

a Pressure Controlling System

Case Study :

1.Assumptions :

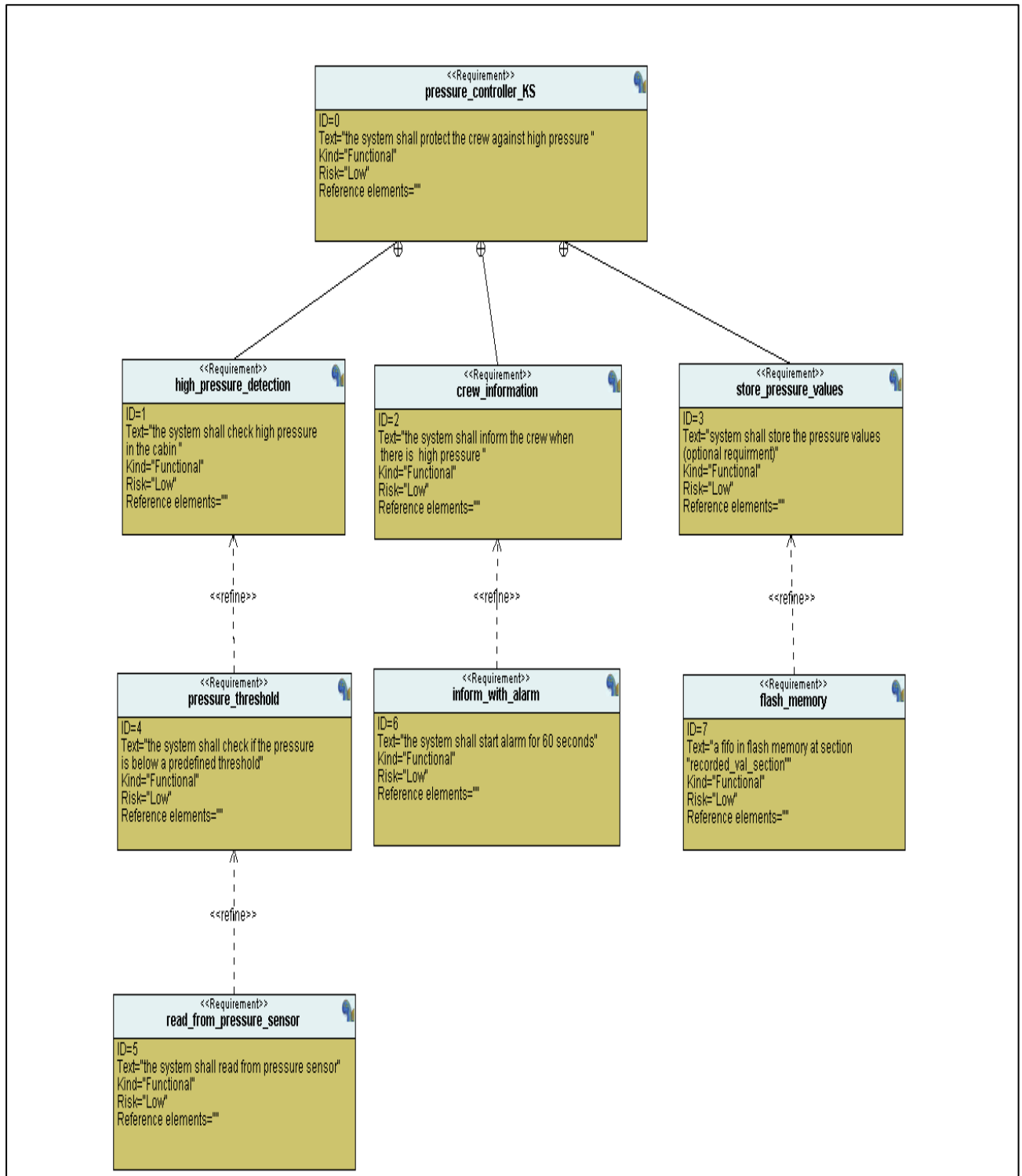
- The controller set up and shutdown procedures are not modeled
- The controller maintenance is not modeled
- The pressure sensor never fails
- The alarm never fails
- The controller never faces power cut

2.Versioning :

- keep track of measured value option is not modeled in the first version of the design

