# **Project Plan**

## 1. Scope Statement

Summary: Create a tower defense game in a web application format, using C# for back end web deployment and Javascript (React) for the front end.

Functionality: Over an internet connection, a player will access the game. The game will feature enemies walking towards a goal which players will defend with drag-and-drop towers that will fire projectiles at these enemies.

There will be one player, but high scores will be kept in a leaderboard. There will not be a computer player as such, but there will be enemies that move in predefined paths toward a target that the player must defend.

Languages: Javascript (React), C#, SQL

Features: Drag-and-drop towers

**Endless levels** 

High-score leaderboard

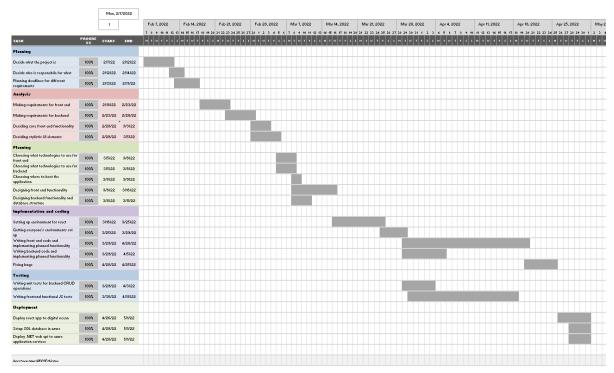
A graphical interface will be used as this is a game meant to be played in a web browser.

### 2. Org Chart

Nick Baumeyer – Project lead, back-end development, testing Stephen Miller – Front end-development, testing Alec Price – Front end-development, testing Will Yount – Documentation, front-end development, testing

#### 3. Gantt Chart

Capstone Projec



(I know it's hard to see in one screenshot, here is a link <a href="https://drive.google.com/file/d/1dIIA8763-uqv5qLxzamBt5JAGiag9anM/view?usp=sharing">https://drive.google.com/file/d/1dIIA8763-uqv5qLxzamBt5JAGiag9anM/view?usp=sharing</a>)

A copy will also be included with the project documentation.

### 4. Tools and Standards

Languages – Javascript, HTML, CSS, C#, SQL,

IDEs – VS Code, Visual Studio, GitHub, SQL Server Management Studio

Frameworks and Technologies - React, Azure, Digital Ocean, .NET Core

Standards:

Configuration Management Plan Github will be used to track versions of the program.

**Version History** 

0.1: basic framework with Login Page, Game Page, Score Page, Home Page

0.2 : Game Board implemented

- 0.3: Basic Enemy implemented
- 0.4 : Basic Tower implemented
- 0.5 : Tower projectile implemented
- 0.6 : First game logic, enemy logic player can now lose the game
- 0.7 : Money implemented, drag-and-drop functionality
- 0.8 : All towers and enemies implemented
- 0.9: Music and timer added
- 1.0: release version
- 1.1 Bug fixes and balancing
- 1.2 Bug fixes and balancing
- 1.3 Implementation of End Game button, bug fixes and balancing