**C++ Assessment 1**

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**PACMAN**

by **C++** and **SFML**

**About Pacman**

Like normal Pacman game, built by C++ and SFML library.

**Functionality**

Pacman and Ghosts are running inside a map, with food in the way and there are some cherries as well (which engage the hidden power of Pacman). Game is over if Pacman eats all the food in the map or eats all the Ghost or be eaten by the Ghost.

Users control by UP, DOWN, LEFT, RIGHT arrows button.

**Screenshots**

|  |  |
| --- | --- |
| Start Game  start.png | In Game  ingame.png |
| Pacman activates the power  power.png | Game over  game_over.png |

|  |  |
| --- | --- |
| **Notes**   * **Element** is most basic class and used by **Maps** and **Foods** and **Cherries**. * **Character** extends from **Element** which includes additionally its own direction and moving functions. **Character** is used by **Ghosts.** * **Pacman** extends from **Character** which includes additionally its own power and mouth opening properties and particular functions like Activating Power, Reducing Power and Toggling its mouth. | **Class Diagram**  **C++_Assessment1_ClassDiagram - Page 1** |

**OVERVIEW STEPS**

**Start**

**Setup**() //initialize *score*, *choice*, *menu*

**Generate**() //initialize game elements (*cherries*, *maps*, *foods*, *pacman* and *ghosts*)

**Draw**() //draw everything in game

**Control**()

//control everything: ***[ghosts automatically moves]***, ***[pacman eats food]***, ***[pacman eats cherry]***, ***[pacman crashes ghost]***, ***[check if game is over]*, *[update score]***

**End**

**SCHEDULE**

(~ 3 weeks in total, exported from Git Log)

(Repository: <https://github.com/iamstevendao/pacman_cpp>)

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