

Topic description and sketch of UI

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Project Topic:

Mario like platformer

Topic description:

I chose to create a platformer game in style of Super Mario Bros. The goal of this game is to get to the other side of the map without dying collecting as much gold coins as possible. It's going to have simple controls that let the player go left and right, up, and down. There will be few kinds of enemies:

1. Ones that just walk from one side to another and kill the player if they run into him. The player can kill them by jumping on their head.
2. Ones that the player can't kill them.
3. Ones that do not move but they shot projectiles at the player.

Another trap is a pit filled with water that is going to kill the player if he falls into it.



Main menu will contain:

1. Start game button
2. Settings
3. Game description
4. Exit

After starting the game player will be allowed to change his setting by using Tabulator on his keyboard. Points will be counted for every coin collected and level passed and stored into logs file that can be read after finishing the game. There could be easter eggs hidden throughout the game.

Classes that my program will contain are as stated bellow:

World Class – A class that renders and updates the game window and all the components

Entity Class – A class that will be responsible for creating a base for all entities

Player Class – A class that will be responsible for player movement and render

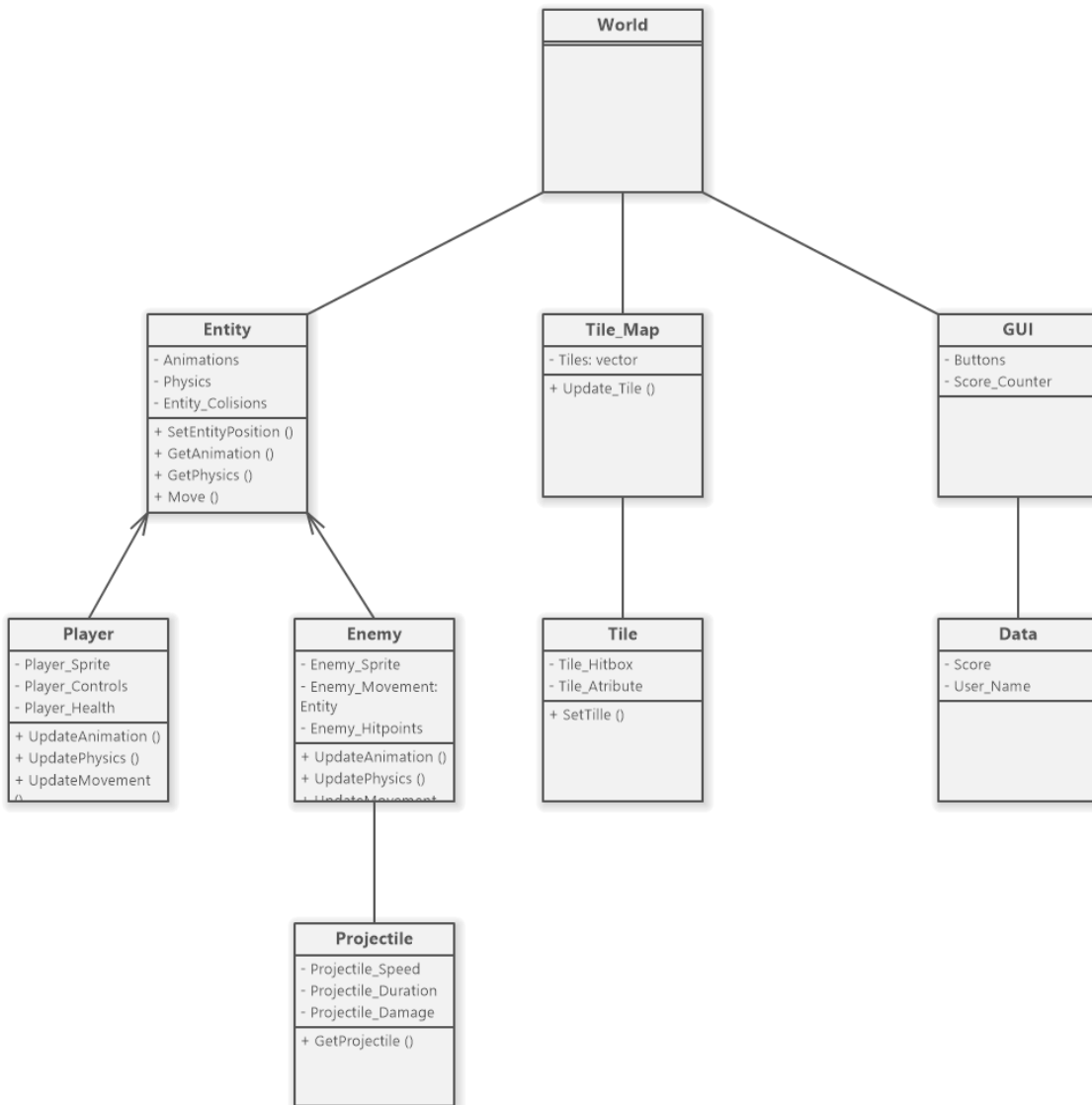
Enemy Class – A class that will be responsible for enemies in the game

Tile_map Class – A class that will be responsible for storing every tile

Tile Class – A class that will be responsible for creating and managing tiles

GUI Class – A class that will be responsible for player interface

Data Class – A class that will be responsible for player data such as hit score etc.



The general scheme of the program operation:

After running the game User must choose from menu on the screen with following items: Start a game, Score and Quit.

After starting the game player will have to set his name and will be met with a text which informs that the first level has been started. Player starts with 3 lives, which can be lost in case of collision with an enemy or enemy bullet. After eliminating an enemy or collecting coins players score will increase. After completing the last stage, the game is finished. Players score is saved and he can see it by selecting Score in Main screen.

Techniques from thematic classes and external libraries:

My Project will make use of:

- Modules
- File systems
- Ranges
- Threads
- SFML Library for graphical implementation