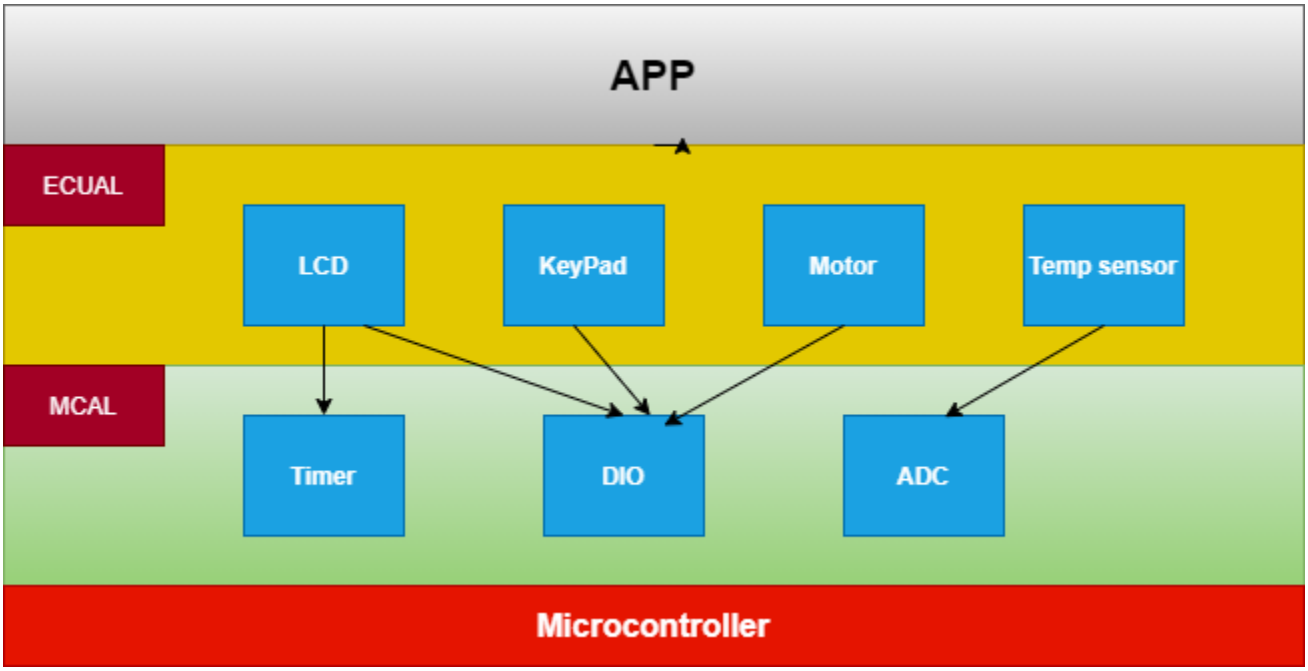
Layers:



LCD:

```
void LCD_init(void);
void LCD_send_command(uint8_t command);
void LCD_Kick(void);
void LCD_clear_screen(void);
void LCD_GoTo_xy(uint8_t row, uint8_t position);
void LCD_display_charcter(uint8_t data);
void LCD_display_String(uint8_t *string);
void LCD_DisplayInteger(uint32_t u32_number);
```

Motor:

```
void MotorInit();
void MotorON(void);
void MotorOFF(void);
```

keypad:

```
void keyPad_init(void);
uint8_t keyPad_GetKey(void);
```

Temp sensor:

```
void TempSensorInit(uint8_t u8_channelID, uint8_t u8_Vref);
void TempSensorGetTemp(uint8_t *pu8_TEMP);
```

ADC:

```
void ADC_init(S_ADC_cofiguration ADC_config);
void ADC_enable(void);
void ADC_disable(void);
void ADC_start_convertion(void);
void ADC_GetSingleSample(uint16_t *Sample);
```

DIO:

```
enuDio_Status_t Dio_init(strDio_Config_t* strDio_pins);
enuDio_Status_t Dio_readPin(uint8_t u8_port,uint8_t u8_pinID, uint8_t *pu8_pinValue);
enuDio_Status_t Dio_writePin(uint8_t u8_Port ,uint8_t u8_pinID, uint8_t pu8_pinValue);
enuDio_Status_t Dio_togglePin(uint8_t u8_Port,uint8_t u8_pinID);
void Dio_SetPinDirection(uint8_t u8_Port, uint8_t  u8_PIN_num, uint8_t u8_Direction);
void DIO_SetPortDirection(uint8_t u8_port , uint8_t u8_Direction);
void DIO_WritePort(uint8_t u8_port , uint8_t u8_val );
```

Timer:

```
enuGpt_Status_t GptInit(void);
enuGpt_Status_t GptStart_Sync(uint8_t ChannelId, uint32_t u32_Ticks);
enuGpt_Status_t GptStart_aSync(uint8_t ChannelId, uint32_t u32_Ticks,
pfGpt_CallBack_t CallBack);
enuGpt_Status_t GptStop(uint8_t ChannelId);
```

Flowchart: