Proof Report – Here, is a proof of the Project. I have pasted the Outputs which i got.

Activity Diagram –

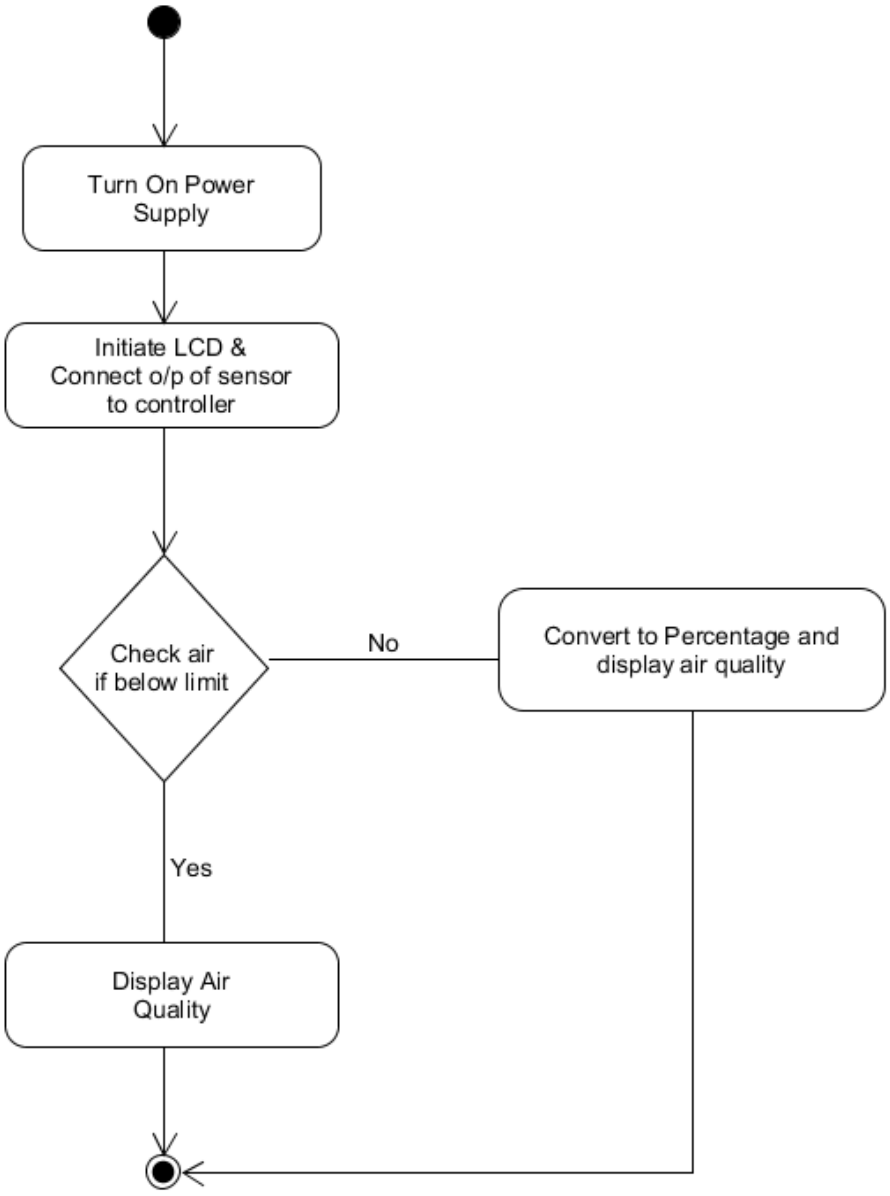

Figure.3: Activity Diagram for Air Quality Monitoring System

Components:

a. Start : It will start the execution.

b. Activities: Turn On power supply, Initiate LCD and Connect output of sensor to controller, convert to percentage and display air quality, display air quality.

c. Decision box: It will check if condition is true or false and return to the function.

d. End: It will end/terminate the activities with and output.

Working:

At first the execution starts from start and then user turns on the power supply to start the machine after that the Lcd light initiate on and off with respect to series of events and connect the output of the sensor to the controller.

The decision box the checks the air quality and if its in the limit the show the ouput to the user and end the activity if not, then it will calculate the percentage according to the ppm and display information to user and ends the activity.

Testing and Output –

Before uploading the code, make sure that you should connected to the Wi-Fi of your ESP8266 device. After uploading, open the serial monitor and it will show the IP address like shown below.

