

Assignment 2 Report

1. The core objects of Pac-Man are the player(Pac-Man), pellets, ghosts, and the walls. Each of these is an entity.

//insert something about Sprites

In addition, the game will also consist of multiple levels, hence the LevelFactory class makes the levels using a mapParser. The mapParser makes the board which consists of multiple squares which may contain one of the above four mentioned entities.

The GameController class is important as it initializes the game with a level and makes the player. It has the functions to start and pause the game. The Game class is a part of the game controller and this is needed to indicate when the player has won a level and then the level will be advanced to the next level (if it's not the last level). It is also used to update the user's score and remove the pellets which have been consumed.

2. When making the sequence diagrams, we chose 3 main use cases of the game which are the login screen, a collision with a pellet, and the leaderboard. Each of these use cases were very different from one another and give an overall most of the game. We decided to show these use cases as the login is necessary in order to start playing the game and storing the user's score, collision with a pellet shows how the score is incremented, and the leaderboard shows how the database communicates with the game by showing the top scores.