**IOT BASED HOME AUTOMATION WITHOUT USING INTERNET**

In this project we controlled our appliances without using internet with the help of Wi-Fi module (ESP8266)

**The problem HOME AUTOMATION WITHOUT USING INTERNET solves**

In this project we have created home automation without using internet where the home appliances like fans, lights etc... are controlled remotely with our local hotspot. We have created a personalized HTML page for controlling our appliances. The network established between Wi-Fi modules, modem and smart phones or laptops, where the smartphone and laptops can give commands without any kind of internet source. All the home appliances are connected in microcontroller through 5v adapter. The GPIO pins in nodeMCU are 5,14,0,15,16 for the respective relays. The microcontroller along with Wi-Fi module assigned with a static IP address. The web page for the assigned IP address is programmed in the microcontroller. Whoever in the same network using their smartphone can access the IP address and its corresponding webpage. We have also implemented timer operator controller to turn off home appliances according to their desired timings.

**Challenges we ran into**

i) we have faced problem in pcb design ii) creating in HTML page iii) creating timer operator controller iv) creating slider switch in HTML page v) creating a static IP address

**Technologies we used**

[**NodeMCU**](https://hackhub2022.devfolio.co/submissions?tags=NodeMCU) [**Embedded C**](https://hackhub2022.devfolio.co/submissions?tags=Embedded%20C) [**Embedded Systems**](https://hackhub2022.devfolio.co/submissions?tags=Embedded%20Systems) **Server PCB BOARD RELAY MOBILE PHONE MODEM**