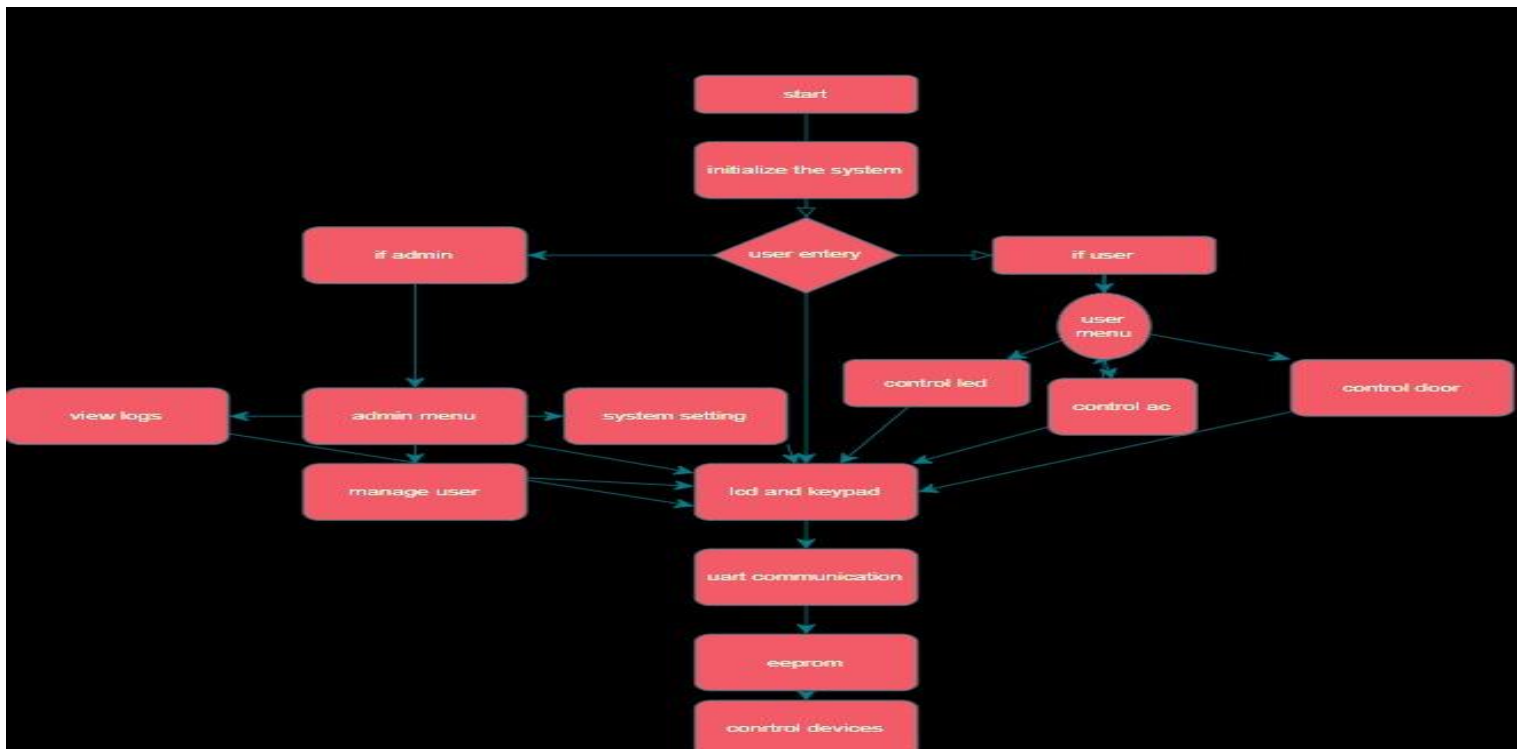# AMIT-Project-Analysis

Introduction

A smart home design which you can control your home lighting and Air-conditioning and open door for admin using a Bluetooth application on smart phone.

Requirements

- Remoted controlled by mobile or lab top.
- For emergency cases or controlling without mobile or lap-top use LCD and Keypad "user mode only".
- The controllable things are 6 lamps "5 on/off lamps, one dimming lamp", door, air-condition according to the ambient temperature.
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Implementation

Required Drivers

- LCD-2x16 driver for displaying info
- AT-mega32 DIO drivers for displaying temperature
- SPI Driver for micro controller communication
- UART Driver for Bluetooth connection (virtual terminal)
- ADC (analog digital converter) for reading temperature
- LED driver for Enable and Disable LED as indicators
- Timer 0 and timer 1
- External EEPROM driver to store user password
- Servo motor to open and close the door
- Thermal sensor to control AC