Project: Automated Room Controlling

**Testing of Components:** 2 types of testing components – 1. Hardware & 2. Software

1. Hardware components testing:
   1. Arduino Uno: Arduino Uno are testing to use a sample code that is given in the example of basic.
   2. Wifi Sheild: Wifi shield are also testing to use the sample code that will be found online or in the example block of arduino.
   3. Relay Module: First relay module are tested using power supply and then secondly tested using code.
   4. Analog to Digital Convertor: Sample power supply and use the volt meter.
   5. Switch: Using power supply.
2. Software components testing:
   1. Arduino Compiler: Run the sample test code and if it is not provide any error then it is completely ok.
   2. Costumed backend software: Sample input and requirements output data are using to test our costumed software.

**Integration Testing:** In the integration testing one-by-one increment method are using because it is very helpful to find out bug of the system. For that reason different steps are taken and the steps are given below:

1. First checking arduino uno.
2. Then added the relay module and test it.
3. After then added the switch and test it.
4. After, added the wifi shield and sent data, and check system, isn’t it okay?
5. Then added the AC-to-DC convert to supply the power in arduino and relay module.
6. If above all things are ok, then check our costumed software to run the full system.