CSCE 4925: Project Aero
Final Acceptance Test Procedure

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Revisions

Below is a list of any revisions made to this document.

Date	Description of Change Made	Person Making Change
5/1/2018	Document Created	Breuna, Alyssa, Travis, James
5/1/2018	Document Revision and Editing	Breuna, Alyssa, Travis, James

1 Test Configurations

Below are a list of the configurations used to perform the tests. In the testing results, these correspond to the Configuration ID.

     2.4.14- Internet Explorer, Windows 7
     2.4.15- Safari, Windows 7
     2.4.16- Mozilla Firefox, Windows 7
     2.4.17- Google Chrome, Windows 7
     2.4.18- Opera, Windows 7
     2.4.19- Internet Explorer, Windows 8.1
     2.4.20- Safari, Windows 8.1
     2.4.21- Mozilla Firefox, Windows 8.1
     2.4.22- Google Chrome, Windows 8.1
     2.4.23- Opera, Windows 8.1
     2.4.24- Internet Explorer, Windows 10
     2.4.25- Microsoft Edge, Windows 10
     2.4.26- Safari, Windows 10
     2.4.27- Mozilla Firefox, Windows 10
     2.4.28- Google Chrome, Windows 10
     2.4.29- Opera, Windows 10
     2.4.31- Android Device 1, Default Browser Available
     2.4.32- Android Device 1, Google Chrome
     2.4.33- Android Device 2, Default Browser Available
     2.4.34- Android Device 2, Google Chrome
     2.4.35- Android Device 3, Default Browser Available
     2.4.36- Android Device 3, Google Chrome
     2.4.37- iPhone, Safari
     2.4.38- iPhone, Google Chrome

2 Test Results

Below are the test results of all the features tested.

Feature 1.3.1.1

Feature 1.3.1.1: Provide users with a map of all sensors within city limits			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.14
Expected Result: A map shown with sensors on a map			
Actual Result: The map showed all sensors in the system on a map			
Test Result: Pass			

Feature 1.3.1.1: Provide users with a map of all sensors within city limits			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.15
Expected Result: A map shown with sensors on a map			
Actual Result: The map showed all sensors in the system on a map			
Test Result: Pass			

Feature 1.3.1.1: Provide users with a map of all sensors within city limits			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.16
Expected Result: A map shown with sensors on a map			
Actual Result: The map showed all sensors in the system on a map			
Test Result: Pass			

Feature 1.3.1.1: Provide users with a map of all sensors within city limits			
Test ID Number:	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.17

01			
Expected Result: A map shown with sensors on a map			
Actual Result: The map showed all sensors in the system on a map			
Test Result: Pass			

Feature 1.3.1.1: Provide users with a map of all sensors within city limits			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.18
Expected Result: A map shown with sensors on a map			
Actual Result: The map showed all sensors in the system on a map			
Test Result: Pass			

Feature 1.3.1.1: Provide users with a map of all sensors within city limits			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.19
Expected Result: A map shown with sensors on a map			
Actual Result: The map showed all sensors in the system on a map			
Test Result: Pass			

Feature 1.3.1.1: Provide users with a map of all sensors within city limits			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.20
Expected Result: A map shown with sensors on a map			
Actual Result: The map showed all sensors in the system on a map			
Test Result: Pass			

Feature 1.3.1.1: Provide users with a map of all sensors within city limits			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.21

Expected Result: A map shown with sensors on a map
Actual Result: The map showed all sensors in the system on a map
Test Result: Pass

Feature 1.3.1.1: Provide users with a map of all sensors within city limits			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.22
Expected Result: A map shown with sensors on a map			
Actual Result: The map showed all sensors in the system on a map			
Test Result: Pass			

Feature 1.3.1.1: Provide users with a map of all sensors within city limits			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.23
Expected Result: A map shown with sensors on a map			
Actual Result: The map showed all sensors in the system on a map			
Test Result: Pass			

Feature 1.3.1.1: Provide users with a map of all sensors within city limits			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.24
Expected Result: A map shown with sensors on a map			
Actual Result: The map showed all sensors in the system on a map			
Test Result: Pass			

Feature 1.3.1.1: Provide users with a map of all sensors within city limits			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.25
Expected Result: A map shown with sensors on a map			

Actual Result: The map showed all sensors in the system on a map
Test Result: Pass

Feature 1.3.1.1: Provide users with a map of all sensors within city limits			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.26
Expected Result: A map shown with sensors on a map			
Actual Result: The map showed all sensors in the system on a map			
Test Result: Pass			

