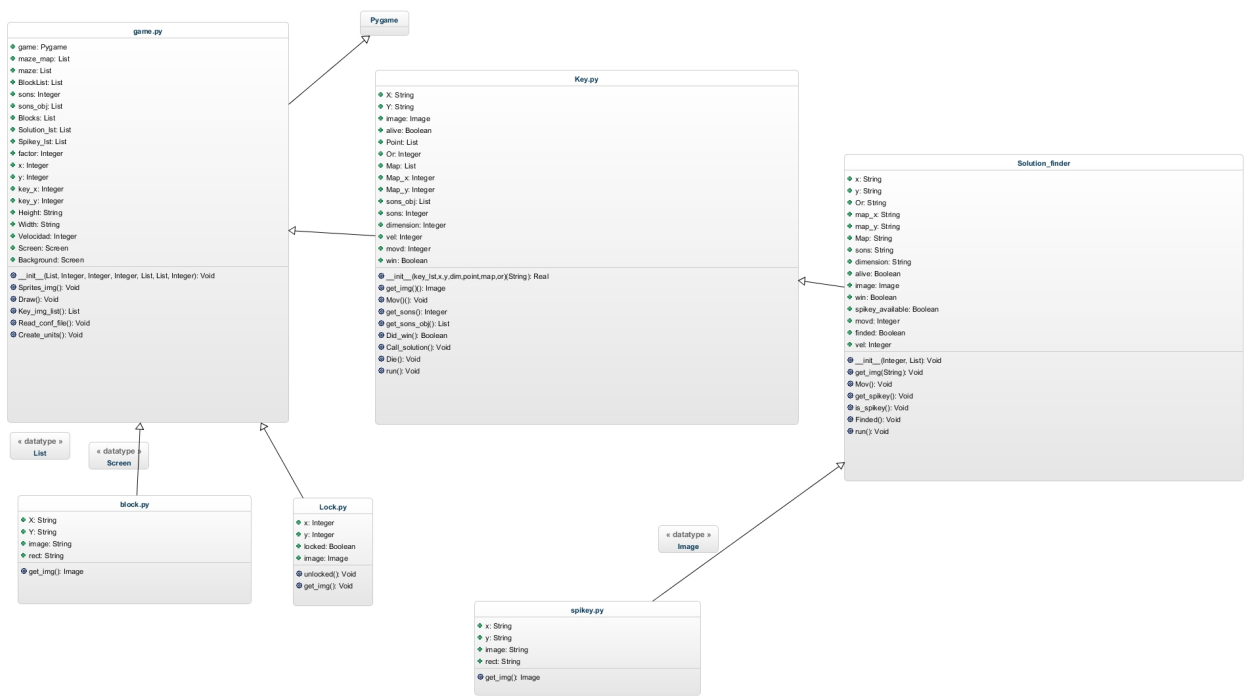
Table of Contents

1. Overview

1.1 Model Description

1.2 Diagrams

game.py
- game: Pygame
- maze_map: List
- maze: List
- BlockList: List
- sons: Integer
- sons_obj: List
- Blocks: List
- Solution_lst: List
- Spikey_lst: List
- factor: Integer
- x: Integer
- y: Integer
- key_x: Integer
- key_y: Integer
- Height: String
- Width: String
- Velocidad: Integer
- Screen: Screen
- Background: Screen

- __init__(List, Integer, Integer, Integer, List, List, Integer): Void
- Sprites_img(): Void
- Draw(): Void
- Key_img_list(): List
- Read_conf_file(): Void
- Create_units(): Void

Pygame

Key.py
- X: String
- Y: String
- image: Image
- alive: Boolean
- Point: List
- Or: Integer
- Map: List
- Map_x: Integer
- Map_y: Integer
- sons_obj: List
- sons: Integer
- dimension: Integer
- vel: Integer
- movd: Integer
- win: Boolean

- __init__(key_lst,x,y,dim,point,map,or)(String): Real
- get_img()(): Image
- Mov()(): Void
- get_sons(): Integer
- get_sons_obj(): List
- Did_win(): Boolean
- Call_solution(): Void
- Die(): Void
- run(): Void

Solution_finder
- x: String
- y: String
- Or: String
- map_x: String
- map_y: String
- Map: String
- sons: String
- dimension: String
- alive: Boolean
- image: Image
- win: Boolean
- spikey_available: Boolean
- movd: Integer
- finded: Boolean
- vel: Integer

