Mastering embedded systems Online Diploma

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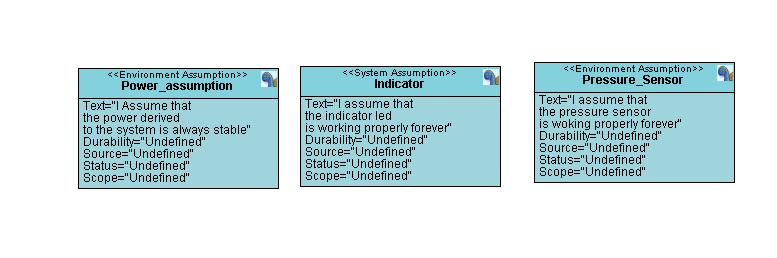
First Term (Final Project 1)

Eng. Mostafa Ahmed ElFallal

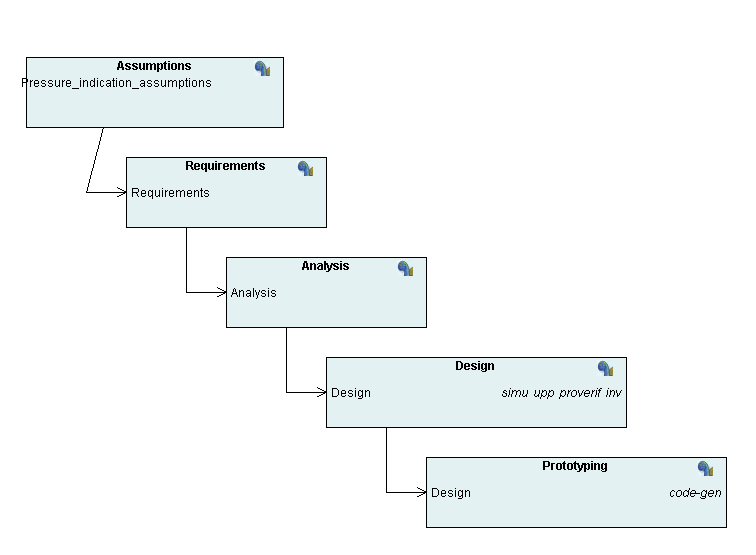
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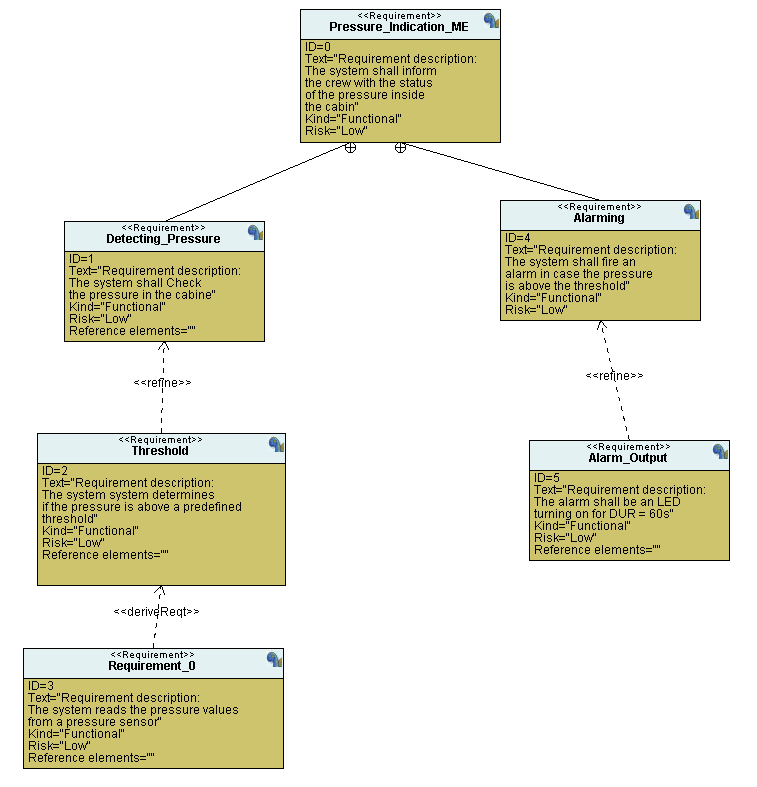
## Assumptions :



## Methodology :

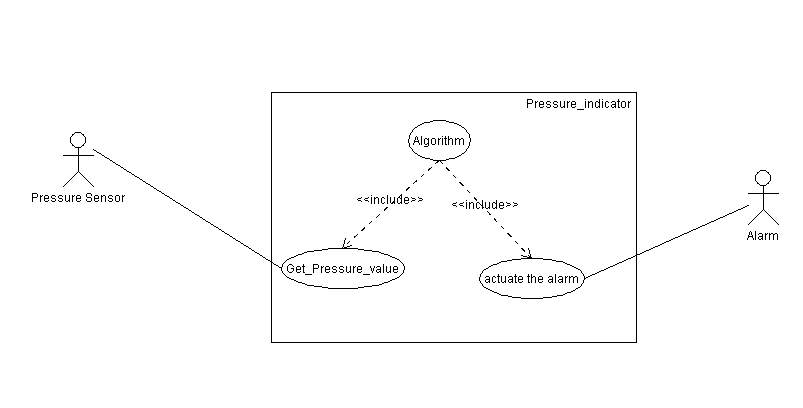


## Requirements :

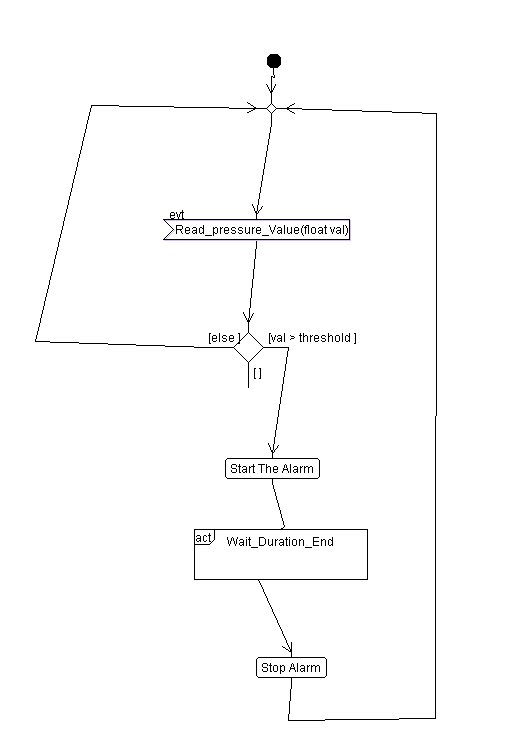


## System Analysis :

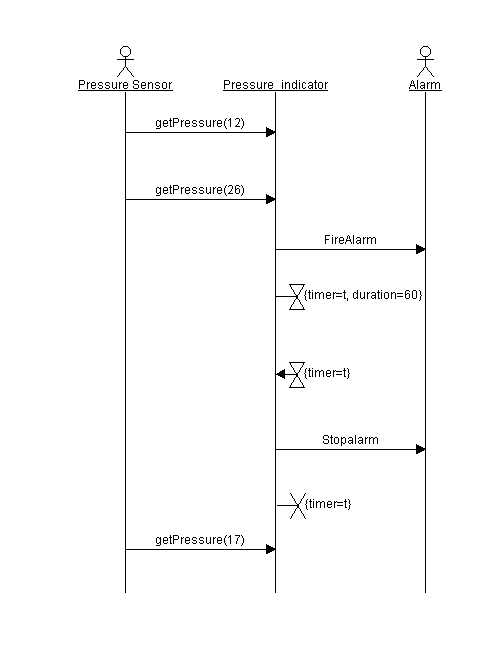
### Use Case diagram :



