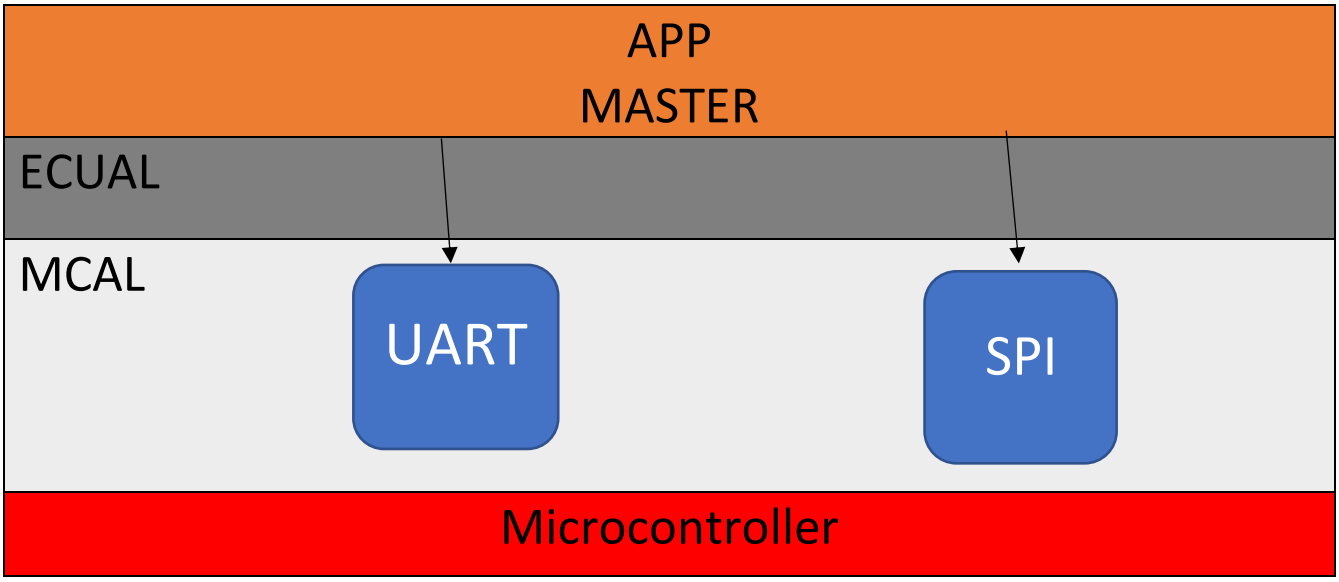
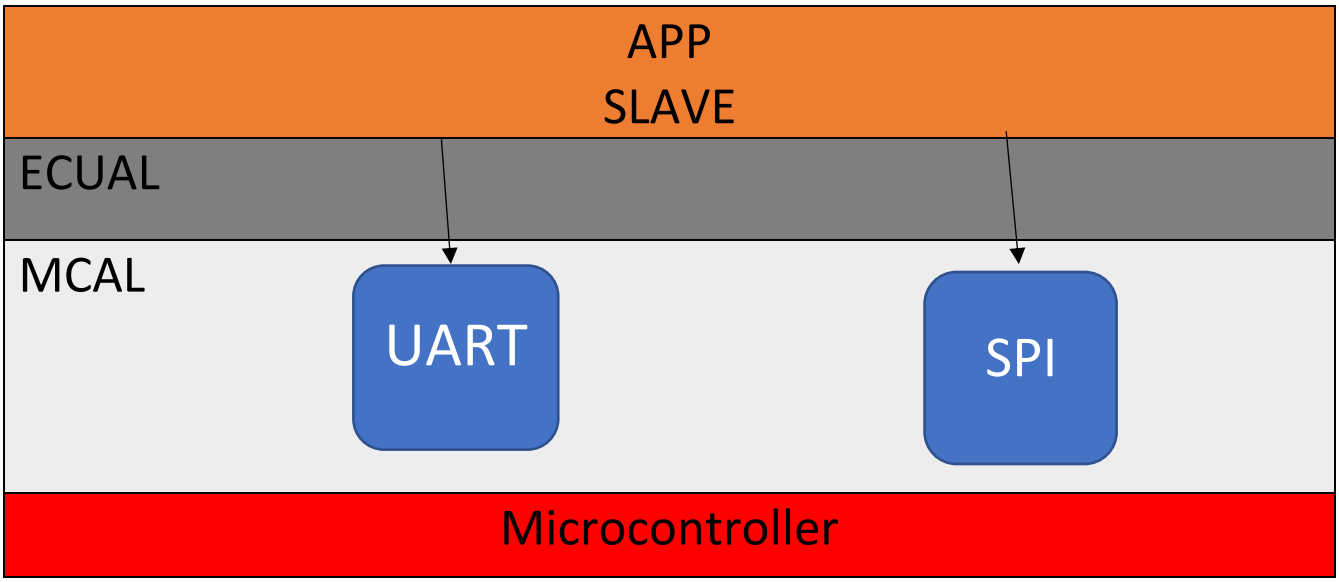
Layers:





APP:

```
void APPInit(void);
void APPGetString(void);
void APP_transmit(void);
```

