**Documentation**

***Setting up your Counter***

**Setting up the SQL Database**

To set up the database, you will need access to a server able to create MySQL databases and executing MySQL commands. Keep track of your login details, you will need it later to enter in a PHP file later in the process. Once you are ready to create the table, enter the SQL command located in TableCommandSetup.txt. This will create a table with the correct title and columns to correctly utilize our systems. For confirmation, you should now have a table called “WalkingCounterDatabase” that has three columns: Count, Date, and Time.

**Setting up your Web Server**

After your SQL Database is set up, you can connect it to the web server. With access to a web hosting provider, unzip and upload the files contained in the Website.zip folder. The only thing you will have to change to connect your new database is the CommonMethods.php file. Open the file and observe lines 8-11. On these lines, change each of the variables to the corresponding values you used to login to your SQL service. This would be the database, the database name, your username, and your password on each line, respectively. Once this is set up, your new database should be connected to the web server, and readings of the arduino may be seen on the website. We are using the free googleCharts API to display the readings from our database, and there is no additional setup to make this functionality available.

**Setting up the Arduino**

You will need to set up your arduino board and 2 HC-SRO4 Ultrasonic Sensors according to the wiring diagram provided. The further the sensors are apart from each other the better because their will be less interference between them. Upload the ultraSonicFinal.ino file to your arduino. You won’t have to change any of the code unless you decide to change the pins to which the trig and echo pins are connected to, then you will need to change the variable values to your new specifications.

**Setting up the Python Code**

First to set up the python code you will need to add your database server, username, password, and database name to the log\_info array clearly labeled. Make sure the port is correct for the port you used to upload the arduino code. The arduino code should have been uploaded to the board before running the python code. Run the code and your counter should print when someone enters and a database entry is added. If there is an error like “out of range”, or “can’t convert string to float” that is ok, just rerun the code and it should work correctly.