Test Plan for Team 1 (Section 13)
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User Acceptance Tests:
Features to be Tested:

1. Game Performance
    a. Users should be able to move their vehicles with the game controls without the risk of client lag or desynchronization with the server.
    b. Users and game objects (player, bullets, etc) should be able to collide without the risk of lag or desynchronization with the server.
    c. User should be able to fully interact with other players (fight/damage them) without being able to exploit major game mechanic issues
2. Login/Register
    a. User should be able to login with the correct credentials.
    b. User should be able to register a new account if not already registered
    c. User should be able to register using a unique username and entering and confirming the password
    d. User should be only be be able to login/register with alphanumeric characters
3. Leaderboard and Database
    a. User should be able to view a table containing the players and their ranking from database
    b. User should be able to see the KD and shot accuracy ratios of each player in leaderboard table
    c. User should be able to update the page and receive the newest rankings/scores from database

Feature Test Plans:

1. Game Performance
    a. Testing would consist of logging multiple players into one room to make sure there is no desynchronization with movements when multiple players are present. The collisions and bullets will also be tested in this high capacity room to observe lag by testing the times for collision checks. We will stress test the mechanics of the game by adding large amounts of game objects and collision detections and observe the computation times. This room will also test the game itself and make sure players are capable of winning/losing the game via damage done to other players.
2. Login/Register
    a. Testing would consist of registering multiple accounts, then logging in with those accounts to make sure they are being saved correctly. If the user inputs anything other than alphanumeric characters then there should be an error message that prevents them from registering or logging in.
3. Leaderboard and Database
    a. Testing would consist of making sure the user could see an updated leaderboard upon completion of game(s). This updated leaderboard would need to reflect the values stored within the database.

Individual Contributions:

- Zoe Roy: About Us, Game Rules Pages, Updating frontend html pages to reflect changes to the game, Updating Jira Board.
- Ziwei Cheng: created main,login,register css to style home, register, login, menu, and other front end pages
- Junyu Chen: Implement JWT. Create svg logo. Debug. Connect prototype_home (the pretty landing page) to the prototype (the working game). Prototype setup (socketio, express, html canvas…)
- Sam Harris: Projectile/bullet implementation, shooting mechanics (click to shoot, shoot in direction of mouse), working on bugs with bullets/projectiles, trying to implement sprites, but currently drawing all images to figure out proper speed and positioning of bullet.
- Aiden Colley: Player and gun movement, box collider implementation, and collision actions between players, map boundaries, and bullets. Working on in-game player stats and wall game objects.
- Benny Sakiewicz: Create a database for storing user info (username, password, top 50 scores), as well as the top scores by all players.

Contribution Link:

Link: https://github.com/CSCI-3308-CU-Boulder/3308SP21_section013_1/commits/master

Jira Screenshot: