Group: 111-4

Test 1: Sensing Unit Acceptance Test

Overview:

In this test we will be testing whether our averaged decibel reading is accurate within 15% of what our phones record. Meaning that we will be measuring ambient sound with both our phone and the sensor unit. The “average” refers to taking many data points over a minute and taking the raw average of those values to figure out on average how loud the ambient environment is.

Testing Instructions:

- Step one: Verify that the phone and microphone on the sensing unit are working properly.
- Step two: Begin taking decibel readings over the course of one minute from the phone and from the sensing module.
- Step three: Once one minute has concluded begin calculating the average decibel reading.
- Step four: Compare the values and calculate a rough “error” associated with the sensing unit if there is any.

Success Criteria:

- Sensing unit displays data to the user terminal.
- Data is accurate within 15% of phone values.
- Averages have no erroneous data.
- Data is displayed properly either in CSV or JSON format (For sensing unit ONLY)

Scoring Rubric:

4 Points: everything functions as intended
3 Points: everything functions as intended minus minor bugs
2 Points: everything functions as intended with multiple bugs
1 Points: major bugs / failed subtest

------

4 Points (1)
4 Points (2)
4 Points (3)
4 Points (4)

Total Score: { / 16}

Test 2: Current Best Location

Overview:

The purpose is to test the feature has displayed the correct location on the front end. According to our SQL database the script will adjust which location will be the best at this instant according to current and past data recorded by microphones.

Testing Instructions:

- Step one: Open the main page
- Step two: Select recommended study spot

Success Criteria:

- Location is correctly picked and displayed

Scoring Rubric:

4 Points: display success as expected
3 Points: display success but with minor bugs
2 Points: display success but with major bugs or incorrect information
1 Points: major bugs / app break

------

4 Points (1)

Total Score: { / 4}

Test 3: Display data for specific time and location

Overview:

This test is for the time and location selection feature. The user will select a location in the interface and pick some time slots they would like to check the sound data. The app should show the past sound data collected in table form.

Testing Instructions:

- Step one: Open the main page
- Step two: Select location
- Step three: Select time slot

Success Criteria:

- Location is correctly picked and displayed
- Time slots are correctly picked and arranged
- Data successfully transferred and showed in table

Scoring Rubric:

4 Points: display success as expected
3 Points: display success but with minor bugs , doesn't affect usage
2 Points: display success but with major bugs or incorrect information
1 Points: major bugs / app break

---

4 Points (1)
4 Points (2)
4 Points (3)

Total Score: { / 12}