

# System and Unit Test Report

## Sustainability Energy Alert

### Team Sustainers

03/04/2015

#### **System Test Scenarios**

##### Sprint 1

- As a team, we want to create a high level design so that can begin development and analysis
- As individuals, learn the relevant technologies so that we can develop our project
- As a team, communicate with the sponsor so that we have a better understanding of what the customer wants

Scenario:

1.

##### Sprint 2

- As a user, I want a working, visually appealing interface that grabs audience attention and incites the need to conserve energy.
- As a back end developer, I want the backend data to be complete so that I can present the data and stream it to the interface.
- As a back end developer, I want sufficient data and analysis so that I can develop a data structure for the front end.

Scenario:

1.

##### Sprint 3

- As a user, I want a working, visually appealing interface that grabs audience attention and incites the need to conserve energy.
- As a back end developer, I want the backend data to be complete so that I can present the data and stream it to the interface.
- As a back end developer, I want sufficient data and analysis so that I can develop a data structure for the front end.
- As a user, I want the user interface to be aesthetically pleasing so that all may be enticed by it
- As a team, we want to test our product to ensure that the customer is happy
- As a user, I would like a user document detailing important information such as how the product works.

Scenario:

1.

### **Unit Tests:**

Include a file/directory named 'Testing' in your Git Repository. There should be details (can be in a separate file in the directory) provided by each team member about the module and the functional testing they have done. Each team member picks a module or module and lists the equivalence classes and the test cases selected to cover all equivalence classes.

Tests by: Howard Tjong

- Browser support only by Google Chrome thus far
  - Mozilla FireFox will not support the pop-up box properly. It will not close, due to a javascript complaint about an event not being defined
  - no other browsers have been tested
- On bigger monitors (1920 x 1080) the icons are no longer symmetrical and tend to float left, leaving a larger margin of space on the right side
- Monitor sizes substantially smaller than 1080 x 720 are not fully responsive (also leaving a margin space on the right side) but works
- The pop up box was intended to close only when a click is pressed outside the box, and worked with one pop up box. However, since editing javascript code to account for multiple pop up boxes, clicking inside the pop up box also closes it now.

Test by: Lucas Rencoret

- Tested the insertion to the database in different run scenarios. And as well with different users and privileges.
- Tested the socket with different types of data, from the file we are reading or the recording from the ideal sensor.
- Tested the connection between the backend/database and the front end with different values to see if the front end was successfully changes colors.

Test by: Tyler Schulenberg

- Win32 ports
- linux demos
  - issues with building code on windows
- Windows executables testing simulated bacnet devices
  - Monterey building problem
  - wireshark

Tests by: Ashley Stallcop

### **Unit Testing For CSS and HTML:**

- Browser Support

- Google Chrome - in its developer tools, it shows no CSS or HTML errors, however, it shows a minor XMLHttpRequest warning. Website is functional and viewable.
- Firefox - in the developer tools, it shows several CSS errors. There's an issue with closing the popup box once an icon has been clicked on.
- Safari - using Safari's Unicorn's W3C's Unified Validator extension, it showed a couple of CSS errors, but this does not seem to affect the website's functionality.
- Issue with closing the popup box
  - Clicking anywhere on the popup box causes the background to return to transparent and the popup box is still visible
- Mobile Support
  - Most Mobile Phones: entire website is viewable and functional (works just as functional as in the web browsers), but require some scrolling left to right to see the image in the popup box.
  - Mobile devices with screens bigger than 1600px x 1000px: entire website and the image in the popup box can be seen as a whole without scrolling back and forth, and the website is functional (works just as functional as in the web browsers).
  - All Mobile Devices: just as in the web browser, the popup box is still visible if you tap anywhere on the popup box.

Tests by: Garrett Weng

- Tested different values for ports and hostnames
- Tested reading the .eso file from the client and sending the correct data to the database server
- Tested sending data to the database server that already existed\