

GRADUATION PROJECT

By

AHMED SOBHY HALIMA

Group F18

CONTENTS

- ❑ Information about project
- ❑ MCUs used
- ❑ Application layers for MCUs
- ❑ Flow chart
- ❑ Schematic simulation

Information about project

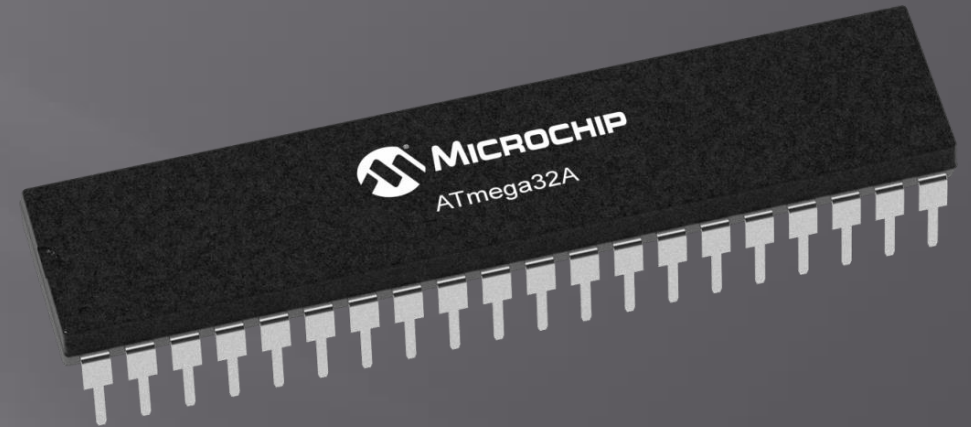
- ▣ A project is a small smart home were using UART communication protocol to control three LEDs by Bluetooth module.
- ▣ Using two MCUs, one as a MASTER and another as a SLAVE and the communication between them by SPI protocol.

