



Arcade Documentation

How to implement new graphics libraries or game libraries compatible with our system ?

In order to implement new graphics libraries:

- 💡 You need to create a folder with the name of your graphical libs in the `/graphics` folder.
Then you need to create a `Makefile` in order to be able to create the `.so` of the graphical lib.

Then you just need to code the virtual functions from the `AGraphicalMemory` class specific to your graphical library:

- Init the graphical display (ex: create a window)

```
void graphInit();
```

- Destroy the graphical display (ex: destroy the window)

```
void graphDestroy();
```

- Display the games from the map (if the position of the map is equal to 0 -> display backgroundIf is esqual to 1 -> display wallsIf is equal to 2 -> display snakeIf is equal to 3 -> display snake foodIf is equal to 4 -> display pacman characterIf is equal to 5 -> display pacman foodIf is equal to 6 -> display ghosts)

```
void graphDisplay(std::vector<std::vector<int>> map, int speed, int score);
```

- Display the game menu with the welcome text and the prompt for the user to type his name and select the game

```
void graphMenuDisplay();
```

- Clear the graphical interface (ex: Make sure the window is correctly closed)

```
void graphClear();
```

- Refresh the graph

```
void graphRefresh();
```

- Handle events (ex: handle keys, handle mouse events, handle window closing...)

```
void handleEvents();
```

- Handle the transition frame

```
void transitionFrame(int i);
```

In order to implement new game libraries:



You need to create a folder with then name of your game lib in the `/games` folder.

Then you need to create a `Makefile` in order to be able to create the `.so` for the game lib.

Then you just need to code the virtual functions from the `AGameMemory` class specific to your game:

- Init the game

```
void gameInit();
```

- Write the game score to the `Scoreboard.txt` file with the specific game n

```
void gameScore(std::string playerName);
```

- Handle player game movements (the `bool` must be set to `true` whenever the player needs to keep his trajectory)

```
void gameMoveLeft(bool isAuto);
void gameMoveRight(bool isAuto);
void gameMoveUp(bool isAuto);
void gameMoveDown(bool isAuto);
void gameMoveDefault();
```