

# **Concordia University Department of Computer Science and Software Engineering**

SOEN 331 Section S: Formal Methods  
for Software Engineering

## **Assignment 3**

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## Question 1

The UML diagram for the alarm system is shown below [Figure 1]. However, due to the low resolution of the image, we have also decided to show the composite states separately as well.

Also to see the full diagram, we will also include the link :

[https://drive.google.com/file/d/1931THbgp-pls06snaGNyNNRa\\_5o2UPzj/view?usp=sharing](https://drive.google.com/file/d/1931THbgp-pls06snaGNyNNRa_5o2UPzj/view?usp=sharing)

PS: Would probably still need to open the diagram, on diagrams.net. We will also include a PNG for easier zoom in the submission.

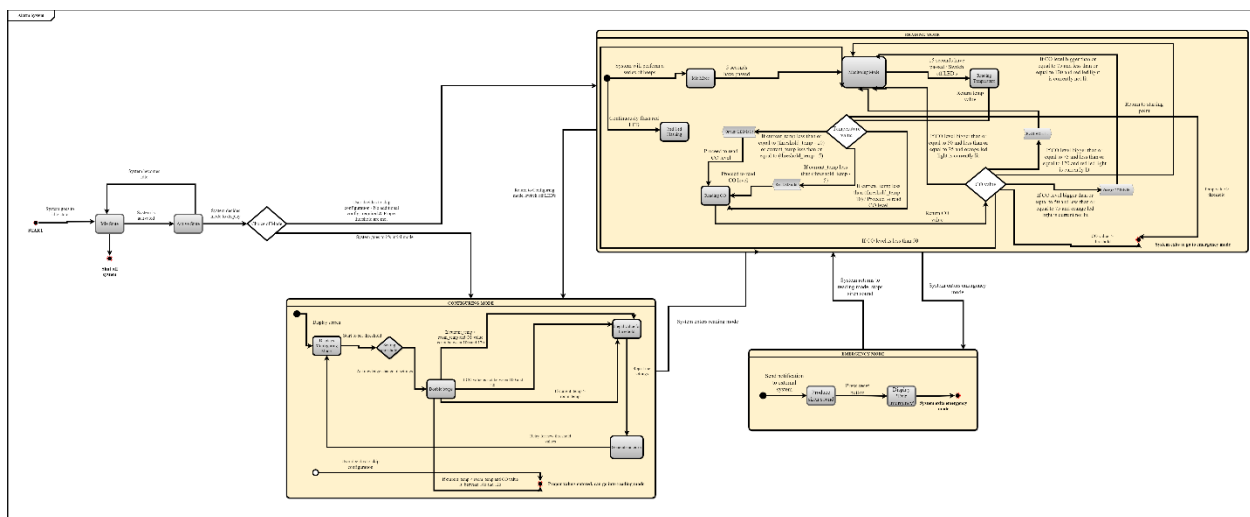


Figure 1: UML Diagram for alarm system

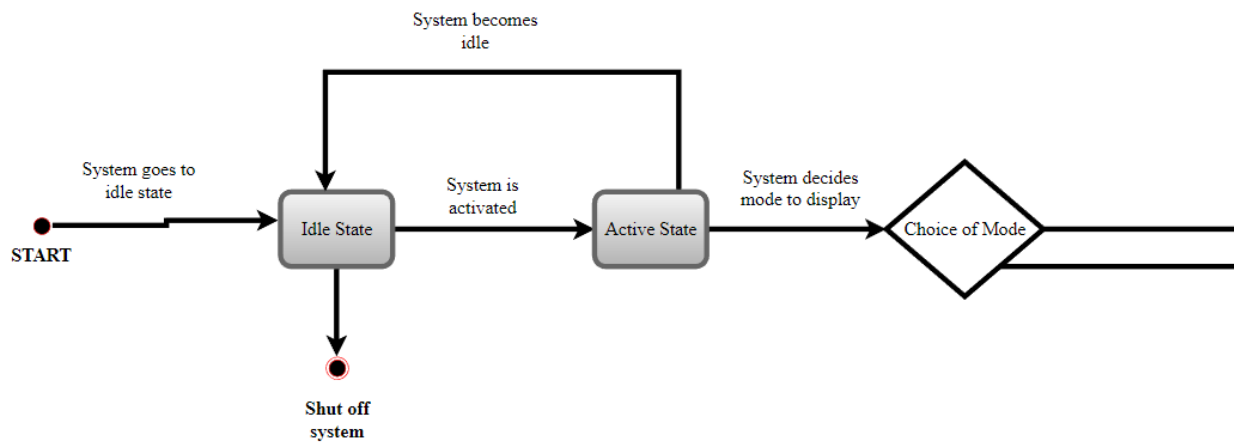


Figure 2: Initial setup of the system

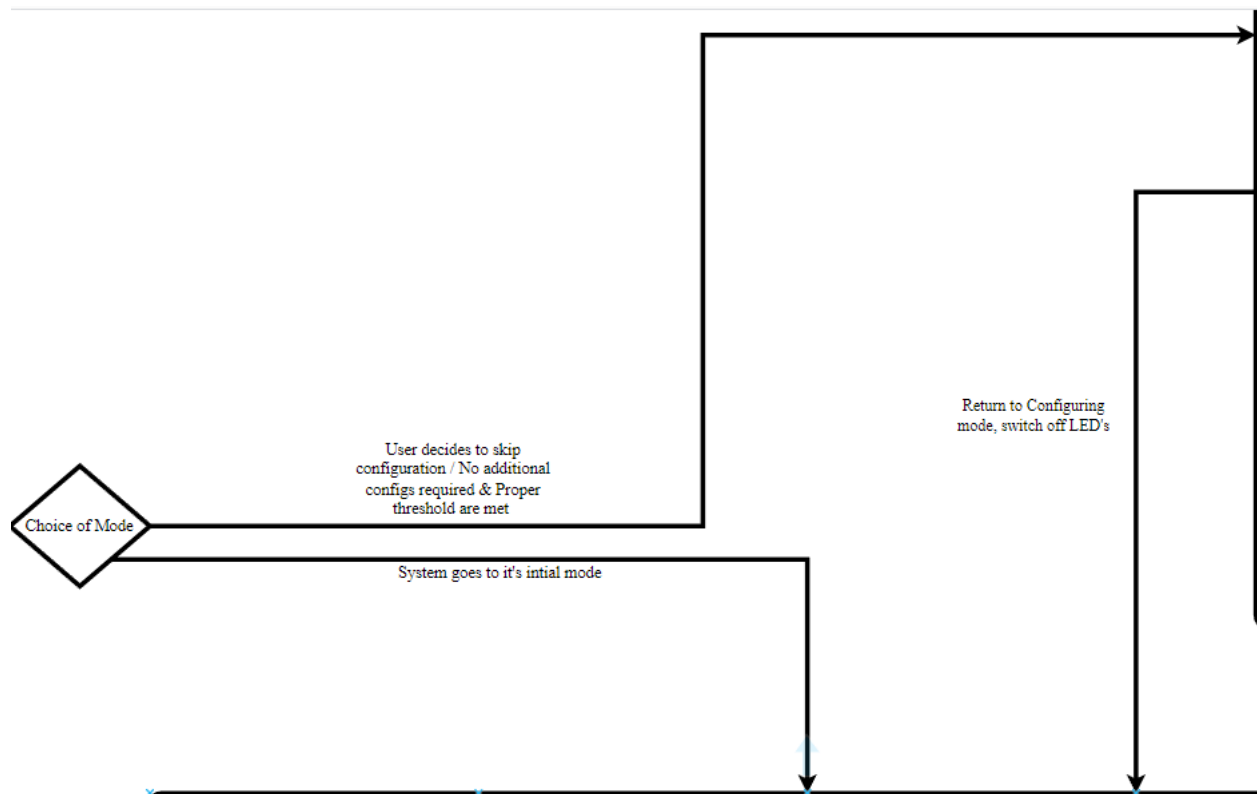
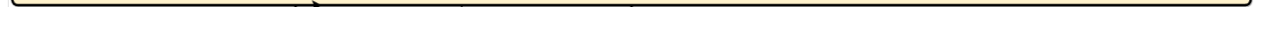
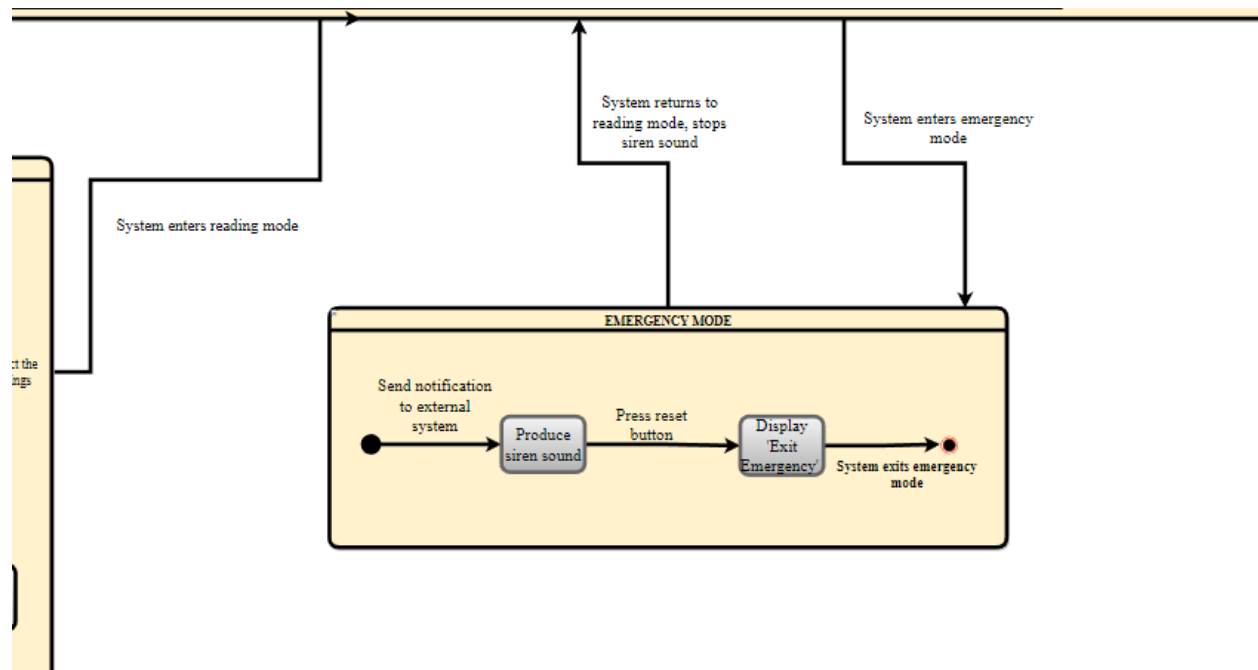


Figure 3: Initial choice of mode





*Figure 6: Emergency Mode [Composite State]*