

Team Group Number: 201-4

Team Name: Ominous Corp.

Members:

- Jake Martin
- Ryan Marizza
- Angelo Vacca
- Mauro Nannini
- Chirag Telang

Application Name: *Tank Royale*

Application Description:

Our application is a multiplayer, tank-based battle royale game that will be hosted on a web server, and will be played by users via their web browser. Players will login to a website in order to connect to games hosted on the server, playing with and competing against other players.

The main features of the application will be a registration page, login page, and a tank battle royale. The players will play a game of tank combat. They will start with a predetermined amount of health points and attack each other until there is only one survivor. The game will be complete with a “Game Over” match summary for players who are eliminated early or a “Winner!” match summary for the winning player.

The matches, involving N players per match (fixed), possibly in teams, will be hosted on a server to facilitate multiplayer interactions. There will be a way for players to communicate with each other during the match.

Vision Statement:

For **gamers**

Who **want to play a fun and competitive game based on tanks**

The **Tank Royale game** is a **web-based video game**

that **provides a fun and competitive multiplayer experience based on tanks**

Unlike **World of Tanks**,

our product **is a 2D, “.io” style web-based game, rather than a 3d, “realistic” style mobile game**

Version Control (Github Repo Link):

<https://github.com/CSCI-3308-CU-Boulder/The-Ominous-Corp>

### Development Method

- Agile
- Week-long sprints with end-of-week group meetings to go over progress
- Progress broken down into features, which are defined in terms of “user stories”
- Each sprint should yield fully functional features
- At each meeting, feature backlog is re-evaluated
- Using Github repo for version control
- Using Jira for project management
  - <https://csci-3308-fa20-201-4.atlassian.net/secure/RapidBoard.jspa?rapidView=1&projectKey=O24&view=planning&selectedIssue=O24-5&versions=visible&epics=visible&issueLimit=100&selectedEpic=O24-3&atlOrigin=eyJpIjoiNjgwOTFhNjU4NWM2NDU2OWI0Mjk3YzUwY2Q3MGNIYzMiLCJwIjoiOiJ9>

### Communication Method:

- Discord for asynchronous communication and collaborative coding when doable
- Zoom for weekly group meetings
- Mandatory Jira for project management, and GitHub for version control
- Written collaboration via Google Drive

Meeting Plan: 11am-1pm Fridays, 10:45am Fridays TA meeting with Zoom as the meeting mode.

### Proposed Architecture Plan:

#### Front End:

- HTML/CSS elements
- Javascript for any programmable web page elements

#### Back End:

- Unity as main game engine
- Some kind of web server for hosting the site and game matches
- SQL database for players with their login and game info

#### Communication Between Front and Back Ends:

- Unity game can be built to support direct HTML embedding
- Either Javascript or C# to connect webpage and server

## Use Case Diagram:

### *Tank Royale* (Multiplay Battle Royale Game) Use Case Diagram

