


SMART HOME

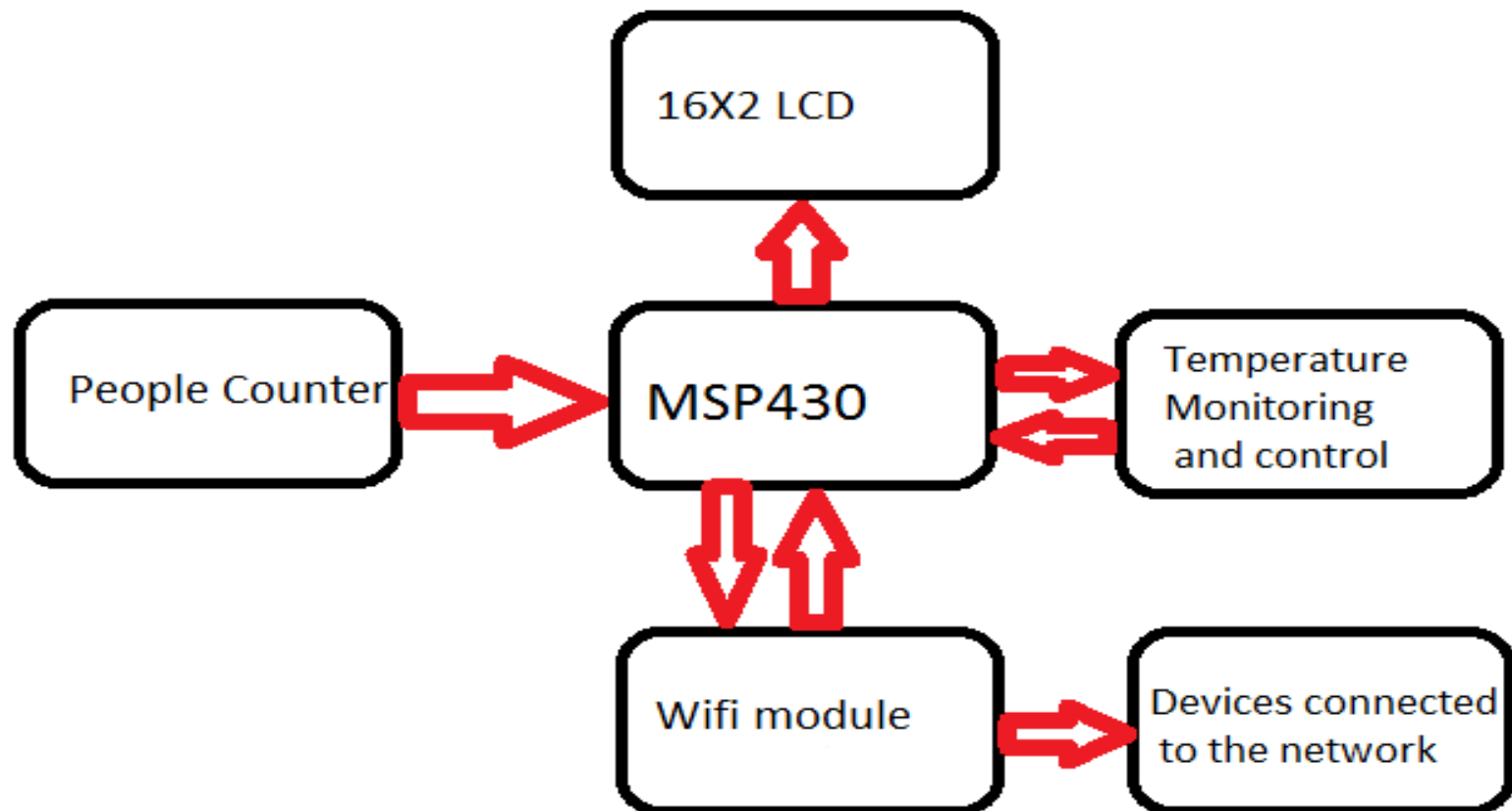
AMIT SINGH
GAURAV SHENOY
RAJ SHAH
TEJAS SONTAKKE



Overall Status

- * Individual components acquired.
- * Interfacing of 16x2 LCD with MSP430 was completed and tested.
- * IR sensor acquired and tested.
- * Data acquisition from Inbuilt Temperature sensor is underway.
- * Interfacing of CC3100 (Wi-fi Booster Pack) with MSP430 in progress.