- __init__(Integer, List): Void
- get_img(String): Void
- Mov(): Void
- get_spikey(): Void
- is_spikey(): Void
- Finded(): Void
- run(): Void

« datatype »
List

« datatype »
Screen

block.py
- X: String
- Y: String
- image: String
- rect: String

- get_img(): Image

Lock.py
- x: Integer
- y: Integer
- locked: Boolean
- image: Image

- unlocked(): Void
- get_img(): Void

« datatype »
Image

spikey.py
- x: String
- y: String
- image: String
- rect: String

- get_img(): Image

2 Class Descriptions

2.1 Class game.py

2.1.1 Attributes

- **game** : Pygame [1]

- **maze_map** : List [1]

- **maze** : List [1]

- **BlockList** : List [1]

- **sons** : Integer [1]

- **sons_obj** : List [1]

- **Blocks** : List [1]

- **Solution_lst** : List [1]

- **Spikey_lst** : List [1]

- **factor** : Integer [1]

- **x** : Integer [1]

- **y** : Integer [1]

- **key_x** : Integer [1]

- **key_y** : Integer [1]

- **Height** : String [1]

- **Width** : String [1]

- **Velocidad** : Integer [1]

- **Screen** : Screen [1]

- **Background** : Screen [1]

2.1.2 Generalizations

- **Pygame**

2.1.3 Operations

- Void **__init__** (parameter : List, parameter2 : Integer, parameter3 : Integer, parameter4 : Integer, parameter5 : List, parameter6 : List, parameter7 : Integer)

- Void **Sprites_img** ()

- Void **Draw** ()

- List **Key_img_list** ()

- Void **Read_conf_file** ()

- Void **Create_units** ()

2.2 Class Pygame

2.2.1 Attributes
No additional attributes

2.2.2 Generalizations
None

2.2.3 Operations

2.3 Class block.py

2.3.1 Attributes

- **X** : String [1]

- **Y** : String [1]

- **image** : String [1]

- **rect** : String [1]

2.3.2 Generalizations

- **game.py**

2.3.3 Operations

- Image **get_img** ()

2.4 Class Key.py

2.4.1 Attributes

- **X** : String [1]

- **Y** : String [1]

- **image** : Image [1]

- **alive** : Boolean [1]

- **Point** : List [1]

- **Or** : Integer [1]

- **Map** : List [1]

- **Map_x** : Integer [1]

- **Map_y** : Integer [1]

- **sons_obj** : List [1]

- **sons** : Integer [1]

- **dimension** : Integer [1]

- **vel** : Integer [1]

- **movd** : Integer [1]

- **win** : Boolean [1]

2.4.2 Generalizations

- **game.py**

2.4.3 Operations

- Real **__init__(key_lst,x,y,dim,point,map,or)** (parameter : String)

- Image **get_img()** ()

- Void **Mov()** ()

- Integer **get_sons** ()

- List **get_sons_obj** ()

- Boolean **Did_win** ()

- Void **Call_solution** ()

- Void **Die** ()

- Void **run** ()

2.5 Class Solution_finder

2.5.1 Attributes

- **x** : String [1]

- **y** : String [1]

- **Or** : String [1]

- **map_x** : String [1]

- **map_y** : String [1]

- **Map** : String [1]

- **sons** : String [1]

- **dimension** : String [1]

- **alive** : Boolean [1]

- **image** : Image [1]

- **win** : Boolean [1]

- **spikey_available** : Boolean [1]

- **movd** : Integer [1]

- **finded** : Boolean [1]

- **vel** : Integer [1]

2.5.2 Generalizations

- **Key.py**

2.5.3 Operations

- Void **__init__** (parameter : Integer, parameter2 : List)

- Void **get_img** (parameter : String)

- Void **Mov** ()

- Void **get_spikey** ()

- Void **is_spikey** ()

- Void **Finded** ()

- Void **run** ()

2.6 Class spikey.py

2.6.1 Attributes

- **x** : String [1]

- **y** : String [1]

- **image** : String [1]

- **rect** : String [1]

2.6.2 Generalizations

- **Solution_finder**

2.6.3 Operations

- Image **get_img** ()

2.7 Class Lock.py

2.7.1 Attributes

- **x** : Integer [1]

- **y** : Integer [1]

- **locked** : Boolean [1]

- **image** : Image [1]

2.7.2 Generalizations

- **game.py**

2.7.3 Operations

- Void **unlocked** ()

- Void **get_img** ()