# **Mastering Embedded Systems**

Online Diploma



# Project 1

Pressure Controlling system.

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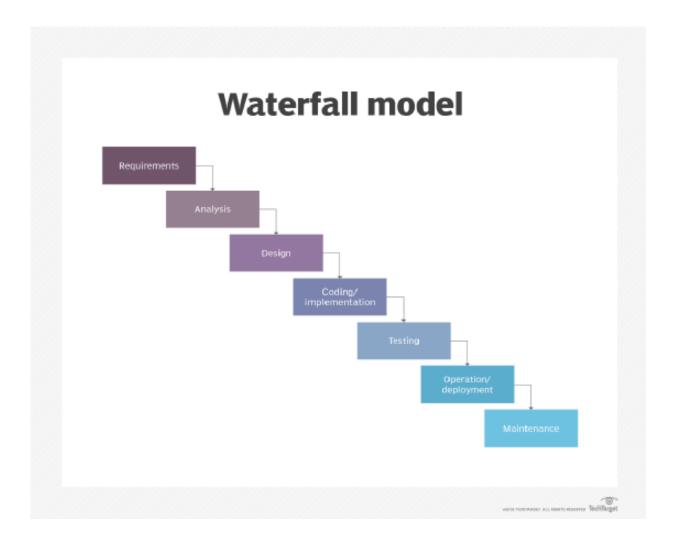
Be Professional In Embedded System Eng. Keroles Shenouda

# I. Project Overview

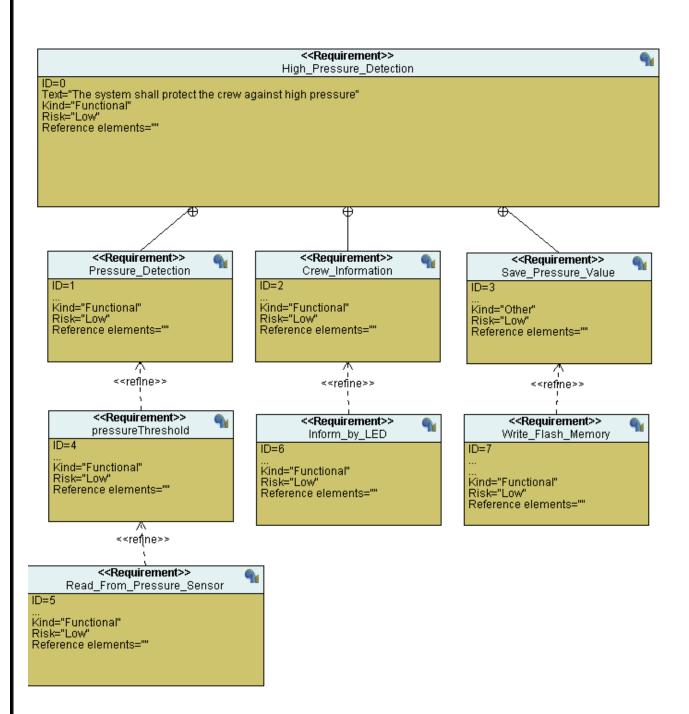
- ➤ We are required to deliver a pressure controller that informs the crew of a cabin with an alarm when the pressure exceeds 20 bars in the cabin.
- > The alarm duration equals 60 seconds.

#### II. Method

➤ In this project I choose waterfall model due to its simplicity

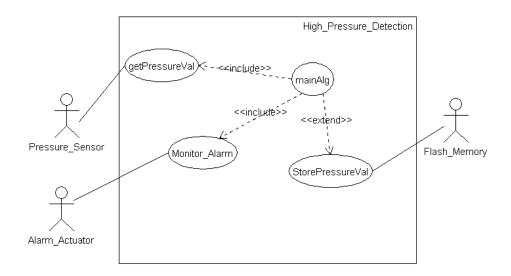


# III. Requirement Diagram

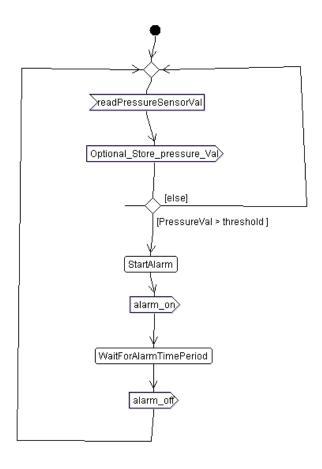


# IV. System Analysis

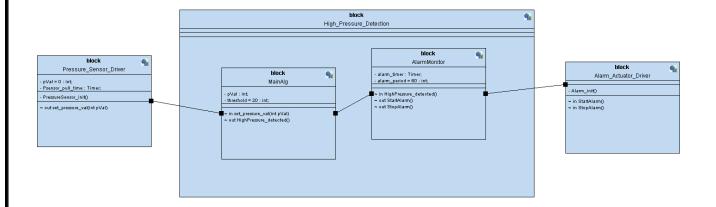
#### i) Use case diagram.



# ii)Activity diagram.

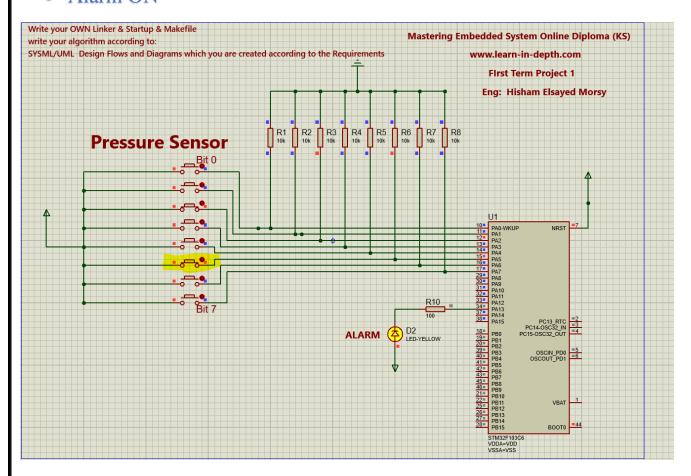


#### V. Design



#### Pressure Reading: 32 (Greater than threshold)

#### Alarm ON



# Pressure Reading: 6 (Less than threshold)

#### • Alarm OFF

