

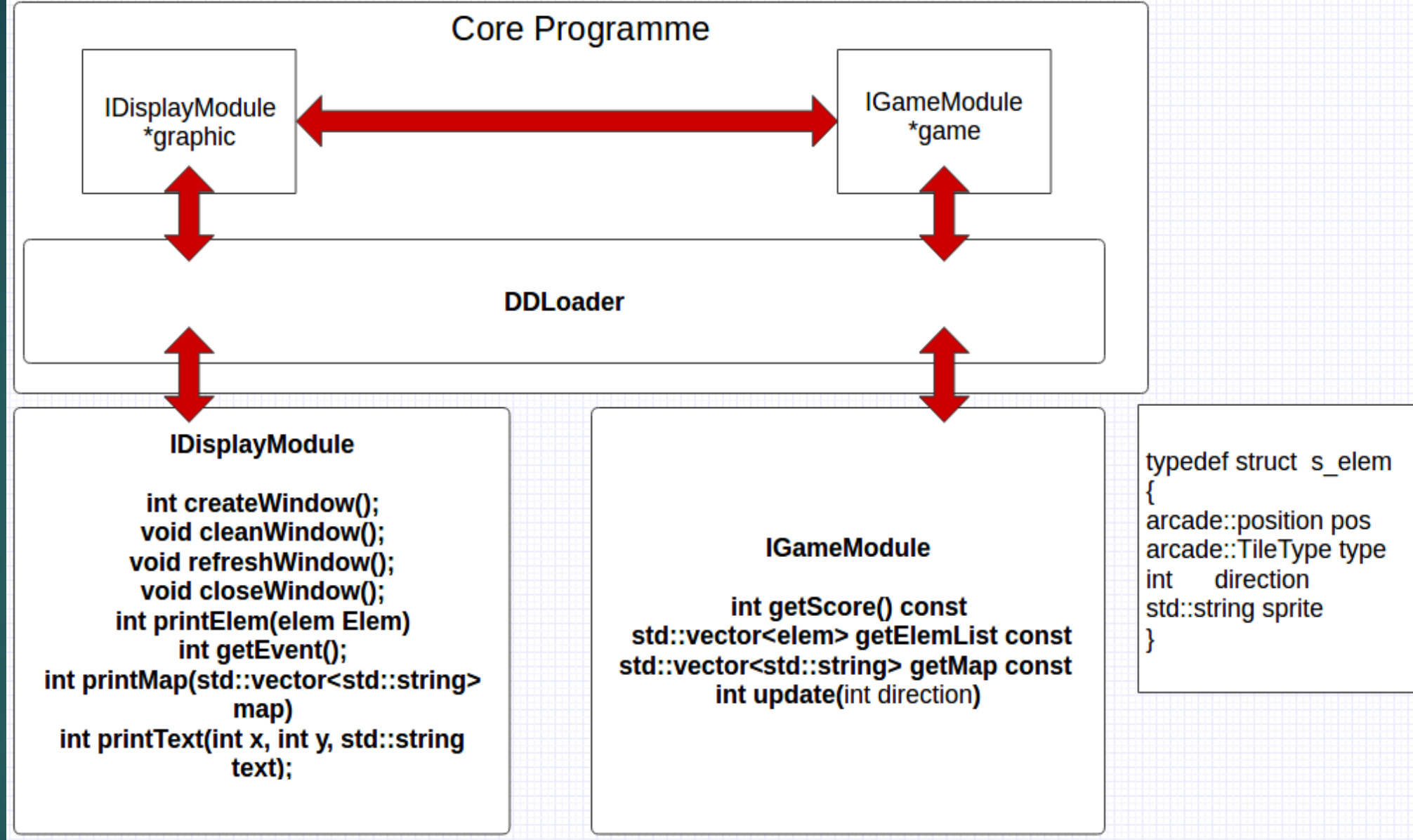


Arcade Documentation

(epitech promotion 2020)

Made by :
Costa Arnaud
Alis Antoine
Maxime Counil

Class Diagram



DisplayModule (Graphic Interface)

- ▶ First, in the Interface, there are Basics Functions for every Graphic Library :
 - ▶ `createWindow()`
 - ▶ `cleanWindow()`
 - ▶ `closeWindow()`
 - ▶ `RefreshWindow()` to display.
- ▶ Then, they are Prints Functions :
 - ▶ `PrintElem(elem cetElem)` -> This function print every environment elements like enemies. powerup, player himself.
 - ▶ `PrintMap(std::string map)`.
 - ▶ `PrintText((int x, int y, std::string text)` -> Every text possible for example ; Score, NickName...

IGameModule (Game Interface)

- ▶ Getters Functions :
 - ▶ GetScore() const
 - ▶ GetElemList() const
 - ▶ GetMap() const
- ▶ Update function :
 - ▶ Update(int direction) -> Main function in IGameModule, update every elements contains in the elem list according to movement made by the player.

Explanations : Start and Menu

- ▶ First of all, when we start the arcade, the core program load an instance of a game library and a graphic library passed in parameter.
- ▶ When the core program is loaded, you can press Y to write your Nickname then when you have finish, press enter. Or you can select a game with S or Z. To change library in a menu, press D to go down and E to go up. When you have your correct game and library graphic press Enter and play.
- ▶ For the movement in the game, Z to move forward, S to move backward, Q to go on the left and D for the right move.

Explanations : Key in Game

When your program is running :

- ▶ '2' : Previous graphics library.
- ▶ '3' : Next graphics library.
- ▶ '4' : Previous game.
- ▶ '5' : Next game.
- ▶ '8' : Restart the game.
- ▶ '9' : Go back to the menu.
- ▶ Escape: Exit.

How to integrate a game or a graphic library

- ▶ First, Every libraries have to respect the same interface :
 - ▶ IDisplayModule for graphic library
 - ▶ IGameModule for game library
- ▶ Each dynamic library have to implement the entry point function in `extern "C"`.
- ▶ If you want to test automatically your game, you can implement the function `Play()` also in `extern "C"`.