WEB CONTROLLED SMART-HOME SYSTEM PROJECT OVERVIEW

By-

Ritesh Jaiswal

Electronics & Communication Engineering Department

Maulana Azad National Institute Of Technology, Bhopal, India

Life without 'Web Controlled Home' :-

• Many times in real life we face such condition that we usually forget to turn off the electric home appliances before leaving the house to go to the office which ultimately results in high electricity bills and this will become huge problem if you are going for any foreign trip and you are sitting in a flight. Also, if sometimes we think how good it will be, if I can turn on my bathroom geyser or Air Conditioner before reaching at home so that I don't have to wait until AC will cool the room. The aim of the project is to provide control on home appliances through internet.

Working of 'Web Controlled Smart-Home System' :-

- As show in sketch we connect two relays to control one device. Two relays are used because when we are at home, we don't want to access my TV or Light bulb whose switch is just 5 feet away from me. So in that case you can switch to Manual Control Mode by going to web server. In this mode Relay1 will break the circuit and Relay2 will make the circuit (In the sketch).
- Now since arduino is acting as web server and anybody can access it through its IP Address so to avoid others to
 access my home appliances, security feature is also provided in web server code. As you go to the IP Address of
 web server then one Login Panel will open which ask 'Username' and 'Password' and as you click submit button this

- 'username' and 'password' will sent to arduino as http POST request and get checked with previously programmed username and password by arduino web server.
- After Login into your web server you can either click on 'ManualControlling' button or you can check the proper radio button and then submit the form. Doing this will sent http POST request to arduino web server which turn on or off corresponding relays to control the appliances and show their updated status on webpage.

• SKETCH:-

