

# **SEPR 2019/20 Assessment 2**

**Team CheatCodez**

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**Implementation Report**

## Features failed be be implemented

| Requirement          | Reason  |
|----------------------|---|
| NFR_COLOURS          | Colour blindness not implemented due to time constraint and lack of research  |
| FR_SETTINGS          | Brightness, mouse sensitivity, difficulty and sound on/off not implemented due to time constraint   |
| FR_MINI_GAME         | Minigame was not a requirement for this assessment  |
| FR_DESTROY_STATION   | Due to time constraints this was unable to be implemented. The fortresses can destroy the firetrucks but immediately. There is no timer in place.                               |
| FR_PATROLS           | Full implementation not complete however, we do have types of aliens set up and the graph ready to use for the next assessment, elaborated below in "Implementation highlights" |
| FR_GAME_DIFFICULTIES | Difficulties have not been met but is possible. The ability to change variables to do with the game are in the code   |

## Implementation highlights

### Underlying Graph

Built underneath the Tiled map, we have created a graph that will enable us to perform the A\* path finding algorithm around our map (A\* implemented from LibGDX). We have done this by reading vertices from a file, which line up with the games map. This is required for our fire trucks which have two modes - attack and defend. When a truck is left idle, the user will select a mode for the truck to be in. If it is in attack mode, it will head to the nearest enemy base and attack it; defend will go to a friendly base and fight off aliens. While this was not an original requirement, we believe that implementing it will help with the future of the project.

## Code use and extendibility

### JavaDoc

We have supplied a JavaDoc for our codebase at the following url

<https://teamcheatcodez.github.io/project-kroy/javadoc/>,

This will help developers who want to expand on our game. We have made the game with this in mind and thoroughly commented our code.