

SEPR 2019/20 Assessment 2

Team CheatCodez

**Jonathan Grout, George Lesbirel, Cheuk Wang
Wu, Lauren Quarshie, Muaz Atif, Lillian Coultas**

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 ,
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.