DIGITAL ELECTRONICS AND LOGIC DESIGN

MINI – PROJECT

GROUP NO. : - 02

BLUETOOTH CONTROLLED LIGHT BULB

➢ **Group Members : -**

Name	Gr – No.	Roll – No.	Batch
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➢ **Hardware Required : -**
- » Arduino Uno
- » Relay Module (5V VCC)
- » Bluetooth Module HC-06.
- » Desk Lamp or any Light Bulb
- » Wires
- » Holder

➢ **Softwares Required : -**
- » MIT App Inventor
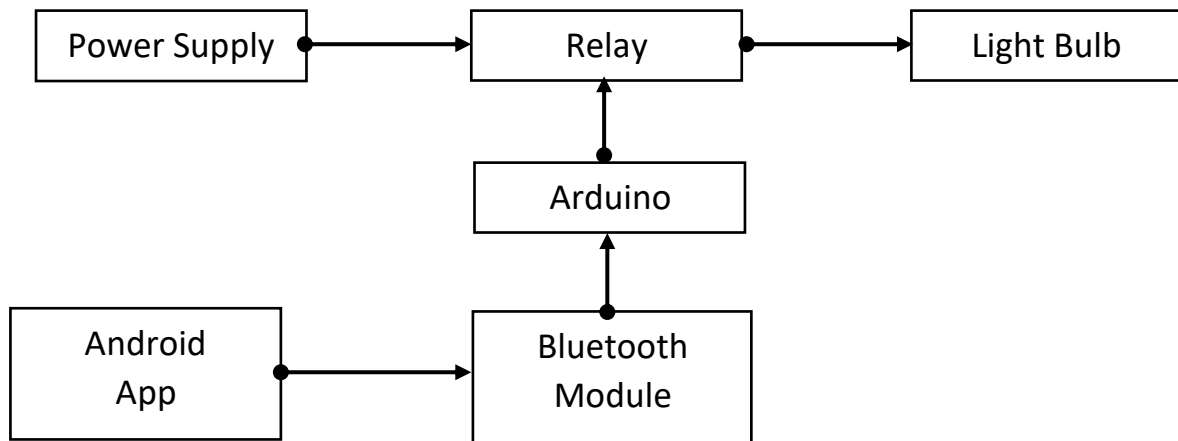- » Arduino IDLE

➢ **Abstract : -**

In this project we are going to control a light bulb using an Android App configured on Bluetooth, which will trigger the Bluetooth module connected to Relay mounted on Arduino Uno.

In the project, the app which will be used to control the light bulb will be created by MIT App Inventor. This app will be used to send signals to the Bluetooth Module and further to the Arduino. Depending upon the signal sent to Arduino, i.e. 'high or 1' for 'ON' state or 'low or 0' for 'OFF' state, the Relay will function, and hence it will decide whether the light bulb will glow or not.

➢ **Cost Estimation : -**
- » Arduino　　　　　=　　Rs. 464
- » Bluetooth Module　=　　Rs. 371
- » Relay　　　　　　=　　Rs. 281
- 　Total　　　　　　=　　Rs. 1116

➢ Block Diagram : -

➢ Circuit Diagram : -