

# AIN SHAMS UNIVERSITY



## Embedded-GPS-Tracking-System (First milestone)

**Course Code:** CSE211

**Course Name:** Introduction to Embedded Systems.

**Examination Committee**

**Dr: Ashraf M. M. Elfarghly Salem**

## Student Personal Information for Group Work

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## Submission Contents

### First Milestone

- 01: screenshots for the output of testing of the LED
- 02: testing function 1 to turn on red led because distance is more than 100
- 03: screenshots for LCD test

### Final Delivery (second milestone)

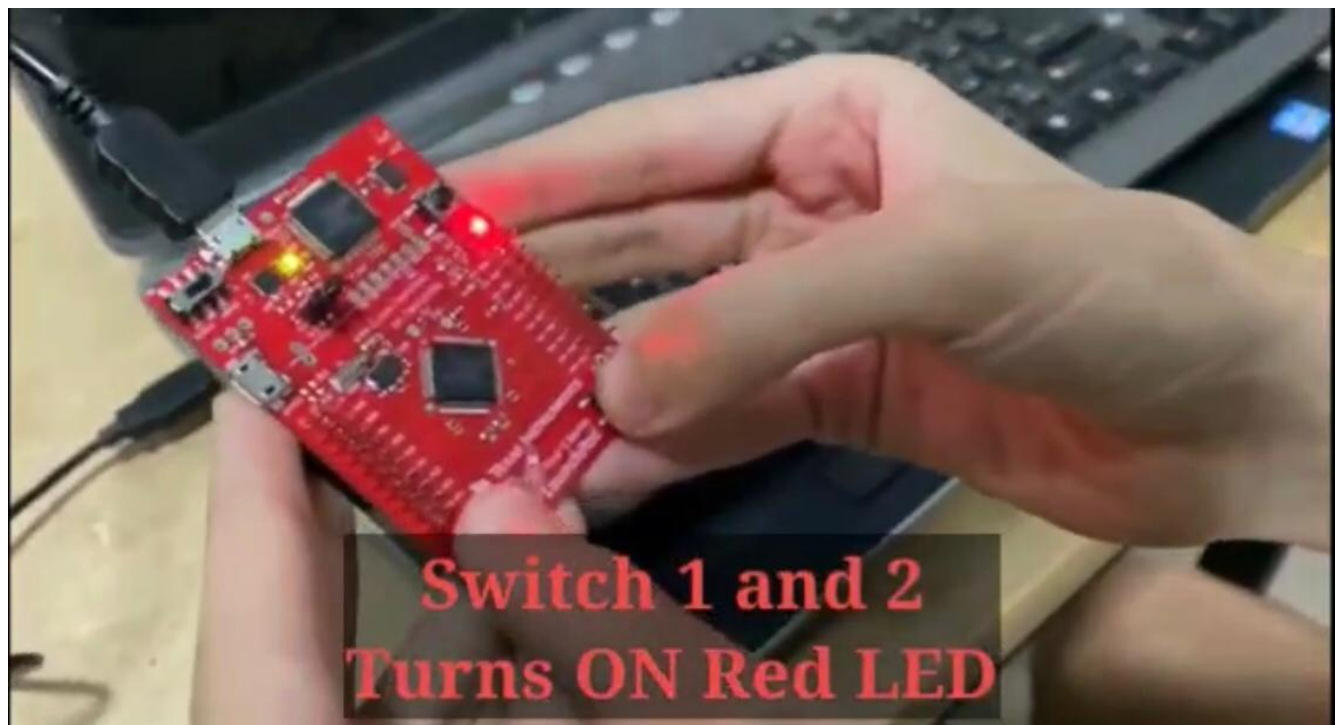
- 01: Comparing our GPS with a running application
- 02: Func1 returned the red color as the distance overcome 100 m

## First Milestone

### 01: screenshots for the output of testing of the LED

```
81     while(1){
82         /*
83         if((GPIO_PORTF_DATA_R&0x11)==0x10){    // blue light
84             GPIO_PORTF_DATA_R=0x04;
85         }
86         else if((GPIO_PORTF_DATA_R&0x11)==0x01){ // green light
87             GPIO_PORTF_DATA_R=0x08;
88         }
89         else if((GPIO_PORTF_DATA_R&0x11)==0x00){ // Red light
90             GPIO_PORTF_DATA_R=0x02;
91         }
92         else GPIO_PORTF_DATA_R=0;    // No light
93     */
```



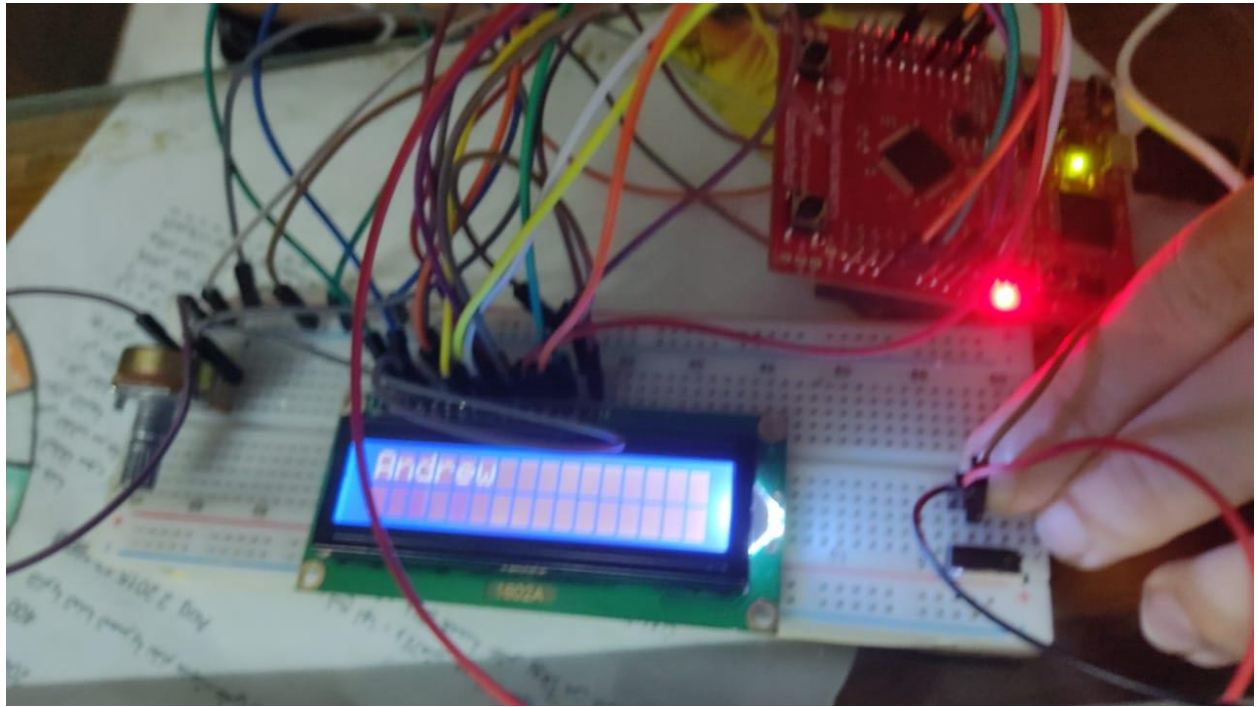


## 02: testing function 1 to turn on red led because distance is more than 100

```
50 //function that turns on the LED when the distance exceeds 100 meters.
51 void func1(float x){
52
53     if(x>=100) GPIO_PORTF_DATA_R|=0x02 ;
54     else      GPIO_PORTF_DATA_R &=~0x02;
55 }
56
```