BLOCK DIAGRAM

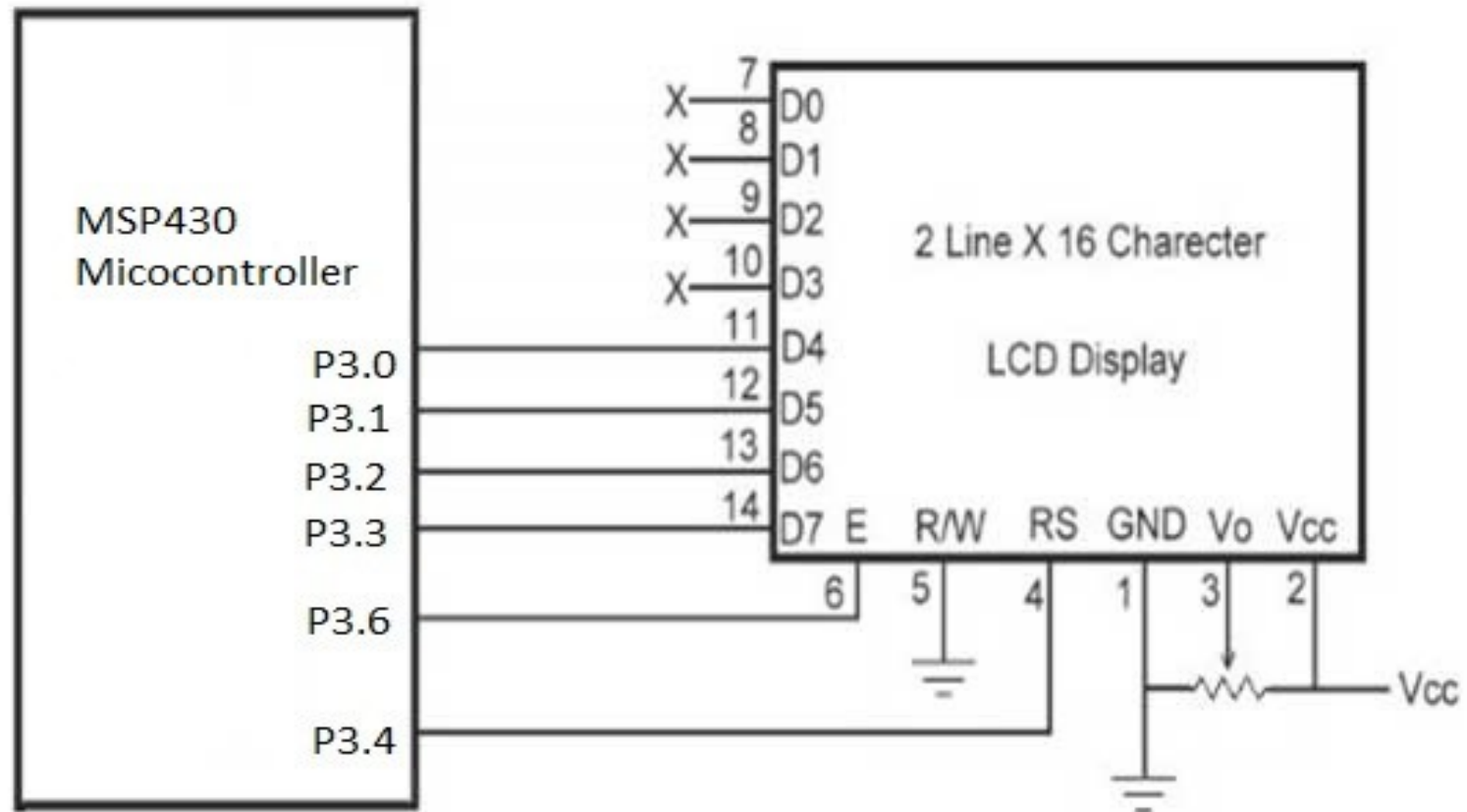


Liquid Crystal Display

- * Name : VSTM 1602K
- * Specs : Operating Voltage - 5V
Supply Current - 2.0mA
- * Progress : Software Interfacing Done



Interface : 16x2LCD

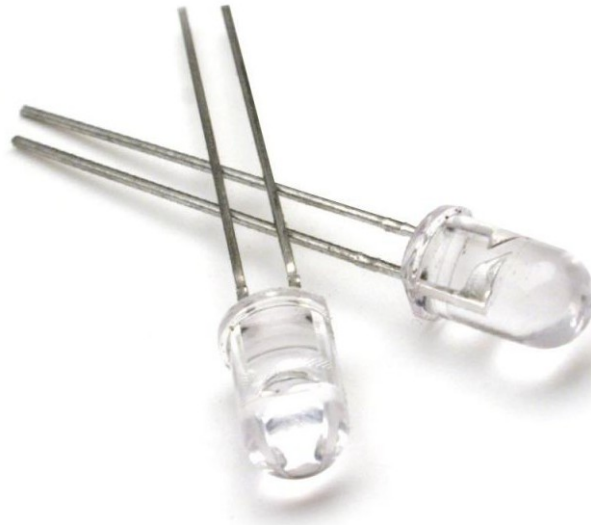


Temperature Sensor

- * Name : In-built Negative Temperature Co-efficient(NTC) sensor of MSP430.
- * Specs : Range - (-40) deg.C to 85 deg.C
Temperature Co-efficient - 0.7%
- * Progress - Software interface in progress
- * Challenges - Displaying Temperature on LCD.

