**Hull University in association with**

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Date submitted: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**East Riding College**

**Foundation Degree in Computing**

**ASSIGNMENT COVER SHEET**

**2018/2019 ACADEMIC SESSION**

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| Reception anonymous marking code |  |

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| **Registration University Number:**  **(Starts with year of registration eg. 200199999):**  **College Number: 20278932** | | |
| **Location:**  **St Marys Walk** | **Tutor: Tracey Murray** | |
| **Module:**  **Object Orientated Programming** | | |
| **Assignment Title:** | | **Word Count:** |

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| **Under the University scheme for anonymous marking, your name will remain concealed until after your assignment has been marked. Please print your name clearly in the box at the top right hand corner, then sign, fold and seal. *Your student registration number from your student card must be entered clearly in the box provided and written on each sheet of your assignment.*** |

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Object Orientated Programming

Specification

Kai Tindall

2020

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# Scope

The scope of this document is to provide requirements for my object orientated game. These requirements must be hit to be labelled as a success. They will encompass both requirements for the assignment and specific requirements for this game.

# Game Concept

The three words I have been given to base my concept around are Squirrel, Crown, and Fire.

So, my concept is to have a castle defence game where you play as king of the squirrels, trying to protect your castle against invaders, which will try to gain access to more levels of your castle (Gate, Town, Keep) by using flaming arrows. You will be able to buy upgrades from a shop menu, and also be able to pick a doctrine to gain advantages.

I will be setting my development into stages in-case of time restraints, so that if I run out of time, I will still have something to deliver.

## Stage 1

Stage one will focus on the base game, by this point the player will be able to defend the gate from waves of enemies and able to buy two upgrades from the upgrade shop. Each wave will have 20% more enemy strength (each enemy unit will be worth an amount of enemy strength) and there will be at least 2 types of enemy (private, captain).

Stage one will also implement a basic requirement of a menu and a leader board. The menu will have three items to choose from (play, leader board, exit), and the leader board will track high scoring players using score generated by how much enemy strength you managed to kill. These scores will be stored on in a local xml document.

## Stage 2

Stage two shall focus on extending the map of the game, at this stage you will be able to move through to the town level. This will act the same as the gate level however it will have different upgrades. There will also be three upgrades added for the town level and an extra one upgrade added for the gate level.

## Stage 3

Stage three will focus on the doctrine aspect of the concept, this will consist of five elements the user can pick from with the first element branching out into two lines, offensive and defensive doctrine, which are both mutually exclusive of each other. Each element will provide advantages in the respective field. This stage will also add one more upgrade to the gate level.

## Stage 4

Stage four will complete functionality for the entire concept, by this stage the user will now be able to access the keep level, with a respective three upgrades available.