UAT TEST PLANS

Test Plan 1: Login and Registration
Description: This test plan focuses on verifying that users can successfully login to the website and register for an account.

Test Cases:
- User should be able to create a new account by providing a valid username and password.
- User should be redirected to the login page after successfully registering for an account.
- User should be able to login with their valid credentials.
- User authentication should fail when invalid credentials are provided.
- User should be directed to register when invalid credentials are provided
- The login page should display an error message when invalid credentials are provided.

Test Data:
- Valid credentials either manually inserted into the database or inserted through registration
- Invalid credentials made with data not inserted into the database

Test Environment:
- A browser (Chrome, Safari, Firefox, etc.)
- A stable internet connection

Test Results:
- User can successfully create a new account and login with valid credentials
- User receives an error message when invalid credentials are provided and is redirected to /login
- User is redirected to registration if a nonexistent username is put in

User Acceptance Testers:
- Individuals who are not familiar with the website, but have experience with similar websites (those requiring account registration/log in for usage, like social media websites)

Test Plan 2: Home Page
Description: This test plan focuses on verifying that the home page of the website displays correctly and provides useful information to the user.

Test Cases:
- User should be welcomed with a personalized message on the home page.
- The home page should display a tip on how to be more eco-friendly.
- The home page should display the user's current impact on the environment.
- The home page should have a navigation menu that allows the user to access other pages on the website.

Test Data:
- A valid user account with travel and electricity data existing in its entries within the database

Test Environment:
- A browser (Chrome, Safari, Firefox, etc.)
- A stable internet connection

Test Results:
- User is welcomed with a personalized message on the home page.
- The home page displays a useful tip on how to be more eco-friendly.
- The home page displays the user's current impact on the environment.
- The navigation menu allows the user to access other pages on the website.

User Acceptance Testers:
- Individuals who are not familiar with the website, but have experience with similar websites (those requiring account registration/log in for usage, like social media websites)

Test Plan 3: Log Page
Description: This test plan focuses on verifying that the log page allows the user to input their modes of travel and saves the data successfully.

Test Cases:
- User should be able to select their mode of travel from a dropdown menu.
- User should be able to input the distance traveled for each mode of travel.
- User should be able to save their travel data successfully.
- The log page should display the user's saved travel data.

Test Data:
- A valid user account with no travel data inputted

Test Environment:
- A browser (Chrome, Safari, Firefox, etc.)
- A stable internet connection

Test Results:
- User can select their mode of travel from a dropdown menu.
- User can input the distance traveled for each mode of travel.
- User can save their travel data successfully.
- The log page displays the user's saved travel data.

User Acceptance Testers:
- Individuals who are not familiar with the website, but have experience with similar websites (those requiring account registration/log in for usage, like social media websites)

Test Plan 4: Leaderboard

Objective: To ensure that the leaderboard is displaying global user data correctly and accurately.

Test Cases:
- Verify that the leaderboard displays the top 10 users with the highest environmental impact scores.

- Verify that the leaderboard displays the username, location, and environmental impact score of each user.
- Verify that the leaderboard updates in real-time as new data is entered by users.
- Verify that the leaderboard can be filtered by location, showing only users from a specific country or region.
- Verify that the leaderboard can be sorted by environmental impact score, showing users in order from highest to lowest impact.

Test Data:
- Sample user data with varying environmental impact scores and locations.
- Test data for specific locations to verify the location filter functionality.

Test Environment:
- The leaderboard feature will be tested on a staging environment that mirrors the production environment.
- The test environment will include sample user data with varying environmental impact scores and locations.

Test Results:
- Test results will include screenshots of the leaderboard with the expected results highlighted.
- Test results will also include a summary of any issues encountered during testing and steps taken to resolve them.

User Acceptance Testers:
- Actual users will be recruited to test the leaderboard feature.
- The users will be selected based on their location and environmental impact score to ensure a diverse range of testing scenarios.(in our case will be our manipulated data)