

WEB CONTROLLED IOT NOTICE BOARD

Team Members:

Ravi Sista

Prasfur Tiwari

Description

In this project, we are using Internet to **wirelessly send the message from Web Browser to the LCD** which is connected to Raspberry Pi.

As message is sent through the web browser, so it can be sent using Computer, smart phone or tablet, hence useful anyway.

Here, we created a web server using *python* and using the Flask framework. Interfacing of LCD to Raspberry Pi is well described in the website **AdaFruit**.

Components

- A Raspberry Pi Model B (or greater can be used)
- A USB WiFi Adapter
- An SD Card flashed with the Raspbian OS
- Access to the Raspberry either via a keyboard and a monitor or remotely.



Creating Webserver

We made a web application with a frame that permit a client to send a message to the Raspberry Pi utilizing Flask in a web browser.

This allowed us to control the Raspberry Pi from a PC, tablet or smart phone. At the point when the form is submitted, it will send the message to the LCD by means of the Raspberry Pi's GPIO ports.

All the code, including the web application, is in Python and HTML.

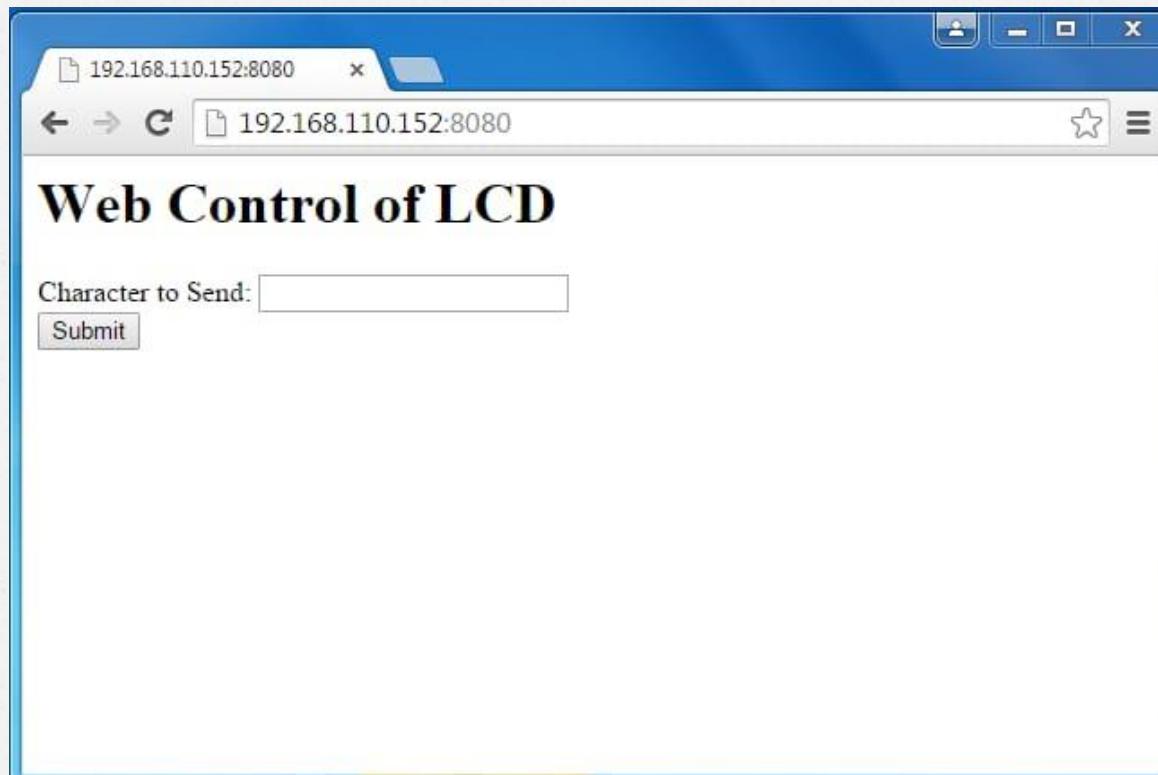
Creating Webpage

Here we utilized the “AdaFruit_CharLCD.py” library according to our connections in the circuit, so we have to set up the folder structure that we need.