MCUs Used

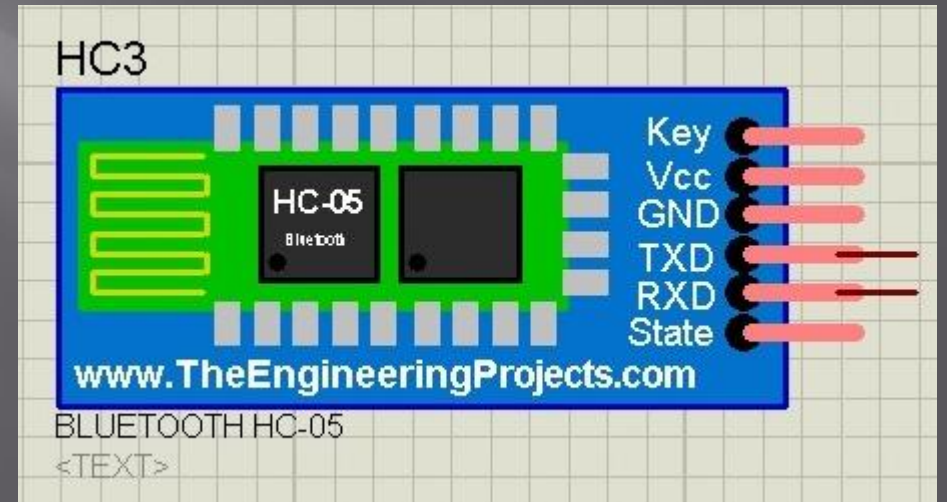
▣ Project (1) with simulation

MASTER: Atmega32A

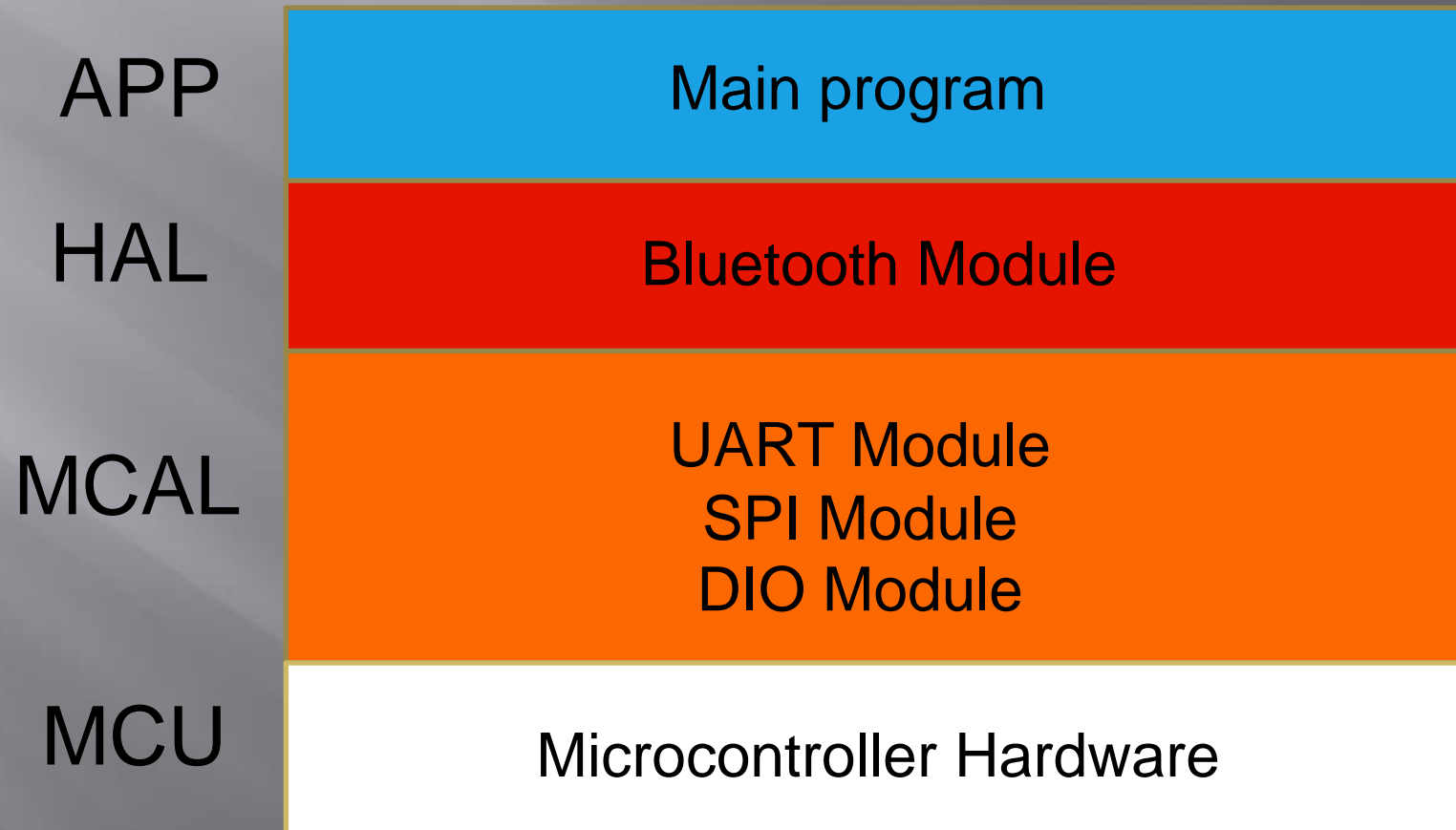
SLAVE : Atmega32A



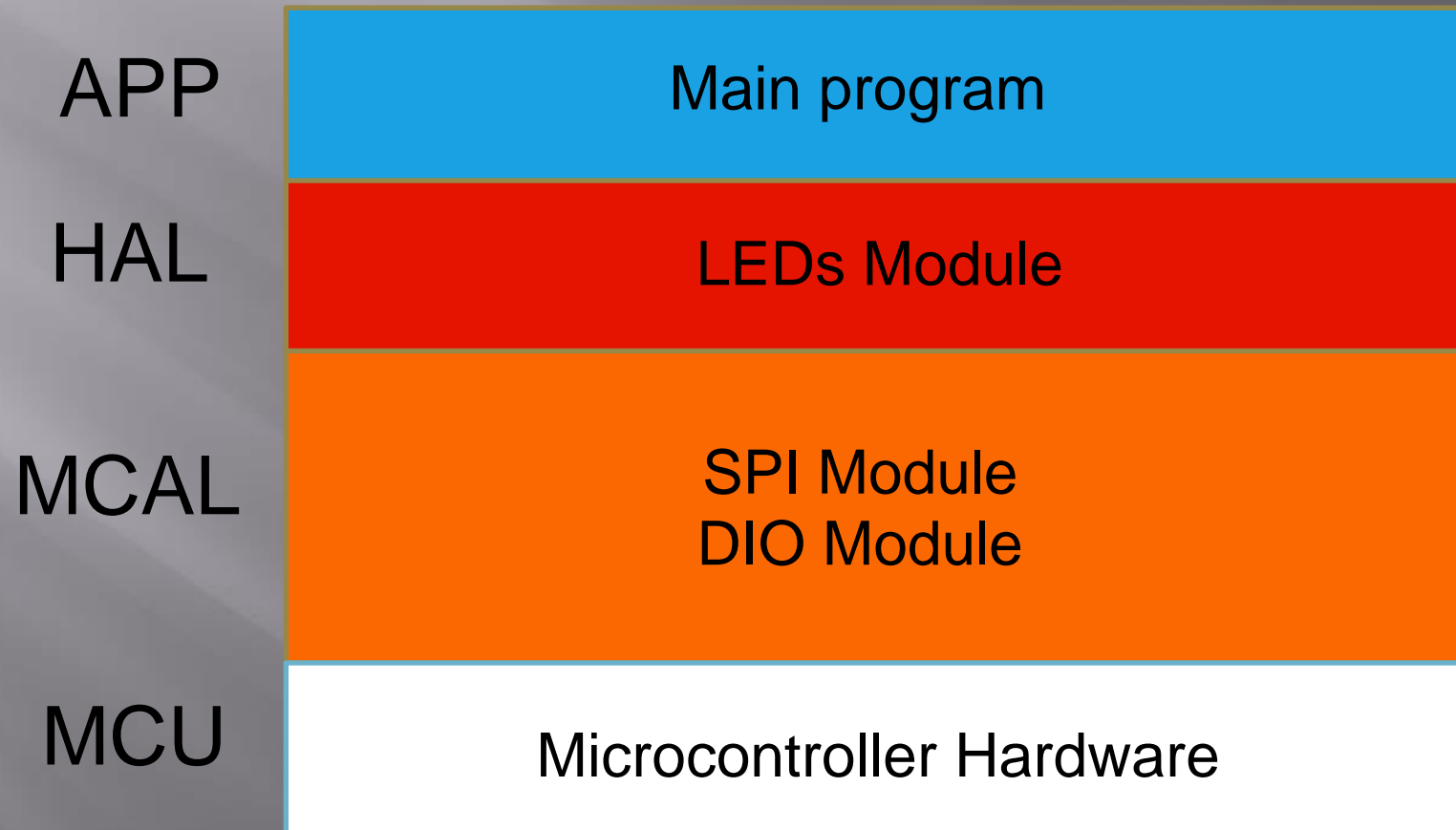
Bluetooth Module (HC-05)



Application Layer for MASTER

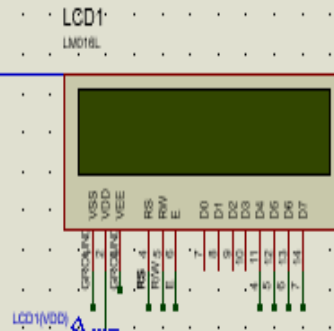


Application Layer for SLAVE

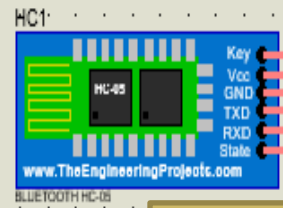
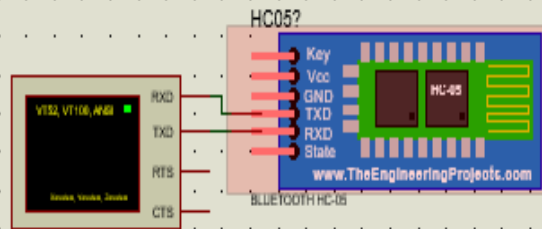