IR Transceiver Pair

- * Name : IR Led and TSOP 1738
- * Specs : 38Khz Operating Frequency
- * Progress : Acquired and Tested



Relay

- * Name : 5vDC SPDT Sugar Cube Relay
- * Specs : Operating Voltage - 5 V
Normally Open (N
- * Progress : Ordered



Wi-Fi Module

- * Name: Wi-Fi 3100 Booster pack
- * Specs:
 - * ARM based module
 - * Hardware Interface used: UART
 - * GUI used: HTML Web Page.
 - * Progress with component: Access point , HTTP server configuration successful.

Wifi Module Test 1

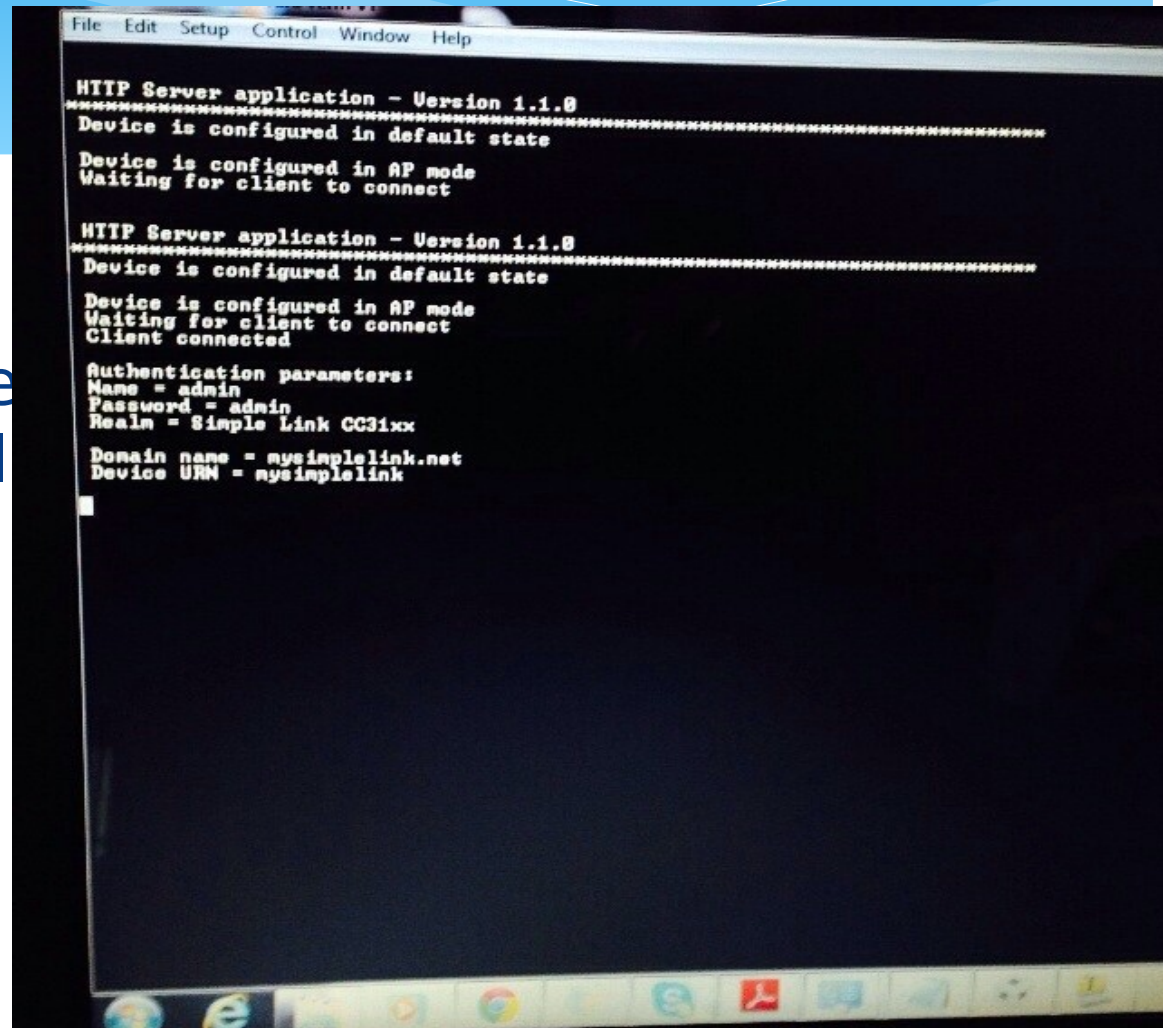
Access Point Setup

- * CC3100 is configured as an Access Point.
- * Devices - PC, Cellphone's connection to CC3100's Wi-Fi network successful.
- * Default web page accessed.

