

Group 11 - Requirements Assignment 3

Exercise 1

Must have

"Implementing power-ups"

- A power-up to give the player a shield with a certain time limit in which he cannot be eaten.
- A power-up to give the fish an extra life. When player gets eaten he can continue by losing that life.
- A power-down that inverts the controls of the player, to make the game more interesting.
- A power-down to increase the movement of player until it's slightly uncomfortable.
- New sprites will be introduced for the power-ups and power-downs.

"Rewrite opponents"

- Creation of opponents is considered an implementation detail and should be deferred to the subclasses of these opponents instead of being implemented in the generic *OpponentHandler*.
- Move the logic and triggering of the *BigOpponent* event to a more suitable location.

"Other important must-haves"

- Improve the *BigOpponent* event by stopping the playing sound when the player dies.
- Amount of opponents that spawn should decrease according to the size increase of the player.
- Write test cases for the power-ups and power-downs.
- Create test cases for the positions package.
- Improve test cases for the models package.
- Improve test cases for the opponents package.

Should have

- Quality of the existing sprites should be improved to scale better.
- An improved graphical version of the menu, not only a black box.

Could have

- Implement two or three difficulty levels to choose from in the start menu.
- A function to pause the game when the game is in the level state.

Would/won't have

- A high score system where you can input your name and the score will be saved.