

# Group 11 - Requirements Assignment 4

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## Exercise 1

### Must have

#### *"TA improvements"*

- A new screen, HelpState, is created with instructions for the game.
- This HelpState is accessible from the menu.
- The MenuState is improved, especially visually.
- A pause feature is to be implemented.
- When paused, instructions to the game are also displayed.
- Put the whale event on a timer.
- Fix the buggy power-ups.
- Differentiate more between the shield and the extraLife power-ups.

#### *"Fixing design flaws"*

- Refactor code to remove data clumps.

#### *"Other important must-haves"*

- Amount of opponents that spawn should decrease according to the size increase of the player.
- Improve test cases for the position package.
- Improve test cases for the opponents package.

### Should have

- Quality of the existing sprites should be improved to scale better.

### Could have

- Implement two or three difficulty levels to choose from in the start menu.

### Would/won't have

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

In this sprint a new screen will be implemented called the HelpState. (A screen is called a xxxState in the code) On this new screen basic instructions to the game will be shown, i.e. what the controls are, and what each powerup and enemy does. In addition, this week will be focussed on fixing several smaller issues, such as putting a timer on the whale event, fixing minor visual bugs, differentiating between different power-ups and implementing a pause feature.

Furthermore, since our code only had one design flaw, there is not much implementation to do for the second exercise. We only had data clumps which will be fixed by refactoring some code.

Lastly, testing will be continued to get higher coverage, and checkstyle issues will be mended.