Sound Sensitivity Traffic 3

Overview:

System based off of the sound(dB) in an ambient setting. I.e the tracks the sounds across the day and finds the best times to (study). For example the sensor reads 60dB throughout the day but at 4 PM it reaches a low of 50dB. The website would show the user that 4 PM would be the ideal time to study. AVG’s and other statistics could be displayed to the user as well.

Project Features List:

* Most Quiet Time at Location

This feature of our software displays the user specific times during the open hours of a location on campus that we have tested sound(db) measures thoroughly and that the sound(db) tested is at its lowest for the day. The user will promptly pick the location from our interface and then will be shown a time interval in graph format.

* Loudest Time at Location

This feature of our software displays the user specific times during the open hours of a location on campus that we have tested sound(db) measures thoroughly and that the sound(db) tested is at its highest for the day. The user will promptly pick the location from our interface and then will be shown a time interval in graph format.

* Display Data for Specific Time and Location

This feature of our software promptly asks the user for a location and a specific time interval that they want to see displayed. We will show the user in graph format the sound(db) measures of that location during the given time interval.

* Display all Data at Specific Location

This feature of our software will have the user pick a specific location in our interface and then we will display all of the given sound(db) data in graph format to the user.

* Average Sound(db) Reading at Specific Location

This feature of our software will promptly ask the user to choose a location from our interface and we will display the average sound(db) of that location.

Requirements:

Functional Requirements

* The user is displayed a graph of the most quiet time interval in a given location
* The user is displayed a graph of the loudest time interval in a given location
* The user is displayed a graph of the sound(db) data for a time interval and location of their choosing
* The user is displayed a graph of all sound(db) data in a location of their choosing
* The user is displayed the average sound(db) data in a location of their choosing

Non-Functional Requirements

* The sensors that measure sound(db) need to be working correctly and record data
* The data recorded from the sensor needs to be passed into our database
* The database needs to parse all of the sound(db) data and correctly find a time interval for the lowest sound(db)
* The database needs to parse all of the sound(db) data and correctly find a time interval for the highest sound(db)
* The database needs to parse all of the sound(db) data and correctly find the average sound(db) calculation
* The database needs to take user input and correctly parse the data and return the sound(db) interval for the given user location and time interval

Project Plan: