 

**Digital Electronics and Computer Architecture Laboratory**

**Class Group: 22 Section: 22-B Project Group (PG): 13**

**Project Abstract**

**ProjectTitle:HOME AUTOMATION USING IOT**

|  |  |
| --- | --- |
| Microcontroller Based |  |
| Non-Microcontroller Based |  |
| Only Software Based |  |
| Others |  |

**Abstract:** *Usage-It makes easy for the man to access all the electronic devices at his place .Even when they are not at home, they can watch and control their devices connected by this system .*

*IOT technology can help homeowners monitor their homes more efficiently and reduce energy costs. Smart doorbells and other sensors can be connected to smart homes to help homeowners detect visitors. Smart thermostats can also monitor the temperature and lighting conditions in a room.*

*Alexa is one such example. It involves automatic controlling of all electronic devices in home through wireless communication.*

*Methodology- This system is mainly implemented by sensors, controlling devices and actuators. The sensors detect light, motion, temperature and other sensing elements and then send that to the main controlling devices. These sensors can be thermocouple, photo detector , level sensors etc.*

*A circuit diagram is created, detailing the connections between the selected components. The circuit must be able to control the on/off cycles of electrical appliances based on defined time intervals.*

*Designing- The simplest home automation design and installation approach is to use plug in automation control. This design involves small control hub the boxes that plug into wall sockets and then communicate with appliances and lightning to determine when they will turn on and off.*

**Batch Details:**

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| --- | --- | --- | --- |
| **Name of Students** | **Roll No.** | **Project Guide (Name and Signature)** | **Approved By**  **(Signature with Date)** |
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