Project Milestone 5

WATT2Buy

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Test Plans

I. Three features that are being tested
    A. Sign-up
        1. Data from sign-up page will be safely stored to the database(password string being hashed into a 32-bit int key)
        2. We will use console logs to check each step of the process has completed.
            a) New instance of User is created in Database
            b) New User data is stored to instance
    B. Login/Logout
        1. Users will be able to Login with old credentials
        2. Users will be able to Logout with data being saved
    C. Admin layout + product
        1. Admin can sign in and see admin properties on site.
        2. Products are displayed and can be added/taken out of the cart.
        3. Unit testing to ensure all inputs are valid
    D. Survey, NREL API integration and results:
        1. From NREL tables, the team will choose 5 locations whose approximate data is known. After the user submits the location the data stored for this user will be checked manually to make sure correct data is obtained. (Makes sure API is correctly configured to output expected data)
        2. The survey will be left half filled to make sure either the user can continue the survey when back, (if logged in) else completely deleted without leaving corrupt and incomplete data on the database (manual check). Secures result algorithm corruption.
        3. The page will be refreshed to see if new alternative tips for energy is displayed (non-functional feature)
        4. The team will design a survey form which according to the calculations should give us a predicted answer (for example, high solar energy area, low investment budget and low commutes used will output electric cars and solar roofs as best options.) The results will then be compared to predictions to calculated results to verify accuracy of code.
        5. User input data will be pulled from the survey fields
            a) Unit testing will be used to ensure all inputs are valid
            b) A mid admin page will be added to verify all data and calculations, compared to hand calculations (like a debug page)

II.   For each: specific test cases that describe the data and the user activity that will be executed in order to verify proper functionality of the feature.

Individual Contributions

Hung Bui:

I.   Admin Functionality and connection to database.

Simon Julien:

I.   Help with survey connection to database, but primarily interaction with database to provide user's results.

Tiger McDaniel:

I.   Sign-up functionality and connection to database. Save Password using a hash function.

Kunal Sinha:

I.   Working on Survey front end after all variables needed for calculation is confirmed.

II.   Working on API integration to be requested when user location info is given in the survey.

Vanessa Van Scyoc Hernandez:

I.   Is working on making results page and and making calculating formulae for results- [git link](#)