Peter Matla, Nathan Berton, Damian Mastylo, Zach Minster

Web Science Group 3 Project Proposal

## Project Idea: “Captur”

Realtime capture the flag game with two sides on a map and flags on the ends of the sides. Bumping into a player that is on your side will “tag” them and teleport them back to their side of the field and freeze them for a few seconds. Bumping into the flag will pick it up and attach it to the player. Bringing it back to their side or flag (minor gameplay detail that will be figured out later with game balancing) will score a point for the team. Once a certain point value is reached, the game is won by the team reaching that value.

## Scalability

The game has potential to be expanded to include an endless amount of advanced features. Once the basic framework of the game has been established, gameplay can be improved by implementing more map features (terrain), multiple game lobbies, and scrolling map view. Additionally, we can establish which metrics are worth tracking and create ways for users to analyze their play.

## Application Value

This application would be commercially viable by running ads on leaderboard screens and along the bottom of the game. However, most important to its value is whether or not it is fun to play.

## Technical Details

We plan on using Node.js, specifically the socket.io libarary, to facilitate the sockets to host the multiplayer game. While layout will be minimal as the majority of the page will be canvas, Foundation 5 will be used as a frontend framework. For authentication and leaderboard tracking, a MySQL database will be accessed through Node.js.

## Timeline

Item is to be completed that week

2/9: Project Proposal

2/16: Begin setting up environments and learn Node.js

2/23: Ability to connect to game + set username of your player when you join in

3/2: Moving your player on the screen

3/9: See connections of other players

3/16: Midway Presentation

Benchmark: Functional Single Player game with Authentication

3/23: See other users’ movements

3/30: Tagging players by bumping into them

4/6: Feature Set Finalization + Any required catchup

4/13: Picking up the flag and scoring points

4/20: Leaderboards

4/27: Final Polish

5/4: Final Presentation