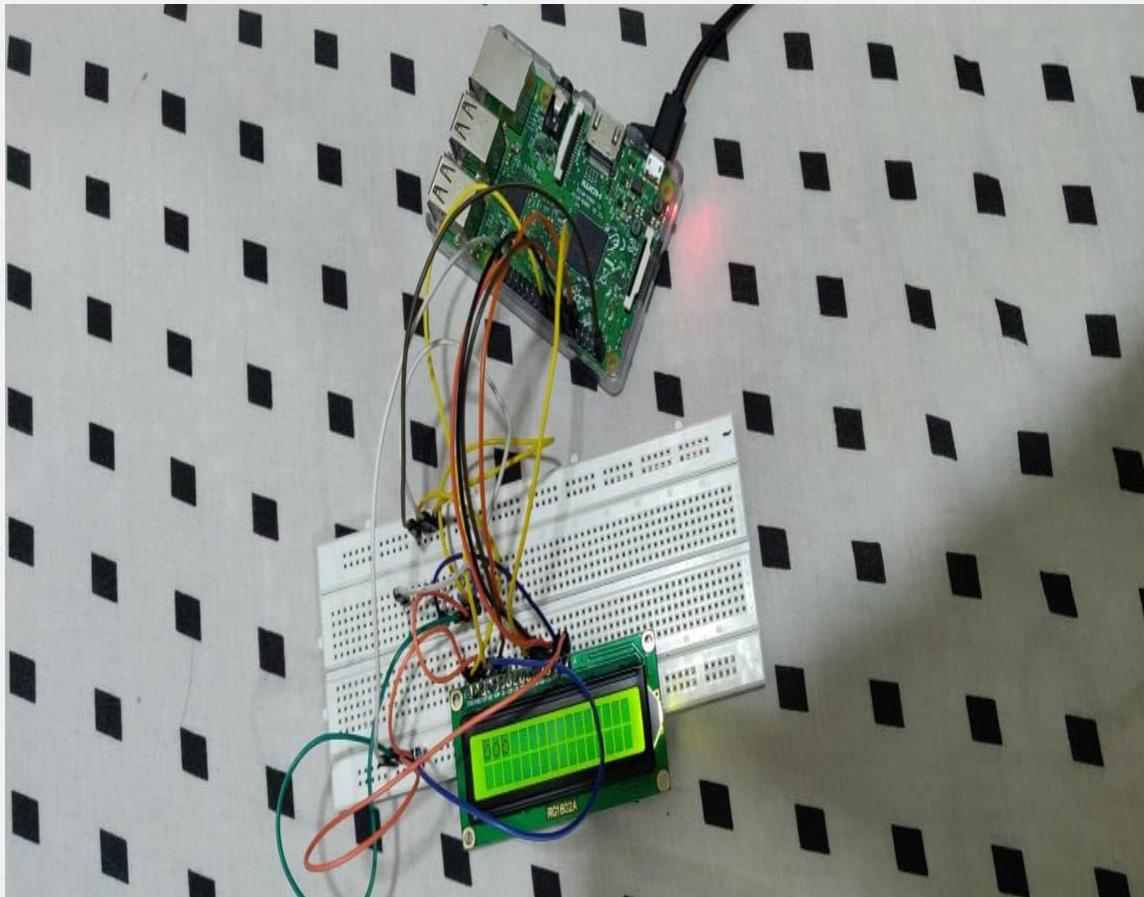
Firstly we created a folder “web_lcd” in the home directory and then created two folders and python script file named lcd.py in the web_lcd directory.

We then downloaded the required project files and transferred it to Raspberry Pi using File Server.

We then changed the IP address to our Raspberry Pi and after writing the command in the command prompt to run the web page, the following web page opens:



The text that we wanna display can then be typed in the box appearing in the web page.



Python Codes



`__init__.py`



`Adafruit_CharLCD.py`



`lcd.py`

References

- o <https://www.engineersgarage.com/>

- o <https://circuitdigest.com/>

THANK YOU



To whomsoever it may concern

This is to confirm that the following team members

Ravi Sista

Prasfur Tiwari

have completed their project titled

Web Controlled IoT Notice Board

assigned to them on time during the course of training.

The performance of the candidates was overwhelming throughout the training.

Dated: June 8th 2019 – June 21st 2019.

Thanks and Regards

Vaibhav Agrawal

Director Operations

Robotech Labs Private Limited