Schematic Simulation

LCD Display



Bluetooth Module



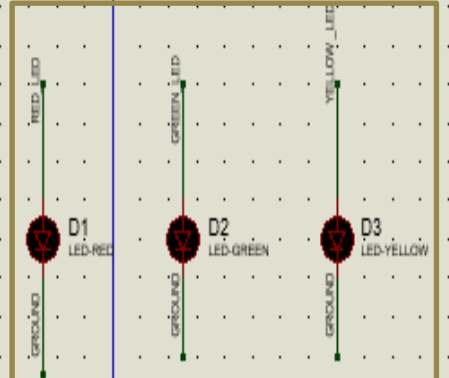
UART

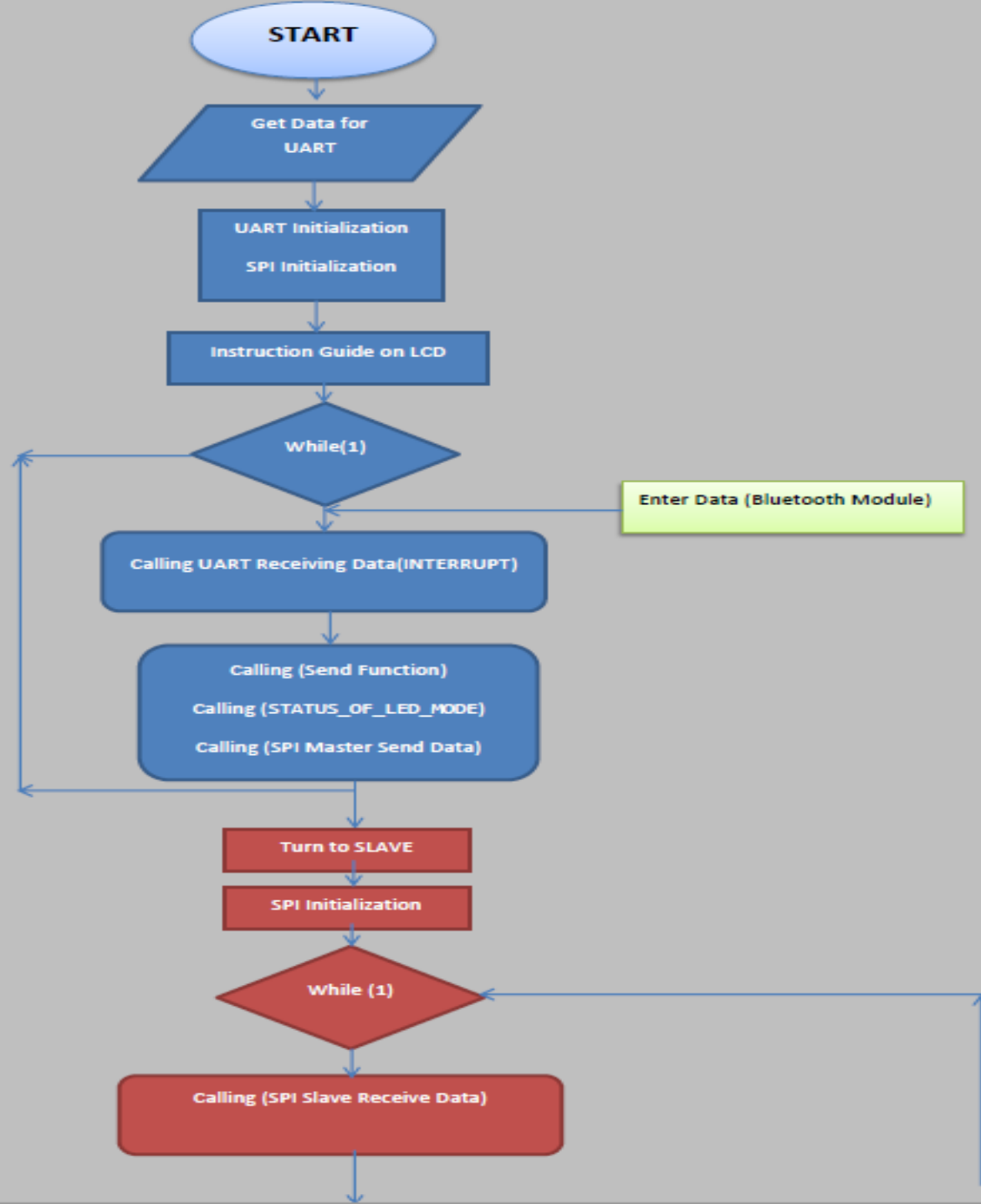
Master

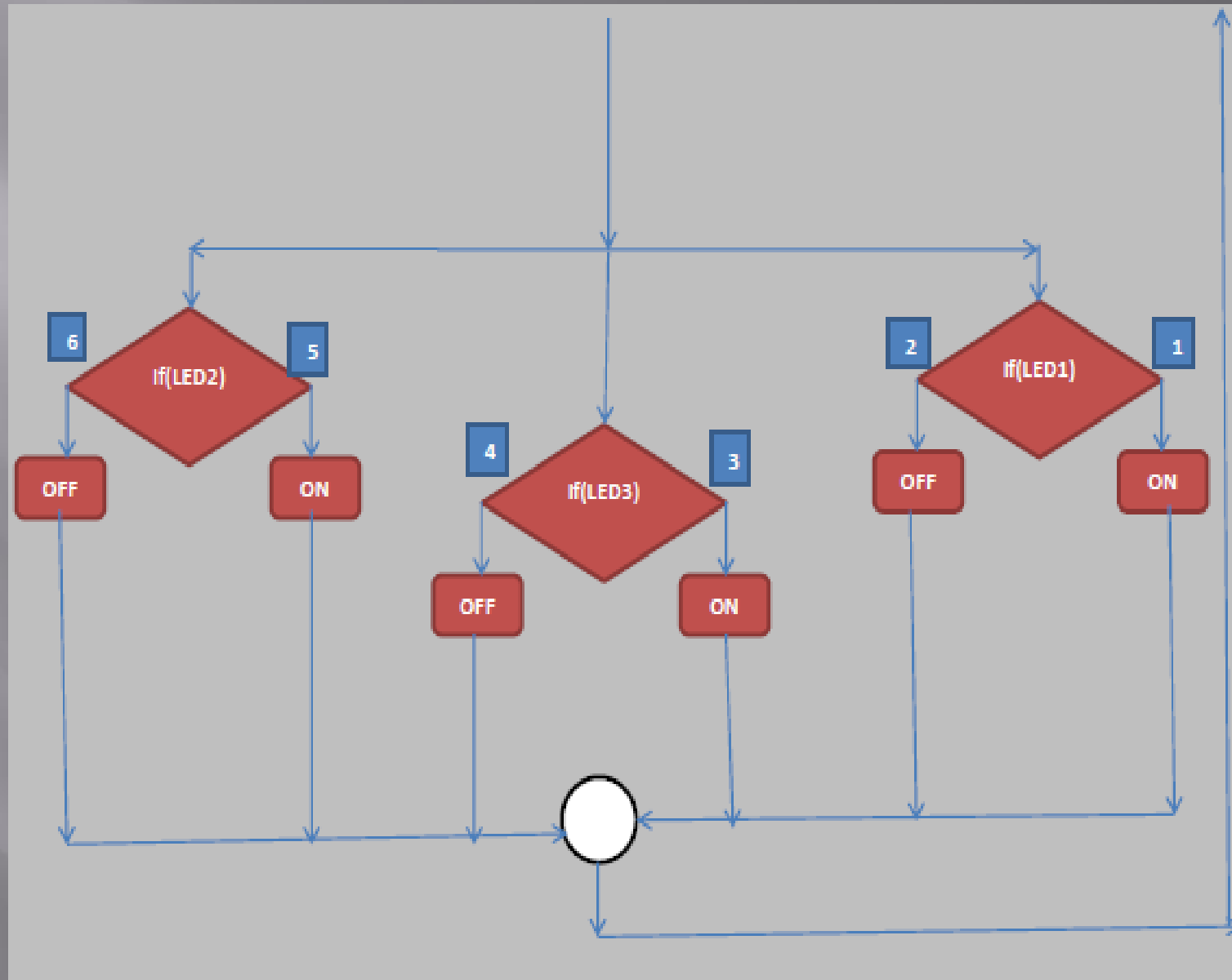
SPI

Slave

LEDS







THE END

-- Thanks --