Bluetooth Controlled Home Automation

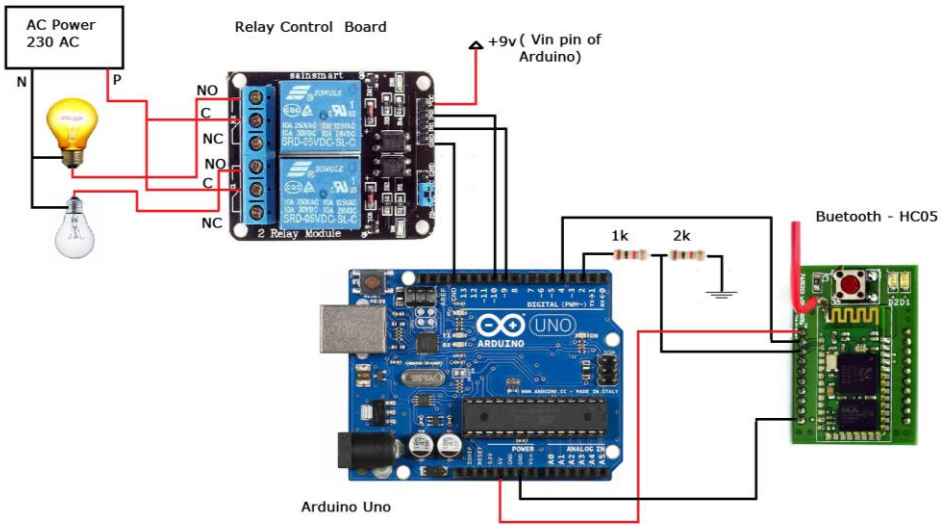
Our project is a voice signal controlled home automation system. First the input signal is given by us in form of voice, that voice is converted to text by an app designed by us. This text signal is then sent to Arduino via Bluetooth module. The output of the Arduino is the input for the relay module which is used to control our fan and bulb.

Working:

In the mentioned project, we have used a relay module as switch to control the functioning of the electrical appliances. We are giving a voice command as input to a self-designed mobile application which then converts it to text and transmits it to the Arduino via Bluetooth module. The UNO is programed to use this received signal as the input signal. Our relay module draws power directly from the Arduino and can be programmed as per the requirements.

Suppose if a user gives a certain voice command “Lights ON” on the mobile application, it will be converted to text and transmitted to the Arduino via Bluetooth module. This output of the application thus sent will act as the input for the UNO and a command will be generated that will switch on the lights.

Circuit Diagram:



Working Model: