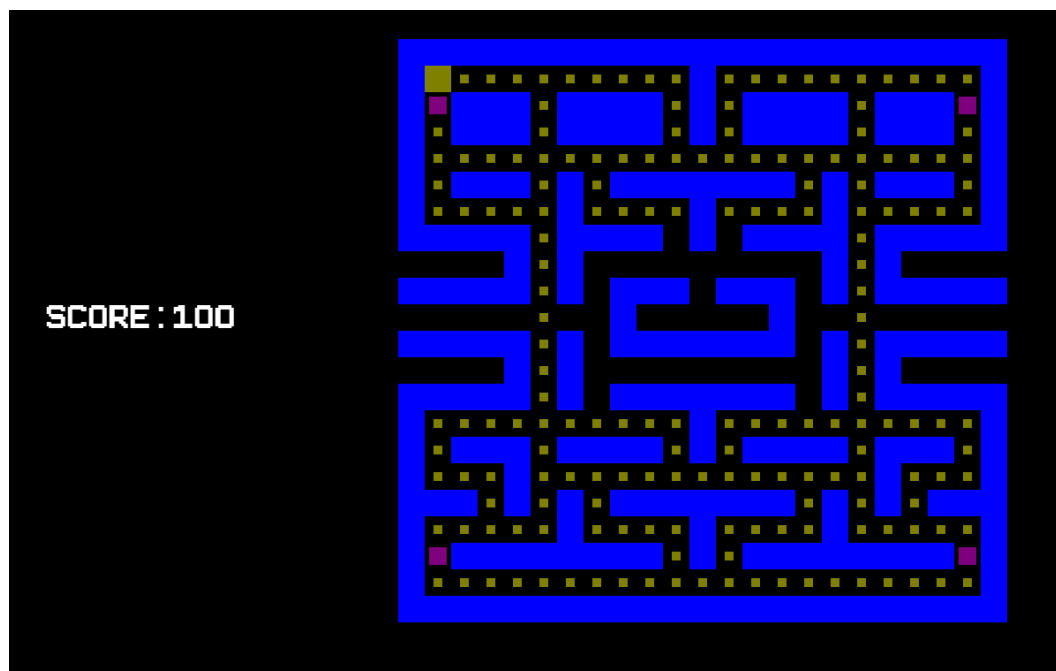# Arcade – Epitech Project

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How to:

Implement a new graphical library:

To implement a new graphical library, you must include "*IDisplayModule.hpp*" in your project. You must create a new class inherited from "*IDisplayModule*" in public. After that you need to override all functions from *IDisplayModule's* class.

Take a look to this implementation of SFML library:

After importing *IDisplayModule.hpp* we implement this interface in our *SfmlModule* class.

```cpp
class SfmlModule :
    public arc::IDisplayModule
```

Now declare all methods we must implement.

```cpp
public:
    SfmlModule();
    ~SfmlModule() override;
    std::string getName() const override;

    void clearWindow() override;
    void displayWindow() override;
    void checkEvent() override;
    bool isOk() override;
    bool getKeyDown(arc::Keyboard key) override;

    void drawText(const std::string& text, int characterSize, arc::Color color, std::pair<float, float> position) override;
    void drawSquare(int size, arc::Color color, std::pair<float, float> position) override;
```

After the implementation of all these methods you are ready to compile your shared library.

Compile your sources as a shared library. You don't know how to do it you can use our Makefile, check in our repository on github and look at *src/libsfml/Makefile*

Now you're ready to use your graphical library (don't forget to look if your library is on the *lib/* folder, it's needed to work with the arcade project).

Implement a new Game:

To implement a new game, you must include IGame.hpp in your project. You must a least create one class inherited from "IGame" and override three function, start, update, terminate.

Take a look to this implementation of *PacMan* pacman game:

After importing *IGame.hpp* we implement this interface in our *PacMan* class.

```
class PacMan :
    public arc::IGame
```

Now declare these three methods we must implement (start, update, terminate). You can use *IDisplayModule* to make action on the window (drawSquare or drawText) to create your game

```
public:
    PacMan();
    ~PacMan();

    void start(arc::IDisplayModule *) override;
    void update(arc::IDisplayModule *) override;
    void terminate(arc::IDisplayModule *) override;
```

After the implementation of all these methods you're ready to compile your sources as a shared library.

Compile your sources as a shared library.

You don't know how to do it, you can use our Makefile, check in our repository on github and look at *src/libsfml/Makefile*

Now you're ready to use your game library (don't forget to look if your library is on the *lib/* folder, it's needed to work with the arcade project).