# System Design Document for 0x2EE

**Group 1**
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Datum()

Version()

## 1. Introduction

0x2EE is a real time game with an isometric perspective based on Boxhead[1] where the goal is to acquire the largest score before the player dies by damage taken from enemies. Score is accumulated through killing enemies and the game gets progressively harder as time passes.

The application is designed by a Model View Controller[2] as in our view becomes the players' user interface where it then communicates input through a controller which then communicates changes in the model which will be represented through the view.

1. Boxhead:
    1.1. a game created by Sean Cooper [1] where the player tries to acquire the largest amount of points before dying.
2. Score:
    2.1. The measurement of how many enemies the player has destroyed.
3. Highscore:
    3.1. The highest score scored from a game.
4. MVC:
    4.1. Acronym for Model View Controller, an architectural system which segregates an application into those three components which handles their logic separately from each other.

## 2. System Architecture

The components of the program are those of a classic Model-View-Controller application, having an application class that initiates all of the MVC components. The game logic is in the model package, which can operate independently, while the controllers and views are tied to each other and the model.

Starting the game initiates all the necessary components and starts the game loop through the game loop controller class. The game loop controller then calls on the model to update 200 times per second. There is an option to pause this game loop, and resume it seamlessly.

The view operates based on data it gets from the model when it comes to the ingame sprites. Menus are handled internally by the view, making sure that the different menus are not tied to the ingame happenings at all.

## 3. System Design

Hej

## 4. Persistent Data Management

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## 5. Quality

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# References:

[1] Anonymous author, Wiki. 2022. *Boxhead (series)*. Fandom. Available at:
https://boxhead.fandom.com/wiki/Boxhead_(series) [Accessed 3 October 2022].

[2] Kaalel (2022). *MVC Framework Introduction*. GeeksForGeeks. Available at:
https://www.geeksforgeeks.org/mvc-framework-introduction/ (Accessed: October 3, 2022).