Collison Avoidance Project

Case Study: Collision Avoidance System

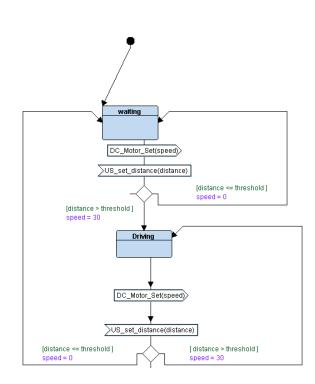
- Collision Avoidance System should check if the distance between itself and object doesn't exceed 50 cm.
- If the distance between itself and object exceeded 50 cm the system should turn the DC Motor off

Assumptions

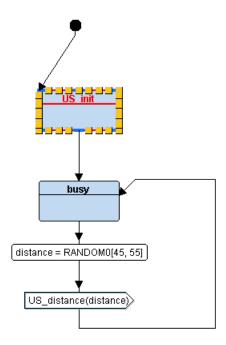
- System setup and shutdown procedure are not modelled.
- System maintenance is not modelled.
- Ultrasonic sensor never fails.
- DC motors never fail.
- System never faces power cut.

Activity diagram:

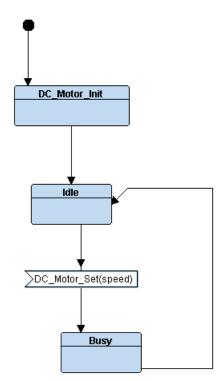
• CA:



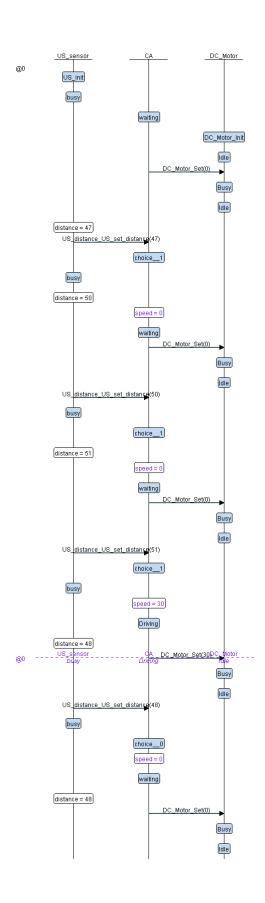
• US Sensor :



• DC Motor:



Sequence diagram:



Block diagram:

