

AMIT Diploma Graduation Project (Smart Home)

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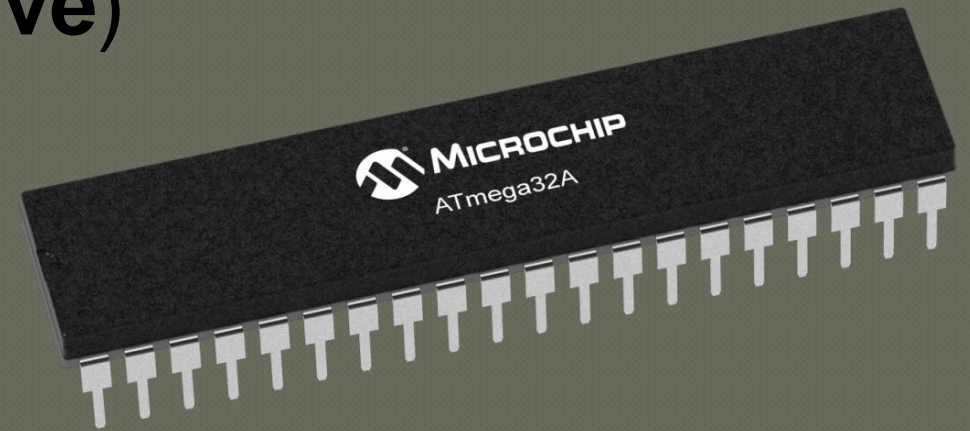
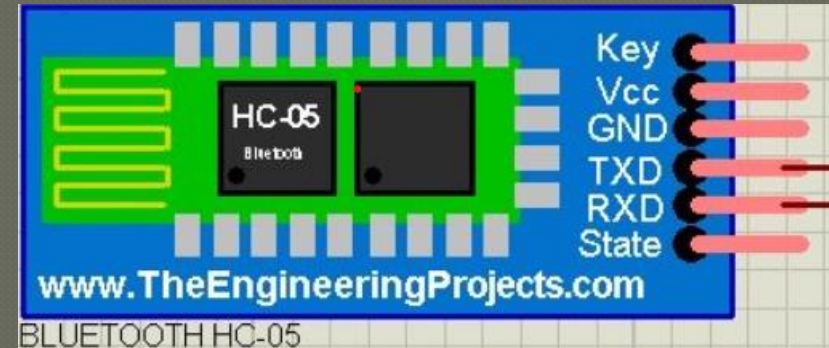
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Project Description

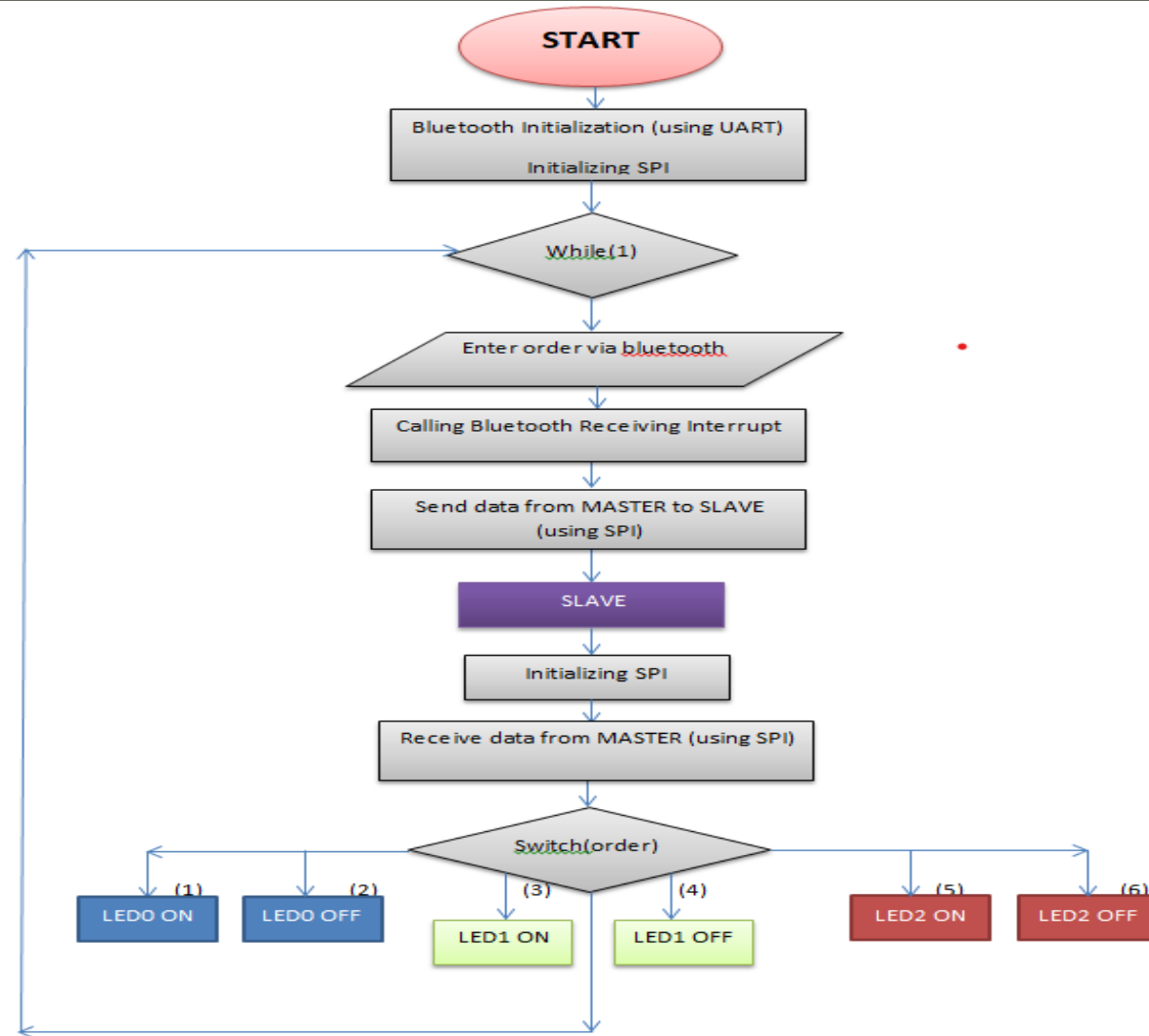
- This project is Smart Home based Bluetooth where we want to control home appliance wirelessly using Mobile App via Bluetooth.
- Two ECU's Communicate with each other the first is a control ECU which takes the input from Bluetooth and send it to the Sink (Actuator) ECU via SPI to interpret which action should be taken.
- A project is a small smart home were using UART communication protocol to control three LEDs by Bluetooth module.
- Using two MCUs, one as a MASTER and another as a SLAVE.

Project components

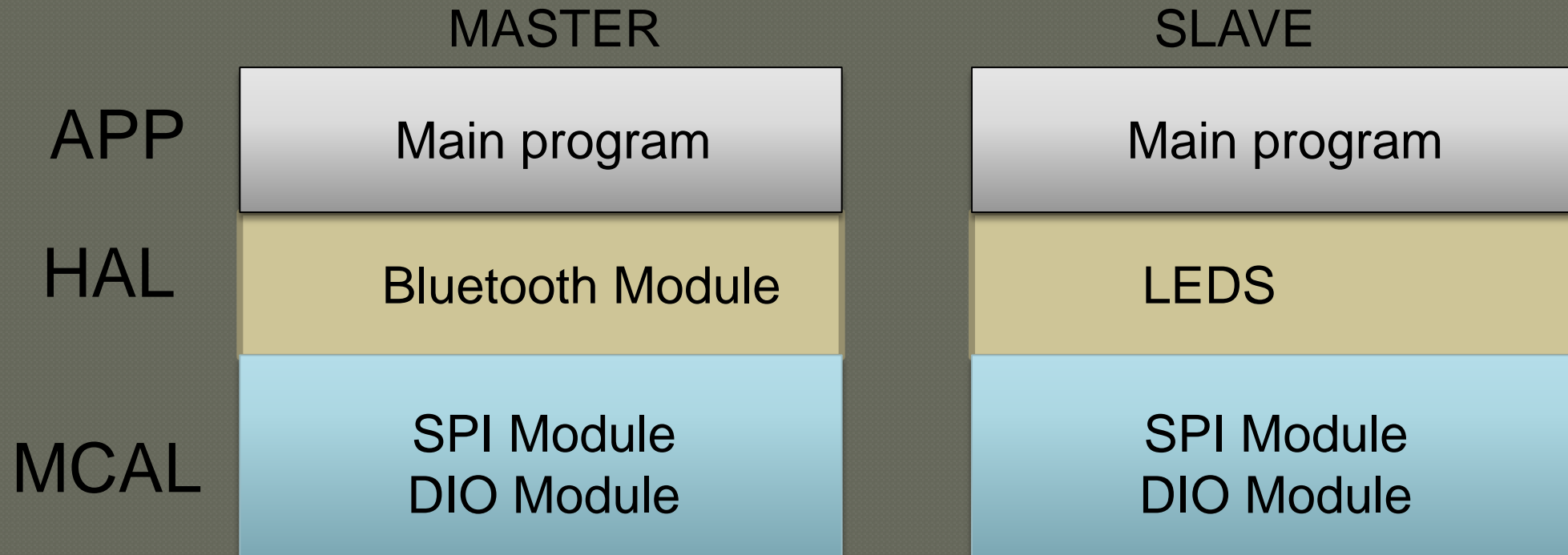
- Proteus simulation:
- 2 HC-05 BLUETOOTH Modules
- 2 Atmega32 MCUs (master-slave)



