CS 408 Project Charter

Team Members: Ammar Husain, Anoop Jain, Charlie Crouse, Jiwon “Daniel” Kim, Jenna Ellis, Prashanth Koushik

Project Title: Tug of Words

Problem Statement:
Drawing inspiration from IO games, like Slither.io and Agar.io, we plan to create a server-room based game centered around team-based typing races. Our application will allow a user to create a gaming ID, unique to all others using the game at a given point in time, and allow them to join a random team in a game room. Once joined, the user will be prompted with a random word to type; depending on how fast the user completes the word in comparison to the opposing team, a “rope” will move back and forth in a simulated tug of war. The first team to pull the rope a certain simulated distance wins, and the game terminates.

Project Objectives:
- Build a website where users can join a Tug of Words typing game
- Generate random words with sufficient variance of difficulty and length
- Keep user statistics based on gameplay performance
- Build a socket-based backend to implement live gameplay
- Display an enticing interface that clearly demonstrates the status of the game and clearly shows the user what she/he needs to do to progress
- Establish a means of determining a game “winner” based on group typing statistics in a given session

Stakeholders:
- Users: typing enthusiast, fans of IO games, those who want to improve their typing skills
- Developers: Ammar Husain, Anoop Jain, Prashanth Koushik, Jiwon “Daniel” Kim, Charlie Crouse, and Jenna Ellis
- Project Manager: Ramya Vulimiri
- Project Owners: Ammar Husain, Anoop Jain, Prashanth Koushik, Jiwon “Daniel” Kim, Charlie Crouse, and Jenna Ellis

Project Deliverables:

- Web application used to simulate real time game play with a large number of users (using Socket.io)
- Server side application made using node.js, a javascript framework, to support gameplay
- Graphical components will be built with Pixi js — a 2D graphics engine built with javascript
- Automated test suite using either Selenium or Cucumber testing frameworks