**CS440 Development Project Summary - Ikon Wars**

Group 21- Nemil Shah, Wishy Parikh, Ruchit Shah, David Qiao

**Project Description**:

The product to be developed is a game on wars between two teams of five avatars. The goal of each player is to upgrade its avatar and gather items for its inventory which will be valid only for one game. Players can fight using their avatar and defeat the opponent team. Players get to choose the map and their avatar before the matchmaking starts.

**Purpose of the Project**:

MOBA (Multiplayer Online Battle Arena) games have become more and more popular within the following years as more and game developers are creating a multiplayer battle games. The main focus of the project is to provide entertainment but also has an educational secondary objective for the user to develop critical thinking, analytical, and team building skills. Ikon Wars will not be just a game. It will help in critical thinking as users are required of using their quick response and defend themselves from the enemy team. The game also provides entertainment value as the players can enjoy roaming around in the map collecting their items for team fights and can work with other teammates in an environment that encourages casual social interactions and fun when players step out of their boundaries. We can measure the success of our project using a variety of different statistics. We can measure the entertainment value by tracking the number of users joining and the number of games being played over a timeline. We can measure the ranks of players and give them matchmaking ranks so they can me teamed up with similar skilled players.

**Scope of the project:**

There are many different maps that users can play on. Each game provides a different experience as there are multiple maps and many different kinds of players can join and play together. This can be published on Steam so; it can be used on Mac and windows. For enthusiasts, this can be costly as it requires playing and winning the games to increase the matchmaking rank to reach on top. These locations can be very large or small. For large maps time limit can be added that will force the avatars to fight with each other. Not only is this, organizing groups of people who can play a virtual game on a real life map near to impossible. In addition, the game will allow users to host an Ikon War server anytime of the day from the comfort of their own homes. Players can save replays of their matches so they can watch it later and learn what they did right or wrong in the match.

**Requirements:**

Functionality: - There should be two databases, one for the types of avatar and one for the maps. The game should also save the matches after it finishes. The game should keep track of how many games they have played and their teammates during that particular match.

Performance: - The game should be able to quickly load the map and place the avatar in the map just like the user selected it before the game started.

Usability: -Our game will be accessible to a large community so it should not crash and servers should be big enough to hold many players.

**Design Goals:**

* Try to have 24/7 server uptime.
* Simulations must be as realistic as possible.
* Try to provide updates to avatars regularly.
* Be open to user’s feedback by opening a blog.
* Try to have the product be compatible with any OS.
* Make the product as accessible as possible in terms of cost and usability

**Use Case Diagram:**