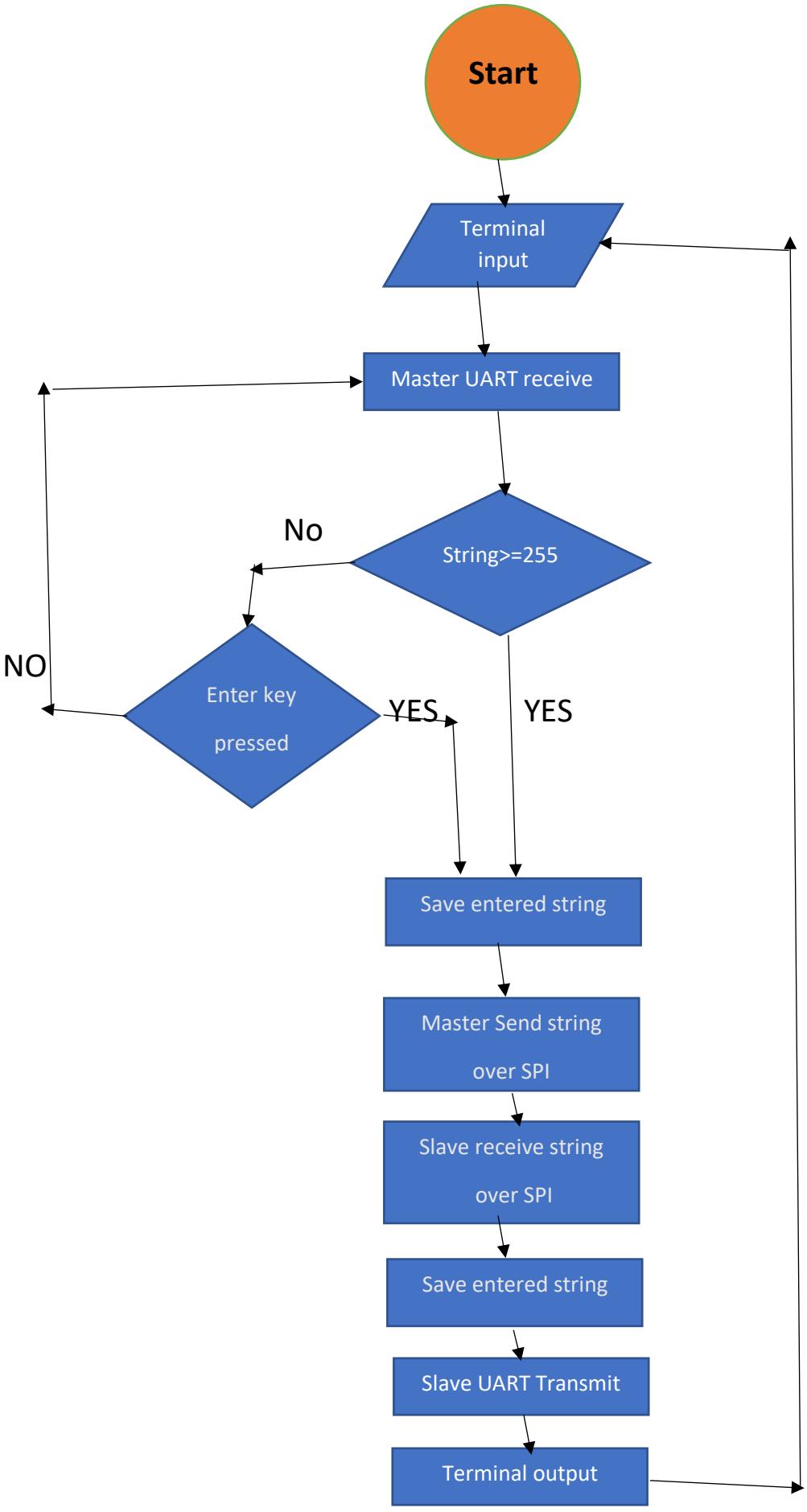
UART:

```
UART_ERROR_t USART_Init(void);
UART_ERROR_t USART_Transmit(uint16_t u16_data);
UART_ERROR_t USART_Receive (uint16_t *Ptr_to_val);
UART_ERROR_t USART_Transmit_Packet(uint8_t *pu8_data,uint8_t SIZE);
UART_ERROR_t USART_receive_Packet(uint8_t *pu8_data,uint8_t u8_SIZE);
UART_ERROR_t USART_Transmit_INTDriven(uint8_t *pu8_data,void (*ptr)(void));
UART_ERROR_t USART_Receive_INTDriven(uint8_t *pu8_data,void (*ptr)(void));
```

SPI:

```
void MCAL_SpiInit(void);
void MCAL_SPIMasterTXRX(uint8_t *u8_DataSend, uint8_t *u8_DataReceive);
void MCAL_SPISlaveTXRX(uint8_t *u8_DataSend, uint8_t *u8_DataReceive);
void MCAL_SPIMasterTrans_String(uint8_t *u8_StringSend);
void MCAL_SPIMasterReceive_String(uint8_t *u8_StringReceive);
void MCAL_SPISlaveTrans_String(uint8_t *u8_StringSend);
void MCAL_SPISlaveReceive_String(uint8_t *u8_StringReceive);
```

Flow chart:


Start
Terminal input
Master UART receive
String>=255
No
YES
Enter key pressed
NO
YES
Save entered string
Master Send string over SPI
Slave receive string over SPI
Save entered string
Slave UART Transmit
Terminal output