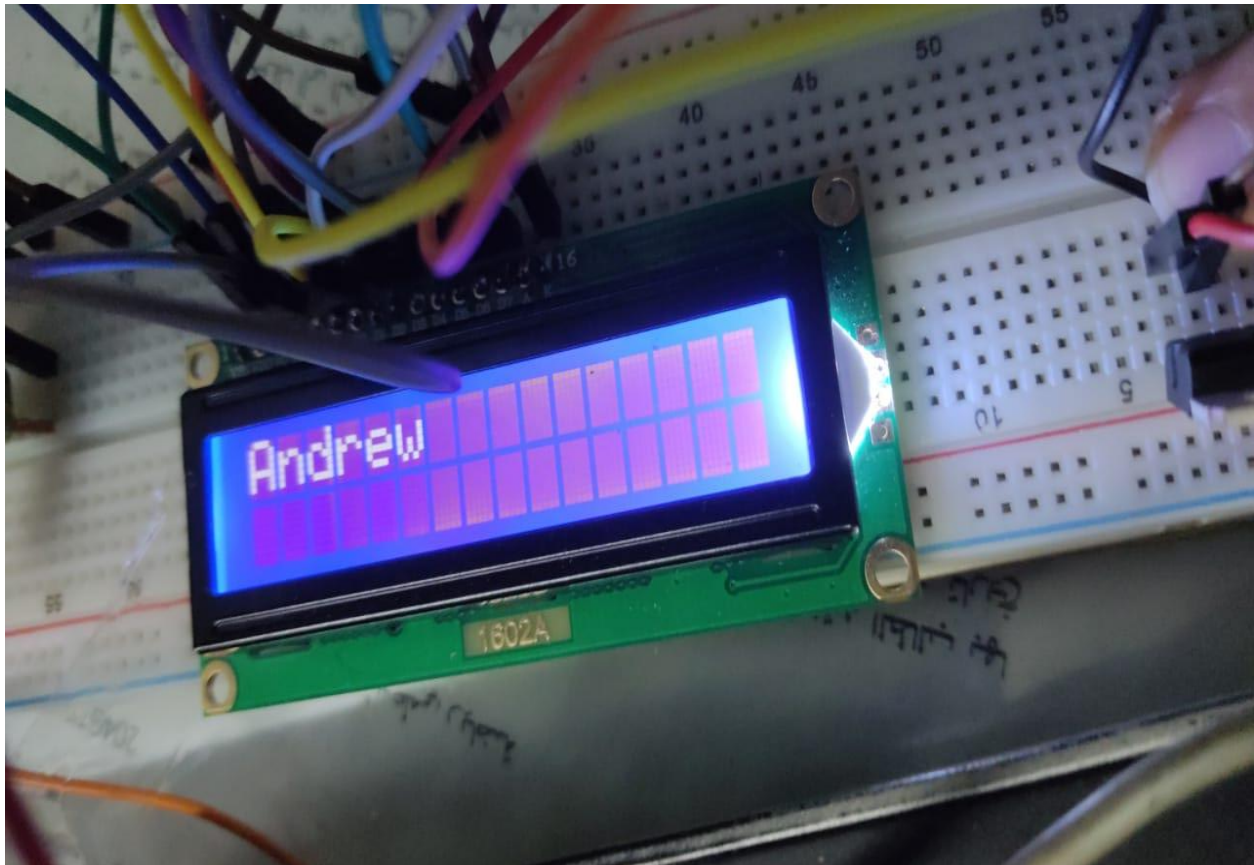
```
81     while(1){
82         /*
83         if((GPIO_PORTF_DATA_R&0x11)==0x10){    // blue light
84             GPIO_PORTF_DATA_R=0x04;
85         }
86         else if((GPIO_PORTF_DATA_R&0x11)==0x01){ // green light
87             GPIO_PORTF_DATA_R=0x08;
88         }
89         else if((GPIO_PORTF_DATA_R&0x11)==0x00){ // Red light
90             GPIO_PORTF_DATA_R=0x02;
91         }
92         else GPIO_PORTF_DATA_R=0;    // No light
93         */
94         func1(200);
95
96     }
97
98
99
100
101 }
```





### 03: screenshots for LCD test

```
75 //LCD TESTING
76 int main (){
77     PORTFinit();
78     PortEB_Init();
79     LCD_init();
80     LCD_displayString("Andrew");
81     while(1){
```



## Final Delivery (second milestone)

### 01: Comparing our GPS with a running application





**02: Func1 returned the red color as the distance overcome 100 m**