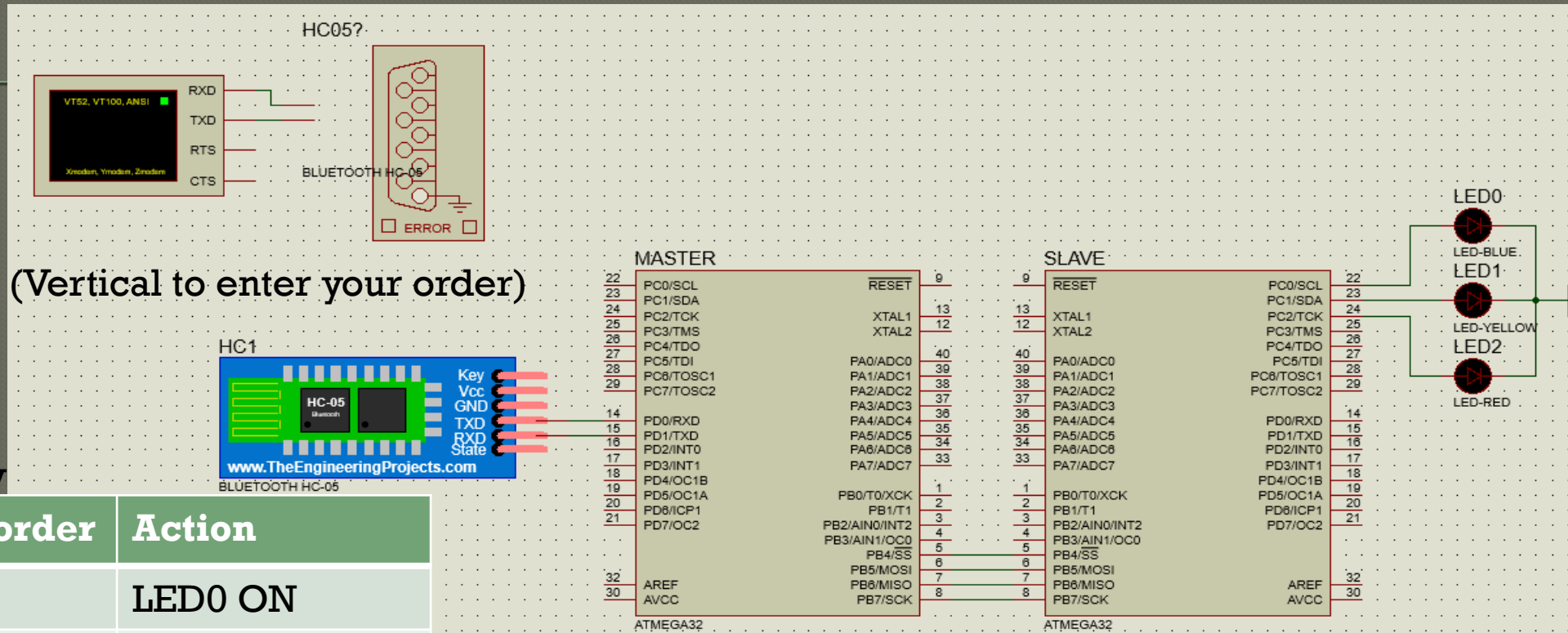
Flow Chart



Application layers block



Schematic Simulation



Using key

Entered order	Action
1	LED0 ON
2	LED0 OFF
3	LED1 ON
4	LED1 OFF
5	LED2 ON
6	LED2 OFF

Comm. Via SPI

End of Presentation

Thank You