### Activity diagram :

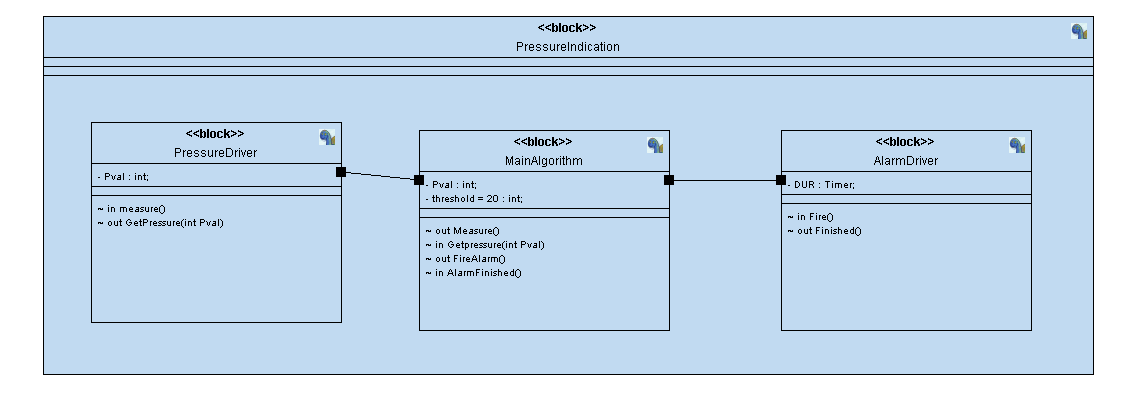


### Sequence diagram :



## System design :

### Block diagram :



### Main Algorithm :

### 

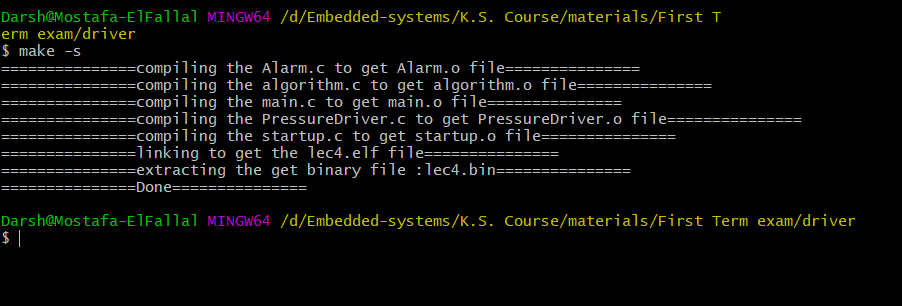
### Alarm Driver :

### 

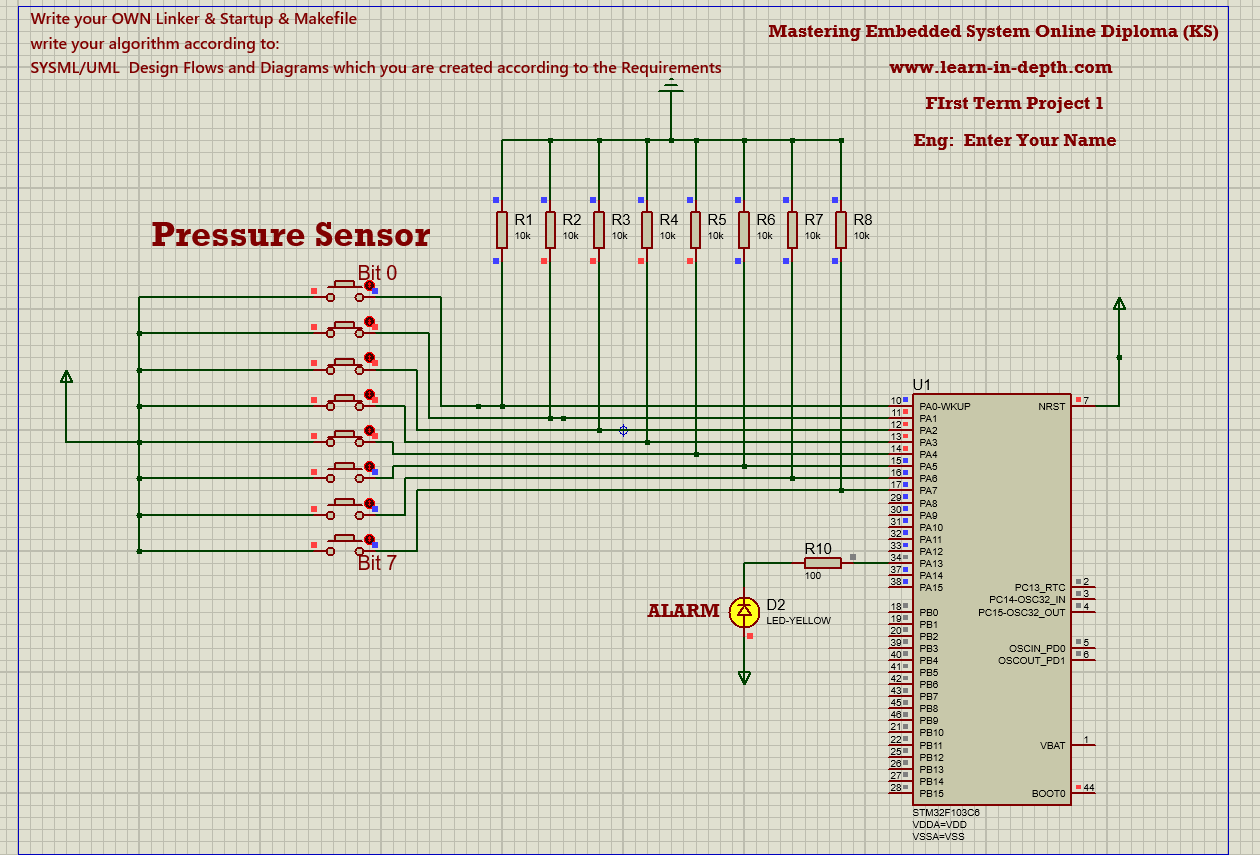
### Pressure Driver :