Feature 1.3.1.1: Provide users with a map of all sensors within city limits			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.27
Expected Result: A map shown with sensors on a map			
Actual Result: The map showed all sensors in the system on a map			
Test Result: Pass			

Feature 1.3.1.1: Provide users with a map of all sensors within city limits			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.28
Expected Result: A map shown with sensors on a map			
Actual Result: The map showed all sensors in the system on a map			
Test Result: Pass			

Feature 1.3.1.1: Provide users with a map of all sensors within city limits			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.29
Expected Result: A map shown with sensors on a map			
Actual Result: The map showed all sensors in the system on a map			

Test Result: Pass

Feature 1.3.1.1: Provide users with a map of all sensors within city limits			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.31
Expected Result: A map shown with sensors on a map			
Actual Result: The map showed all sensors in the system on a map			
Test Result: Pass			

Feature 1.3.1.1: Provide users with a map of all sensors within city limits			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.32
Expected Result: A map shown with sensors on a map			
Actual Result: The map showed all sensors in the system on a map			
Test Result: Pass			

Feature 1.3.1.1: Provide users with a map of all sensors within city limits			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.33
Expected Result: A map shown with sensors on a map			
Actual Result: The map showed all sensors in the system on a map			
Test Result: Pass			

Feature 1.3.1.1: Provide users with a map of all sensors within city limits			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.34
Expected Result: A map shown with sensors on a map			
Actual Result: The map showed all sensors in the system on a map			
Test Result: Pass			

Feature 1.3.1.1: Provide users with a map of all sensors within city limits			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.35
Expected Result: A map shown with sensors on a map			
Actual Result: The map showed all sensors in the system on a map			
Test Result: Pass			

Feature 1.3.1.1: Provide users with a map of all sensors within city limits			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.36
Expected Result: A map shown with sensors on a map			
Actual Result: The map showed all sensors in the system on a map			
Test Result: Pass			

Feature 1.3.1.1: Provide users with a map of all sensors within city limits			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.37
Expected Result: A map shown with sensors on a map			
Actual Result: The map showed all sensors in the system on a map			
Test Result: Pass			

Feature 1.3.1.1: Provide users with a map of all sensors within city limits			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.38
Expected Result: A map shown with sensors on a map			
Actual Result: The map showed all sensors in the system on a map			
Test Result: Pass			

Feature 1.3.1.5

Feature 1.3.1.5: Display Data for a single sensor			
Test ID Number: 05	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.14
Expected Result: Display data for a single sensor			
Actual Result: Data is displayed for a single (test) sensor.			
Test Result: Pass			

Feature 1.3.1.5: Display Data for a single sensor			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.15
Expected Result: A map shown with sensors on a map			
Actual Result: Data is displayed for a single (test) sensor.			
Test Result: Pass			

Feature 1.3.1.5: Display Data for a single sensor			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.16
Expected Result: A map shown with sensors on a map			
Actual Result: Data is displayed for a single (test) sensor.			
Test Result: Pass			

Feature 1.3.1.5: Display Data for a single sensor			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.17
Expected Result: A map shown with sensors on a map			
Actual Result: The map showed all sensors in the system on a map			

Test Result: Pass

Feature 1.3.1.5: Display Data for a single sensor			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.18
Expected Result: A map shown with sensors on a map			
Actual Result: Data is displayed for a single (test) sensor.			
Test Result: Pass			

Feature 1.3.1.5: Display Data for a single sensor			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.19
Expected Result: A map shown with sensors on a map			
Actual Result: Data is displayed for a single (test) sensor.			
Test Result: Pass			

Feature 1.3.1.5: Display Data for a single sensor			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.20
Expected Result: A map shown with sensors on a map			
Actual Result: Data is displayed for a single (test) sensor.			
Test Result: Pass			

Feature 1.3.1.5: Display Data for a single sensor			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.21
Expected Result: A map shown with sensors on a map			
Actual Result: Data is displayed for a single (test) sensor.			
Test Result: Pass			

Feature 1.3.1.5: Display Data for a single sensor			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.22
Expected Result: A map shown with sensors on a map			
Actual Result: Data is displayed for a single (test) sensor.			
Test Result: Pass			

Feature 1.3.1.5: Display Data for a single sensor			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.23
Expected Result: A map shown with sensors on a map			
Actual Result: Data is displayed for a single (test) sensor.			
Test Result: Pass			

Feature 1.3.1.5: Display Data for a single sensor			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.24
Expected Result: A map shown with sensors on a map			
Actual Result: Data is displayed for a single (test) sensor.			
Test Result: Pass			