Wifi Module Test 2

HTTP Server

- * HTTP Server is configured in authentication mode.
- * Data transfer to the server is successful



```
File Edit Setup Control Window Help
HTTP Server application - Version 1.1.0
=====
Device is configured in default state

Device is configured in AP mode
Waiting for client to connect

HTTP Server application - Version 1.1.0
=====
Device is configured in default state

Device is configured in AP mode
Waiting for client to connect
Client connected

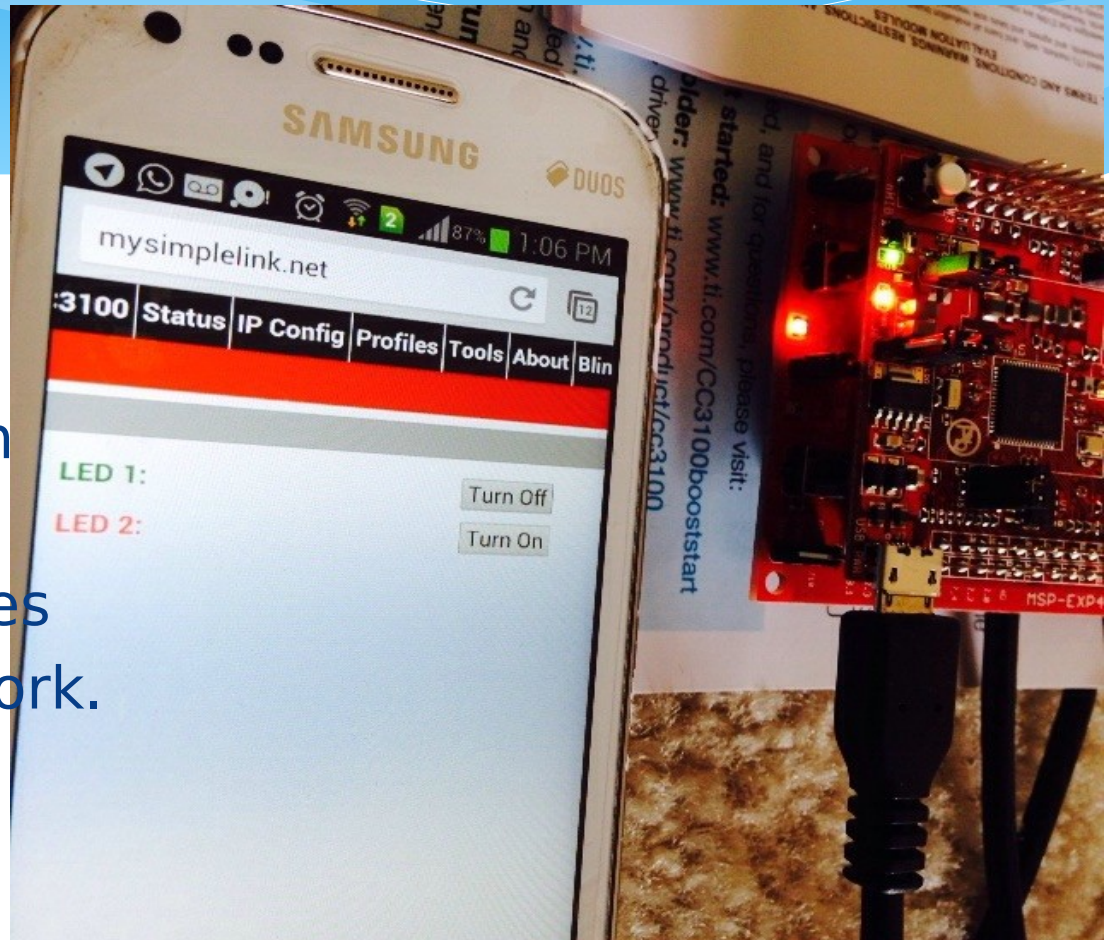
Authentication parameters:
Name = admin
Password = admin
Realm = Simple Link CC31xx
Domain name = mysimplelink.net
Device URN = mysimplelink
```

Test Application LED blink

*LEDs controlled via
GUI -HTML Webpage.

*Challenges faced:

- 1) Unable to connect in station mode.
- 2) Limited no. of devices connected to the network.



TASK DIVISION

- * Amit & Tejas : Wi-Fi Interface with MSP430 ,coding and Debugging
- * Raj & Gaurav : Sensor Interfacing , LCD Interfacing , Relay and Coding & Debugging

THANK YOU

The bottom of the slide features a decorative graphic consisting of several overlapping, wavy, light blue lines that create a sense of movement and depth against the solid blue background.