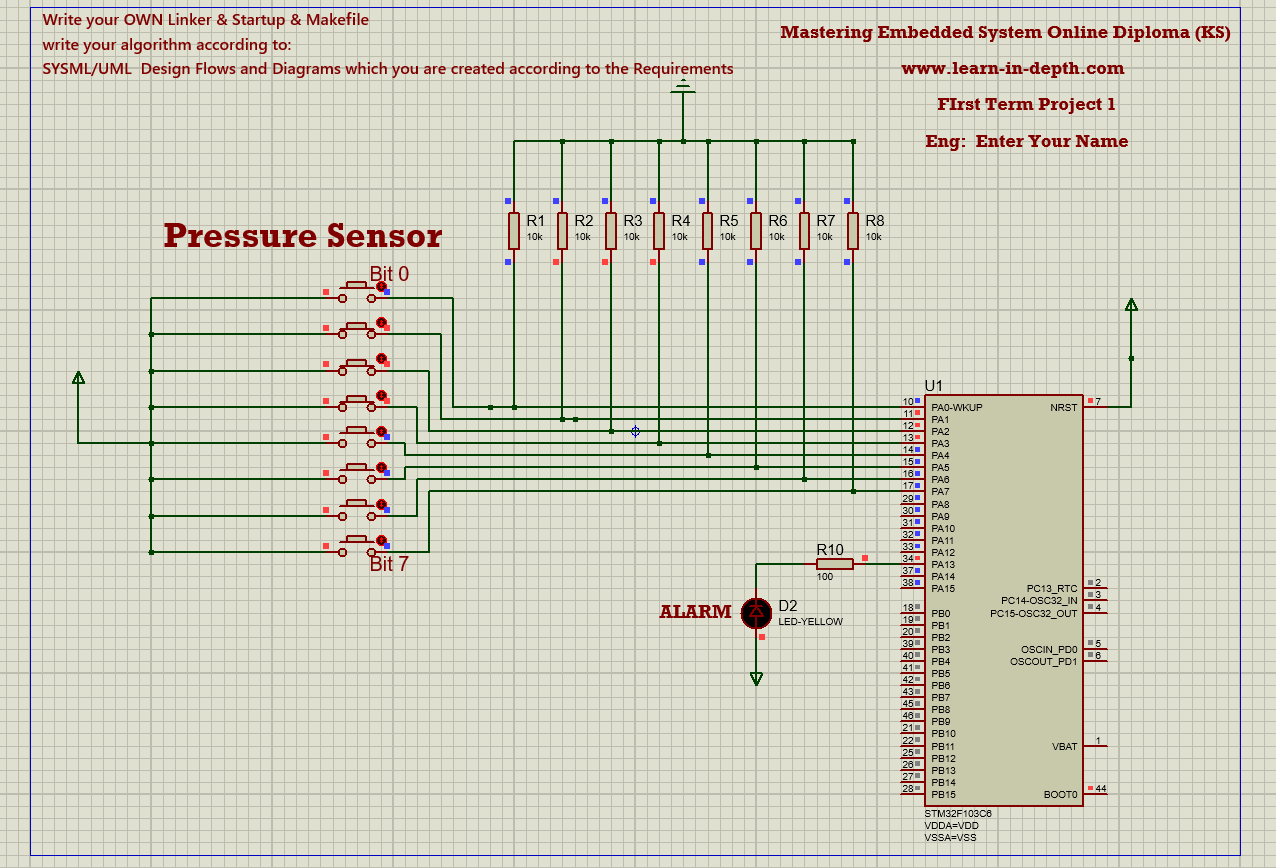
### 

### Using Makefile for building project

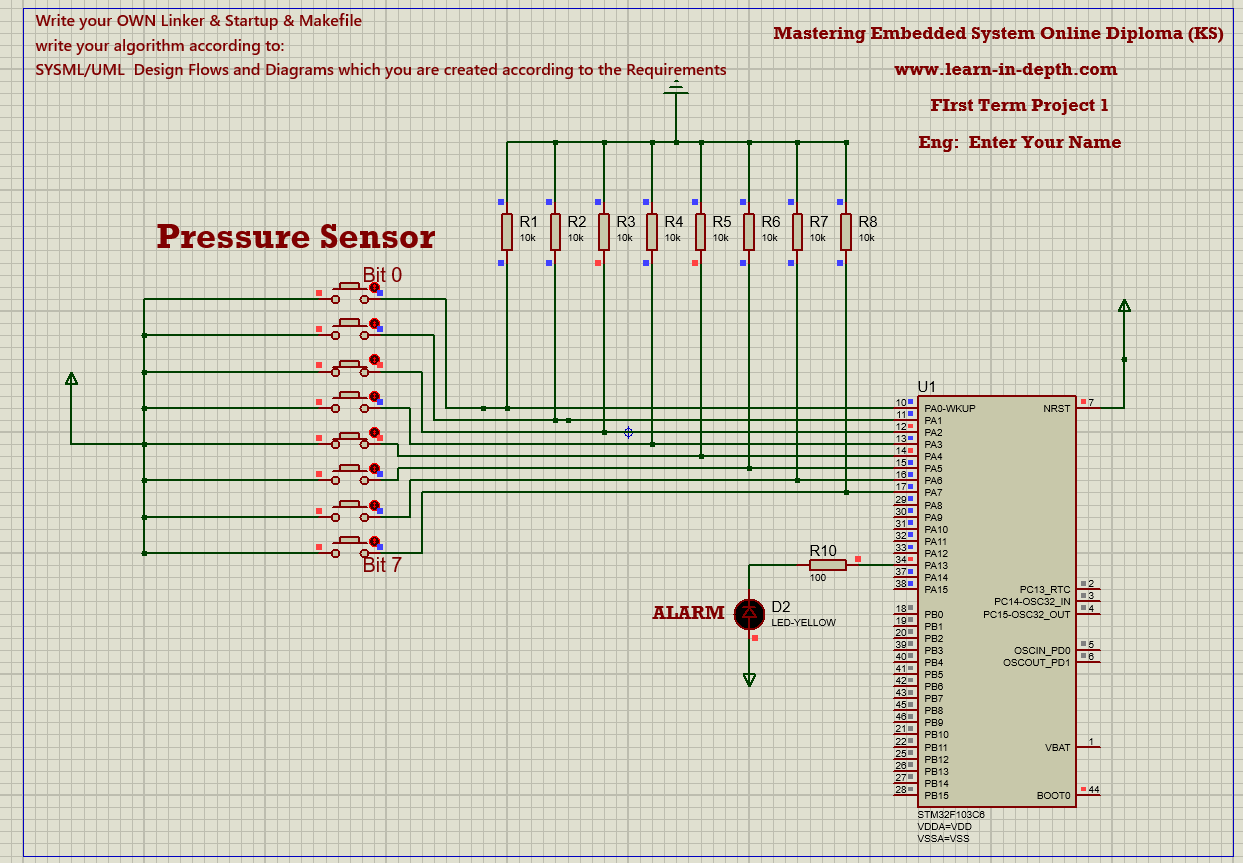


### Proteus :

At 30 bars as input > 20: 

At 14 bars as input < 20 : 

At exact 20 bars (still not greater than 20 ) :



For full video for using the system :

<https://drive.google.com/file/d/1QLfYc-awMDE0p9snuvuzCfJJZ2pbeXsY/view?usp=sharing>