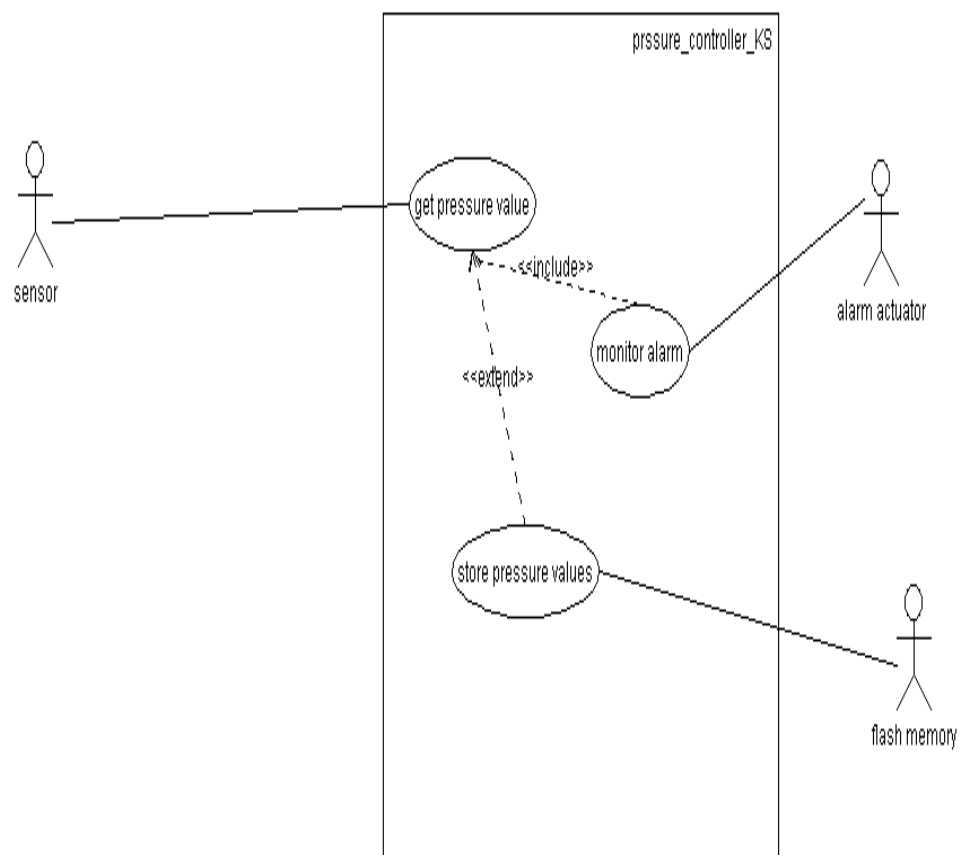
Method : Agile

Requirements :

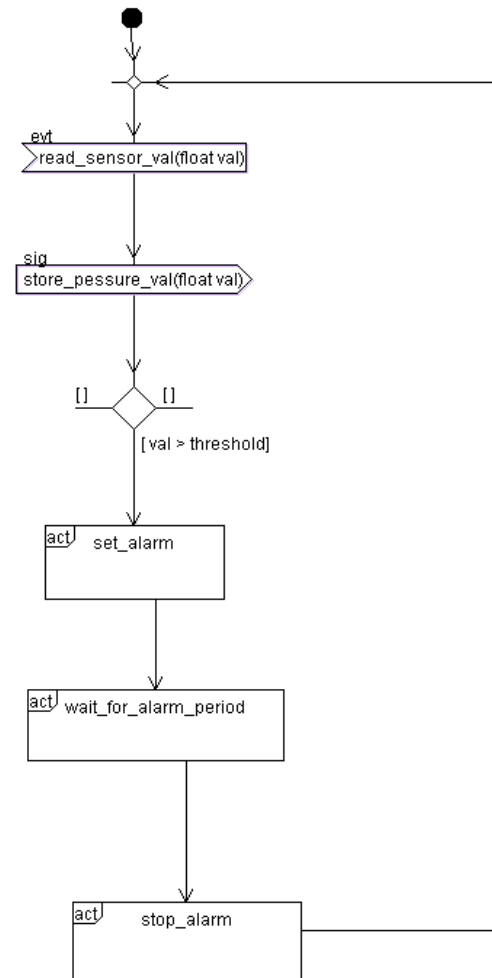


System analysis :

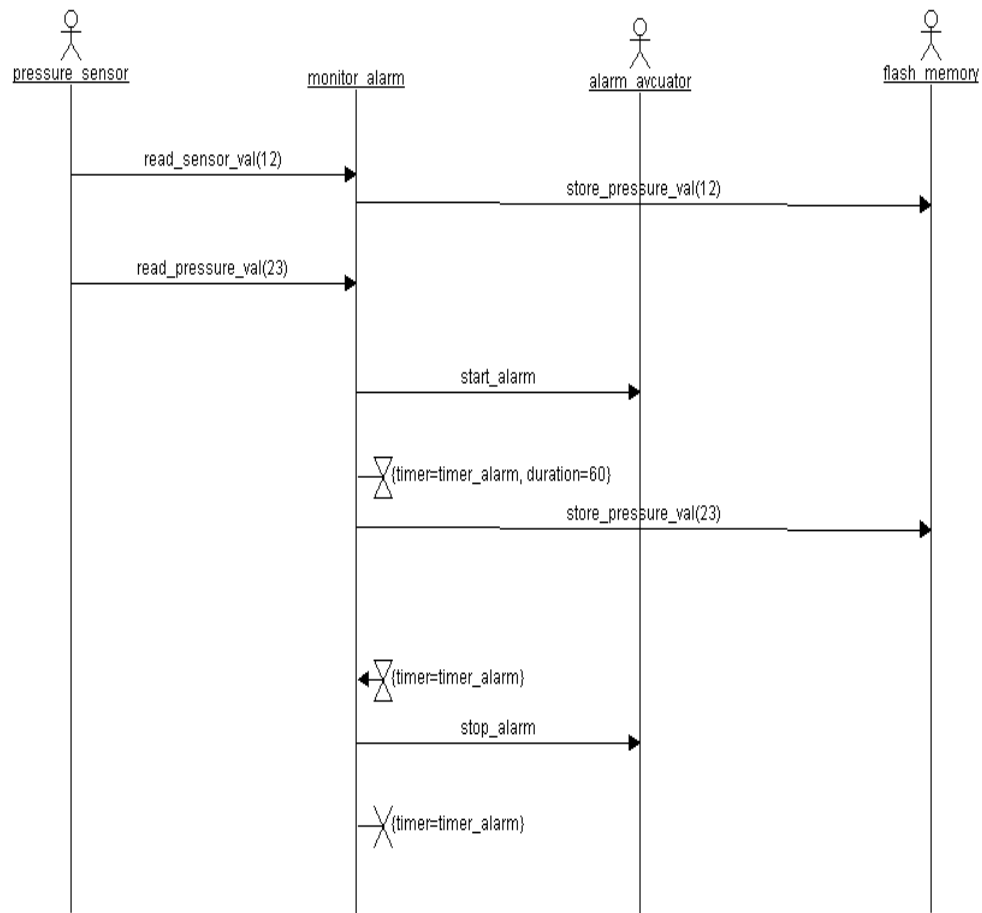
- Use case diagram :



- Activity diagram :

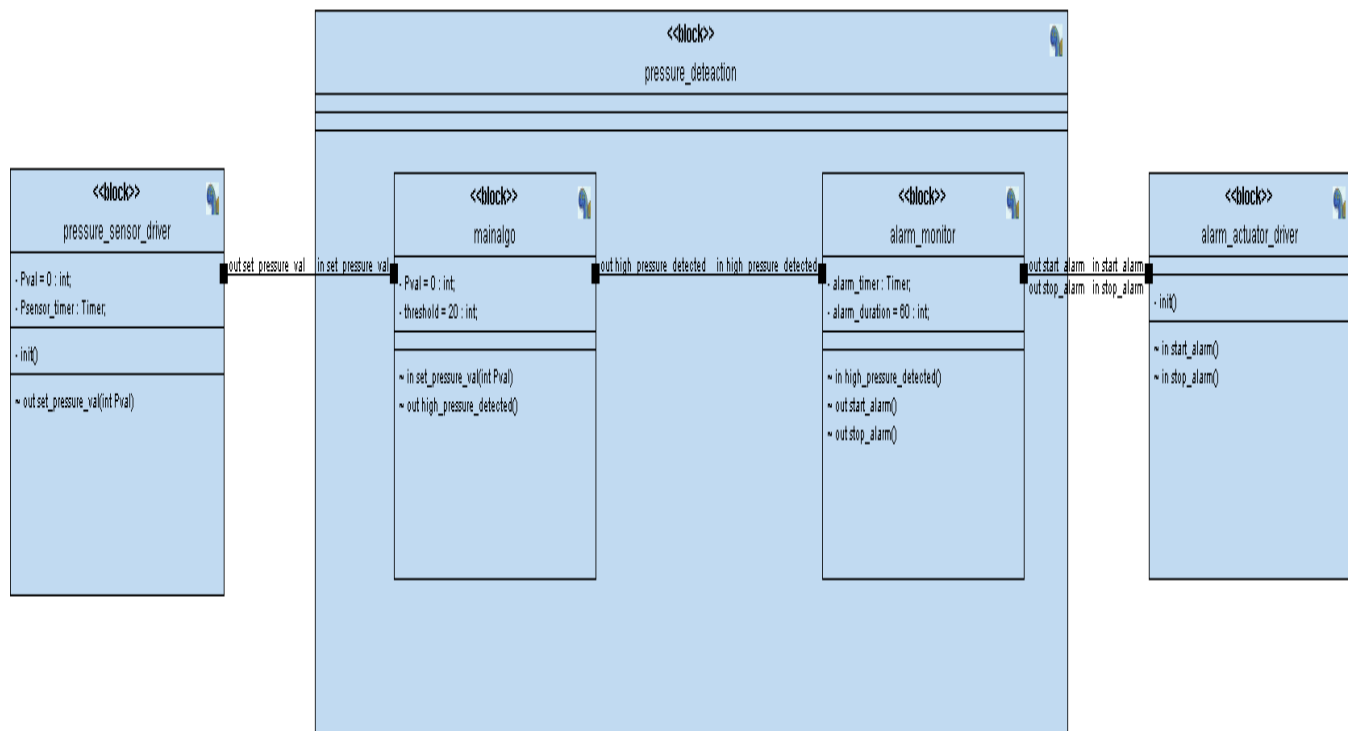


- Sequence diagram :

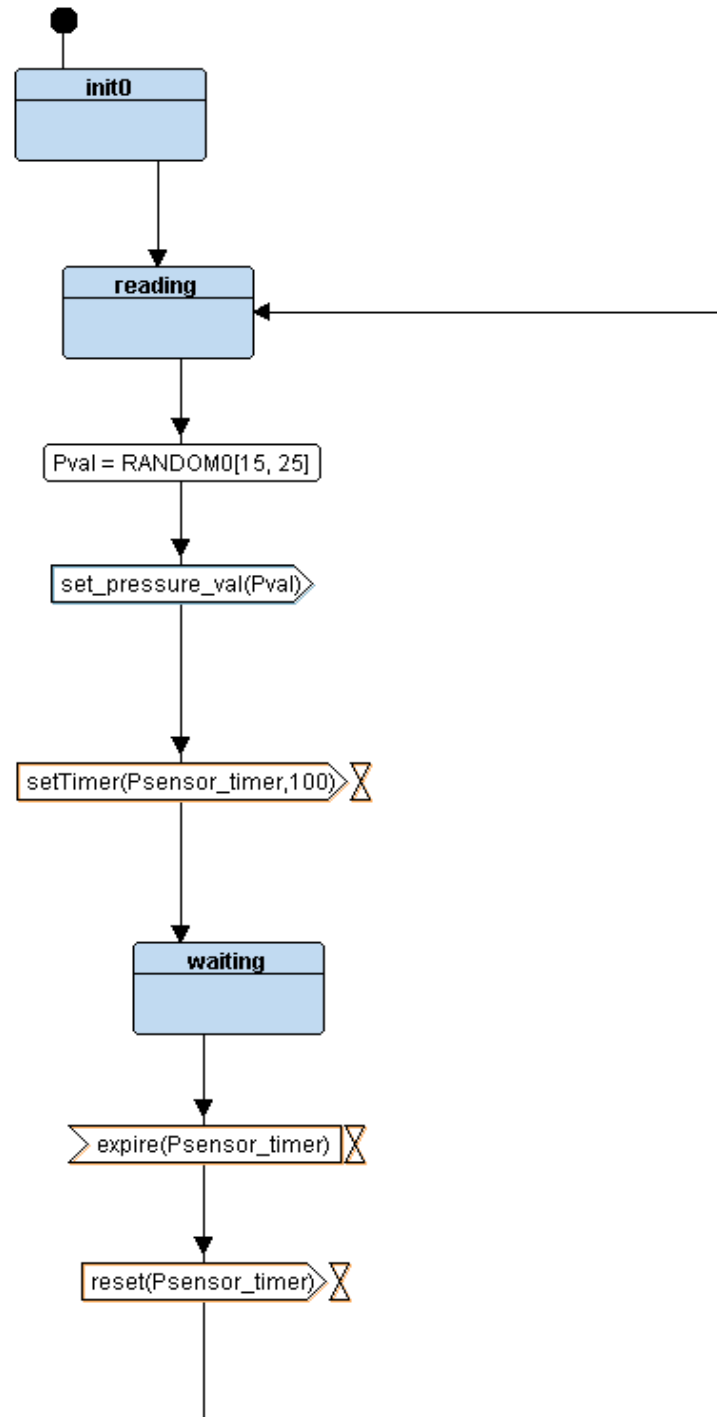


System design :

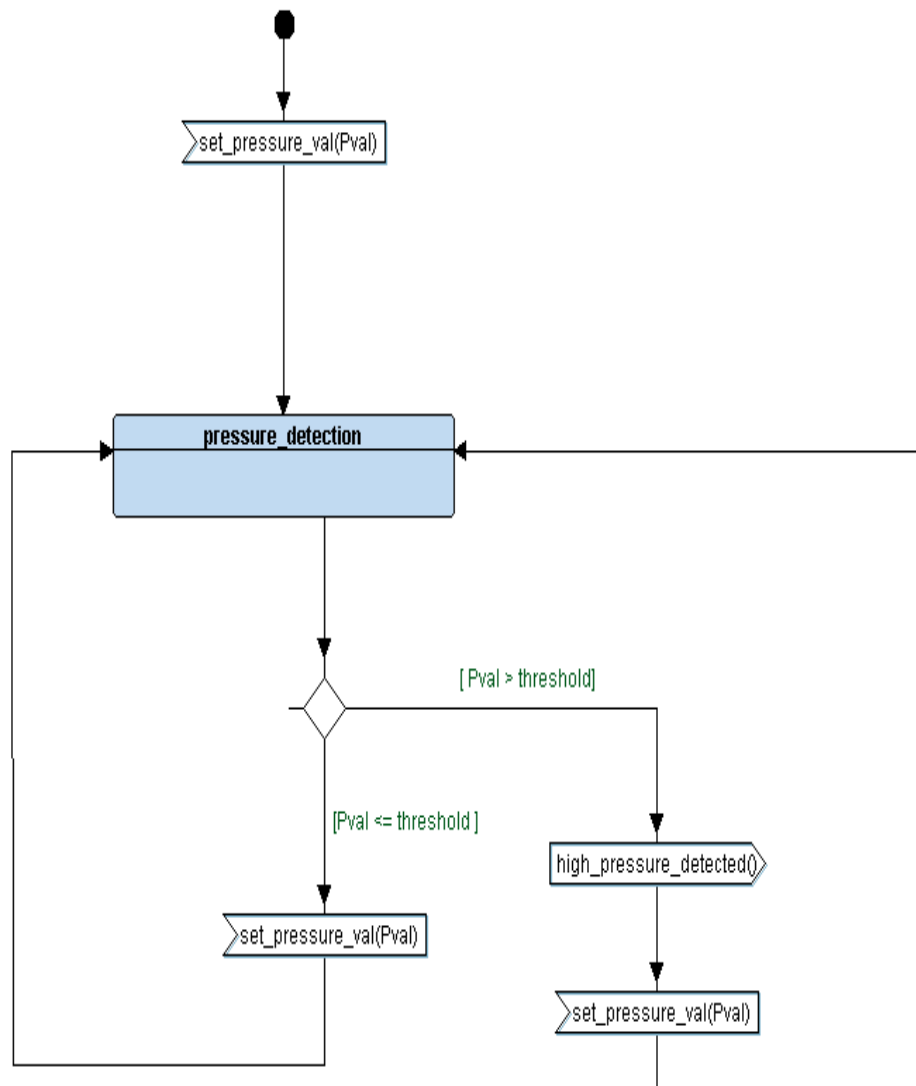
- Block diagram :



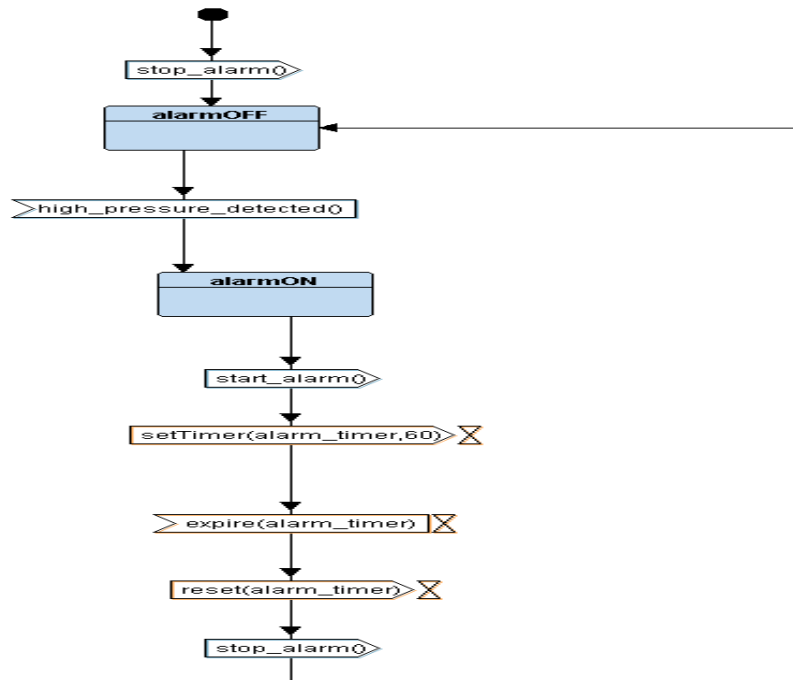
1. Pressure sensor driver :



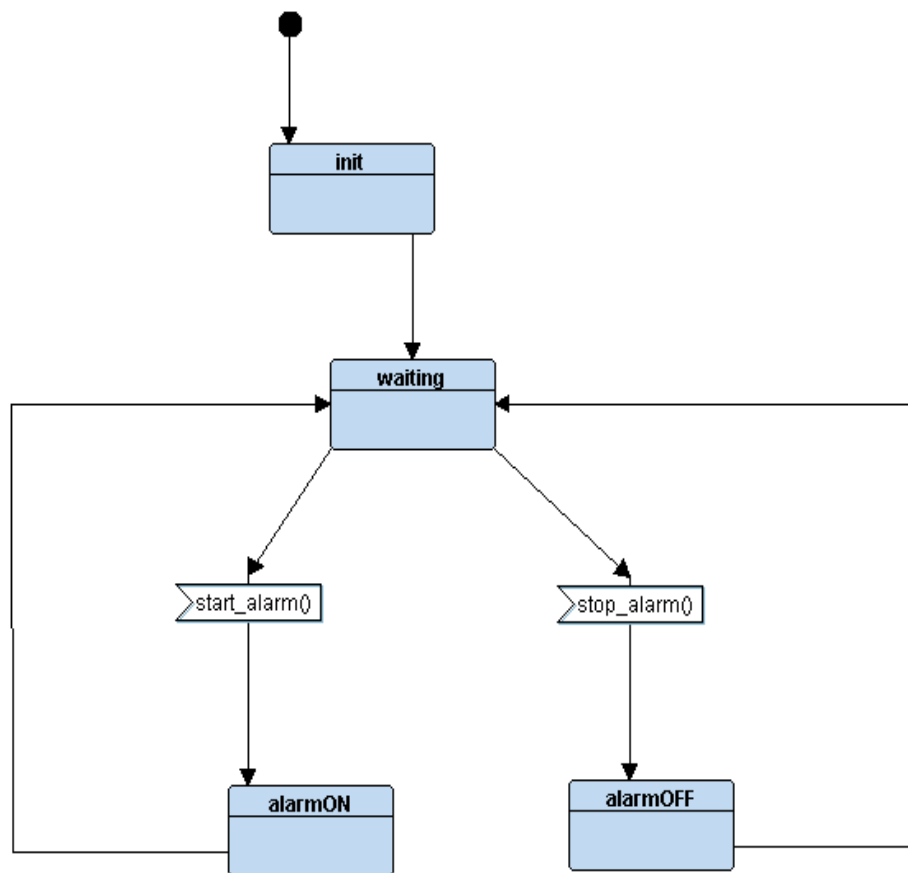
2. Main algorithm:



3. Alarm monitor:



4. Alarm actuator driver:



Simulation :

