# **Documentation**

## **IDisplayModule - Methods:**

List with explanation of all the methods of the class IDisplayModule (Page 2)

### **IDisplayModule - Enums:**

List of all the enumerations of the class IDisplayModule (Page 3)

### **IDisplayModule - Implementation:**

Quick explanation to know how to add a new display module (Page 4)

#### **IGameModule - Methods:**

List with explanation of all the methods of the class IGameModule (Page 5)

#### **IGameModule - Enums:**

List of all the enumerations of the class IGameModule (Page 6)

## **IGameModule - Implementation:**

Quick explanation to know how to add a new game module (Page 7)

# **IDisplayModule - Methods**

```
void open() :
      Open the window where the program will draw
void close() :
      Close the window
bool isOpen():
      Tell if the window is currently open or close
void putRectFill(Color color, Coord size, Coord pos):
      Draw a full rectangle in the window
void putRectOutline(Color color, Coord size, Coord pos):
      Draw the outline of a rectangle in the window
void putCircle(Color color, Coord pos, size_t radius) :
      Draw a full circle in the window
void putText(Color color, Coord size, std::string const &value):
      Draw a text in the window
void displayScreen():
      Display in the window everything that has been draw
void refreshScreen():
      Refresh the window
void clearScreen():
      Clear the window
bool isKeyPress(const KeyList key):
      Tell if a certain key is currently pressed
bool isMouseClicked():
      Tell if a click is currently made with the mouse
Coord getMousePos():
      Give the currently coordinate of the cursor in the window
```

# **IDisplayModule - Enums**

#### Color:

List of all the color, which can be used for drawing

#### KeyList:

List of all the keys

#### Special:

- NEXT\_GAME : Change the game for the next one in the list (Key Z)
- PREV\_GAME : Change the game for the previous one in the list (Key A)
- NEXT\_LIB: Change the graphic library for the next one in the list (Key X)
   PREV\_LIB: Change the graphic library for the previous one in the list (Key W)
- RESTART\_GAME : Restart the current played game (Key R)
- MENU : Send to the menu (Key Q)
- EXIT : Leave the program (Key Escape)
- PAUSE : Pause the game (Key P)

## **IDisplayModule - Implementation**

#### Inheritance

First of all, your module must inherit from the interface IDisplayModule, which is in the arcade namespace.

After that, you must implement all the declared function, for your library to work.

#### **Entrypoint**

To be able to use your graphic library, you must declare a function named entryPoint, like this:

```
extern "C"
{
     std::shared_ptr<IDisplayModule> entryPoint()
     {
         return std::make_shared<YOUR_MODULE_NAME>();
     }
}
```

#### **Enums**

To use the enums, Color and KeyList, you must link them with the corresponding element in the graphic library you want to implement.

#### Compilation

When you have finished everything, or for testing, you have to compile your module into a shared file (.so). Then, give it a name like "arcade\_YOUR\_MODULE\_NAME.so", and put it in the lib folder, which is at the root. And, finally, add its name in the deque GRAPHIC\_LIB\_NAMES, in CoreConfig.cpp (./src/CoreConfig/CoreConfig.cpp)

## IGameModule - Methods

# GameStatus getStatus(): Get the current status of the game void refresh() : Update the game void reset() : Reset the game size\_t getScore() : Get the current score of the player for the currently played game size\_t getScoreHigh() : Get the current high score of the player for the currently played game void setUsername(std::string const &username) : Set the username of the player const IDisplayModule &getDisplayModule(): Get the display module, which is currently linked with the game void setDisplayModule(IDisplayModule &displayModule): Set the display module linked with the game

# **IGameModule - Enums**

#### GameStatus:

List of all the possible status that the game can have

### Special:

- SUCCESS: The game is played and everything is fine
  ERROR: The game is played and there is an error
  GAMEOVER: The game is over (Victory and defeat include)
  PAUSE: The game is in pause

## **IGameModule - Implementation**

#### Inheritance

First of all, your module must inherit from the interface IGameModule, which is in the arcade namespace.

After that, you must implement all the declared function, for your library to work.

For your game to be functional, you probably will have to add other methods, but don't forget that only the methods in the interface will be called.

#### **Entrypoint**

To be able to use your game library, you must declare a function named entryPoint, like this :

```
extern "C"
{
     std::shared_ptr<IGameModule> entryPoint()
     {
         return std::make_shared<YOUR_MODULE_NAME>();
     }
}
```

#### Compilation

When you have finished everything, or for testing, you have to compile your module into a shared file (.so). Then, give it a name like "arcade\_YOUR\_MODULE\_NAME.so", and put it in the lib folder, which is at the root. And, finally, add its name in the deque GAME\_LIB\_NAMES, in CoreConfig.cpp (./src/CoreConfig/CoreConfig.cpp)