Handoff Documentation

The files included:

Python files:

* Ardcon.py = python code that write a loop that reads the data from the Arduino.
* Database.py = python code that connect it to the MySQL table. We use the database in phpmyadmin.cse.tamu.edu. Running it on phpmyadmin.cse.tamu.edu needs an ID and password.
* PythonToArduino\_UnitTest.py = test cases for the Arduino.
* PythonToDatabase\_UnitTest.py = test cases for the database.
* TestRead.py = test file for reading the output of the ultrasonic sensors
* Log.txt = log files for the ardcon.py

PHP to Database files:

* DbConnect.php = PHP to database file. It creates a user interface using the data from database. Also, it includes function to get median, mode, and mean.
* Error.php = the debug file that prints out the error at compiling
* Results.php = printing results to database
* Test4.php = database unit test cases
* UIPage.php = the counter web interface
* PHPtoDatabase\_UnitTest.php = test cases from PHP to database

Arduino files:

* Data.collector.ino = the Arduino code that should be uploaded to the Arduino

How to run them:

1. Assemble the Arduino. Make sure to connect both of the ultrasonic sensors to the 5V and ground respectively.
2. Create a python code that calls the Arduino. Also, make sure to call setup function on the Arduino and set the maximum check distance using the setDistance() function.
3. Then, write a loop using genericRead and run it.
4. The database API will send the result to the database.
5. Also, there are functions, such as MinInHourRange, MaxInHourRange, AverageInHourRange, ModeInHourRange that will take the data from the database and print out the minimum, maximum, average, or mode of people in a certain time.