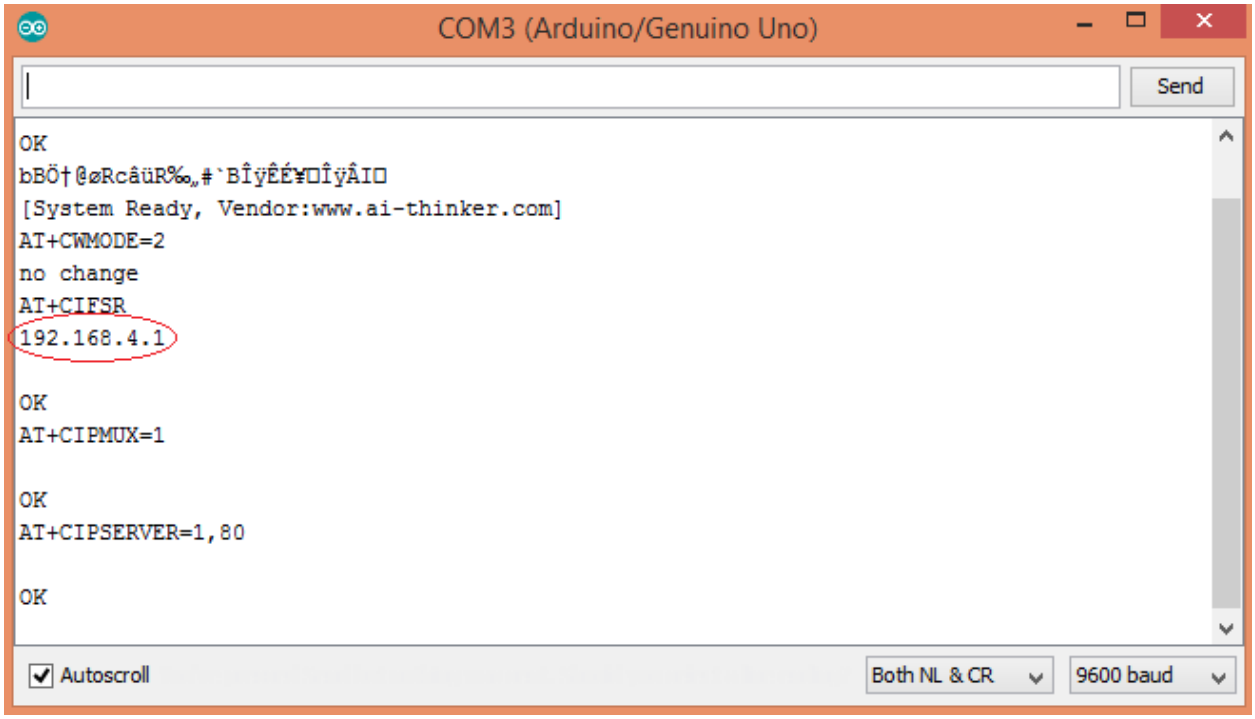

Figure.4: To show the Output on a Webpage

Type this IP address in your browser, it will show you the output as shown below. You will have to refresh the page again if you want to see the current Air Quality Value in PPM.

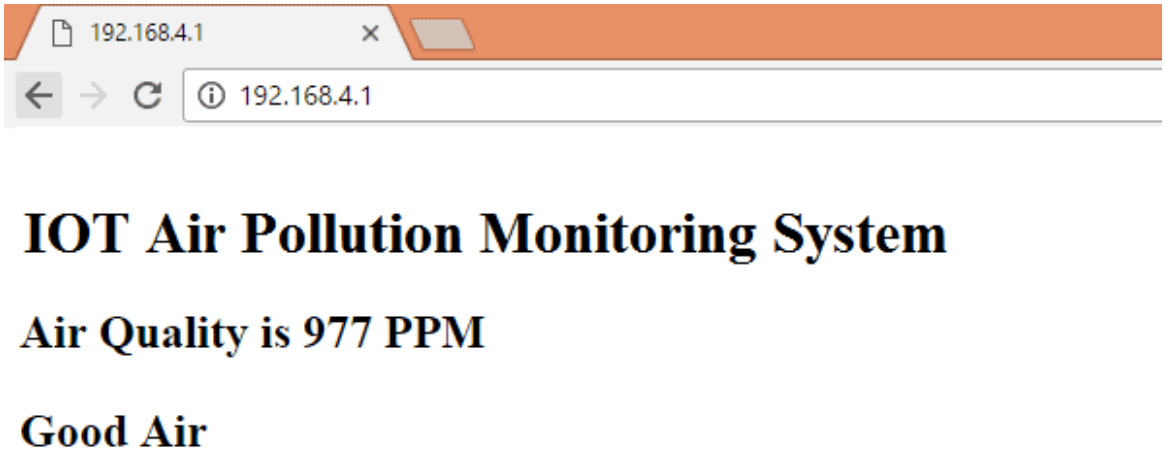

Figure.5: Output shown in the figure

We have setup a local server to demonstrate its working. But to monitor the air quality from anywhere in the world, you need to forward the port 80 (used for HTTP or internet) to our local or private IP address (192.168*) of our device. After port forwarding all the incoming connections will be forwarded to this local address and we can open above shown webpage by just entering the public IP address of our internet from anywhere.