Feature 1.3.1.5: Display Data for a single sensor			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.25
Expected Result: A map shown with sensors on a map			
Actual Result: Data is displayed for a single (test) sensor.			
Test Result: Pass			

Feature 1.3.1.5: Display Data for a single sensor			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.26
Expected Result: A map shown with sensors on a map			
Actual Result: Data is displayed for a single (test) sensor.			
Test Result: Pass			

Feature 1.3.1.5: Display Data for a single sensor			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.27
Expected Result: A map shown with sensors on a map			
Actual Result: Data is displayed for a single (test) sensor.			
Test Result: Pass			

Feature 1.3.1.5: Display Data for a single sensor			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.28
Expected Result: A map shown with sensors on a map			
Actual Result: Data is displayed for a single (test) sensor.			
Test Result: Pass			

Feature 1.3.1.5: Display Data for a single sensor			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.29
Expected Result: A map shown with sensors on a map			
Actual Result: Data is displayed for a single (test) sensor.			
Test Result: Pass			

Feature 1.3.1.5: Display Data for a single sensor

Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.31
Expected Result: A map shown with sensors on a map			
Actual Result: Data is displayed for a single (test) sensor.			
Test Result: Pass			

Feature 1.3.1.5: Display Data for a single sensor			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.32
Expected Result: A map shown with sensors on a map			
Actual Result: Data is displayed for a single (test) sensor.			
Test Result: Pass			

Feature 1.3.1.5: Display Data for a single sensor			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.33
Expected Result: A map shown with sensors on a map			
Actual Result: Data is displayed for a single (test) sensor.			
Test Result: Pass			

Feature 1.3.1.5: Display Data for a single sensor			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.34
Expected Result: A map shown with sensors on a map			
Actual Result: Data is displayed for a single (test) sensor.			
Test Result: Pass			

Feature 1.3.1.5: Display Data for a single sensor			
Test ID Number:	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.35

01			
Expected Result: A map shown with sensors on a map			
Actual Result: Data is displayed for a single (test) sensor.			
Test Result: Pass			

Feature 1.3.1.5: Display Data for a single sensor			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.36
Expected Result: A map shown with sensors on a map			
Actual Result: Data is displayed for a single (test) sensor.			
Test Result: Pass			

Feature 1.3.1.5: Display Data for a single sensor			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.37
Expected Result: A map shown with sensors on a map			
Actual Result: Data is displayed for a single (test) sensor.			
Test Result: Pass			

Feature 1.3.1.5: Display Data for a single sensor			
Test ID Number: 01	Date: 5/1/2018	Test Trial Number: 1	Configuration ID: 2.4.38
Expected Result: A map shown with sensors on a map			
Actual Result: Data is displayed for a single (test) sensor.			
Test Result: Pass			

3 Features Not Tested

These features were not tested because the code for them could not be properly implemented.

      1.3.1.2- Provide a method of looking up historical data

      1.3.1.3- Show what sensors are online and offline

      1.3.1.4- If a sensor is offline, show when it was last online or last "seen"

      1.3.1.7- Allow a user to login to an account

      1.3.1.8- Allow a user to create an account

      1.3.1.9- When logged in, show a map of where the user's sensor's are located.

      1.3.1.10- When logged in, show sensor information

      1.3.1.11- When logged in, show statistics from the user's sensor's

      1.3.1.13- Verify that users are able to create an account

      1.3.1.14- The map should use different icons for sensors that are online and offline

      1.3.1.15- Add new sensors to the network

      1.3.1.16- Delete sensors from the network

      1.3.1.17- Store data from the sensors

      1.3.1.18- Accept user reported data.

      1.3.1.19- The system should accept data from any sensor, regardless of type

      1.3.1.21- The system should be able to store any air quality value that a user is able to provide with their sensor

      1.3.1.22- Verify that the data reported from the sensor is not an outlier, and somewhat matched the data reported from other sensors.

      1.3.1.25- Raw data should be made available for download

      1.3.1.26- The system should refresh itself with new data pulled from the sensors every five minutes.

      1.3.1.27- System should notify a user if the data that is being pulled is an outlier

These features weren't planned on being tested.

      1.3.1.0- Display air quality statistics in an easy to read, graphical format.

      1.3.1.6- Provide a help menu for users needing help with the system.

      1.3.1.12- Provide location data of a sensor, either via address or through coordinates.

      1.3.1.20- The database should be presented in a time series format

      1.3.1.23- A large volume of users should be able to use this system without issue.

      1.3.1.24- THe system should be secure.