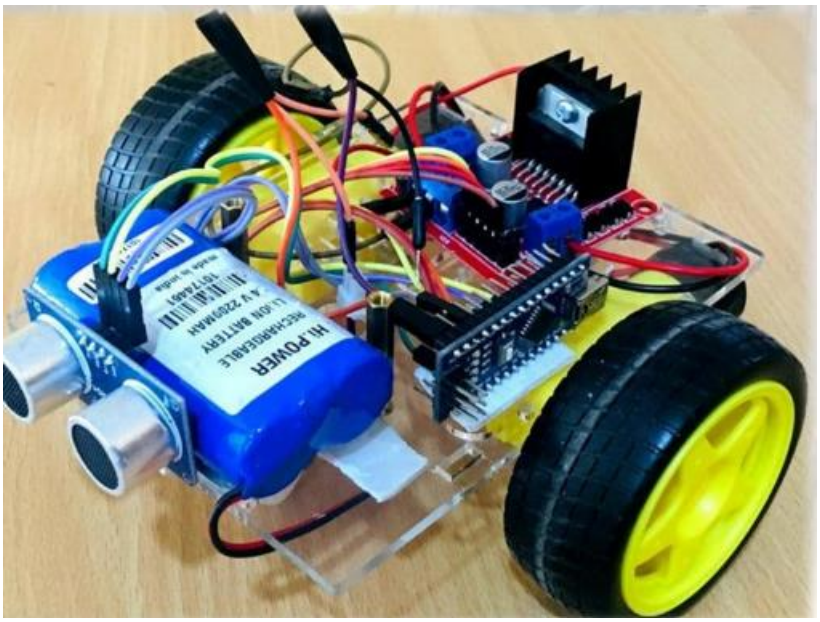
Mastering Embedded System Diploma

Collision Avoidance Car System Design Report



by:

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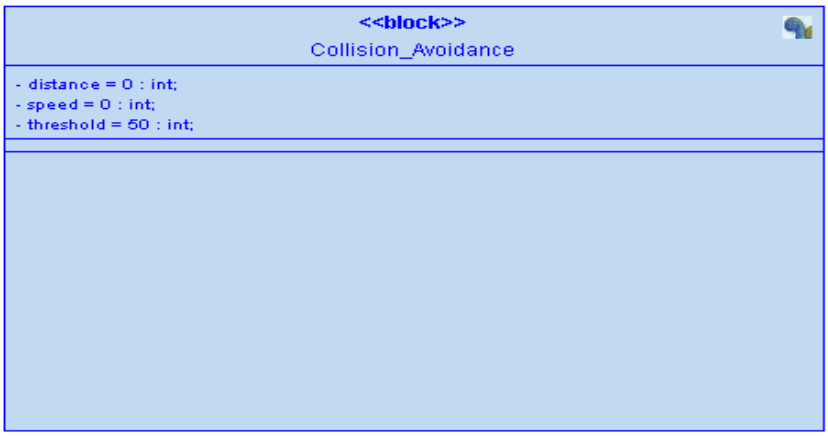
Collision Avoidance Car System

Description:

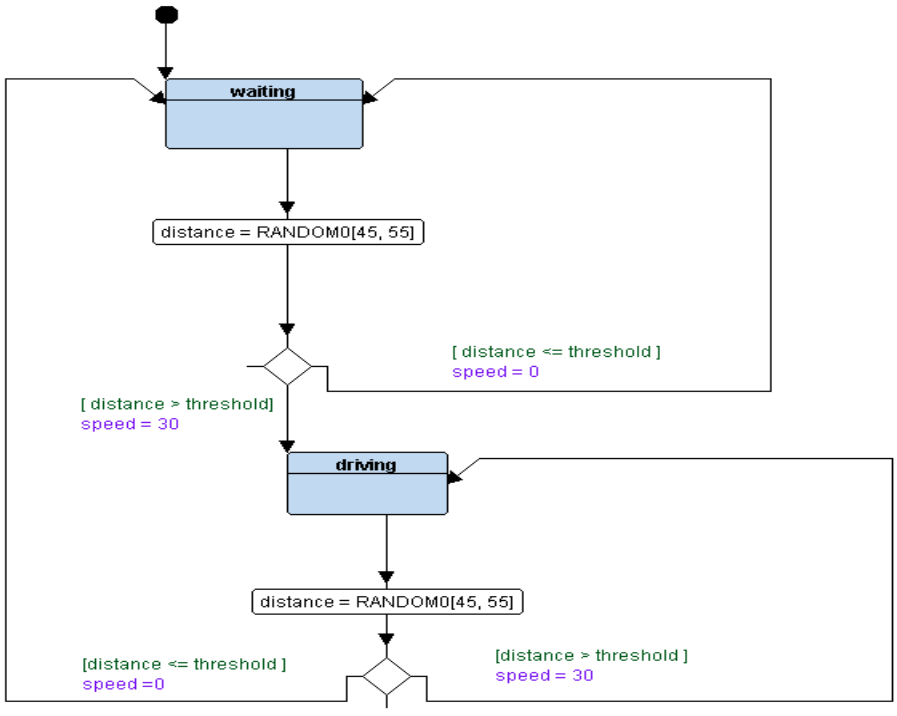
Implementation collision avoidance car system that detects objects, measures the distance between the car and object and decides which is go or stop according to the distance between the car and the object, if this distance is larger than 50 cm the car will keep forward if not the car will stop.

1) Singel Module Project (V1.0)

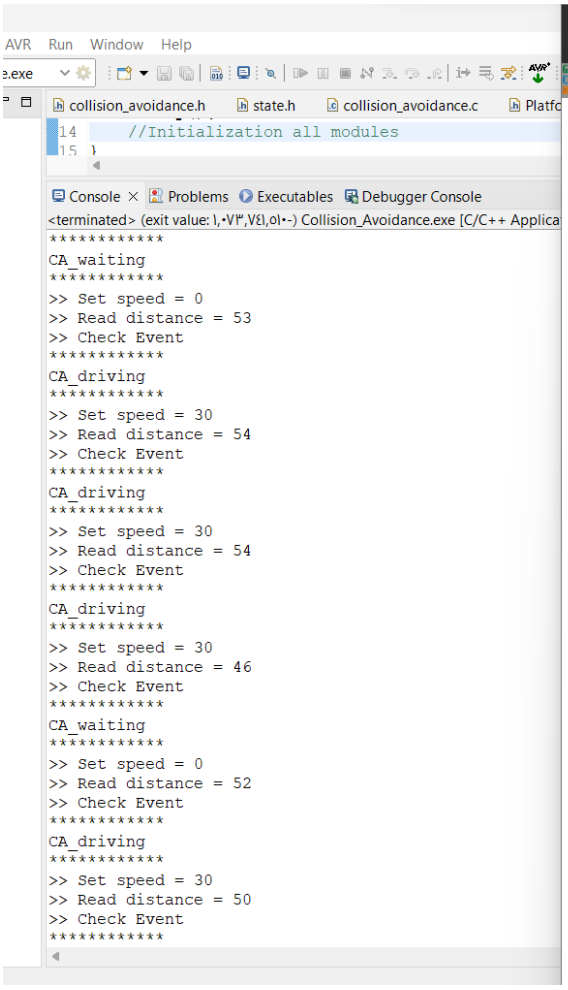
Block diagram of the system:

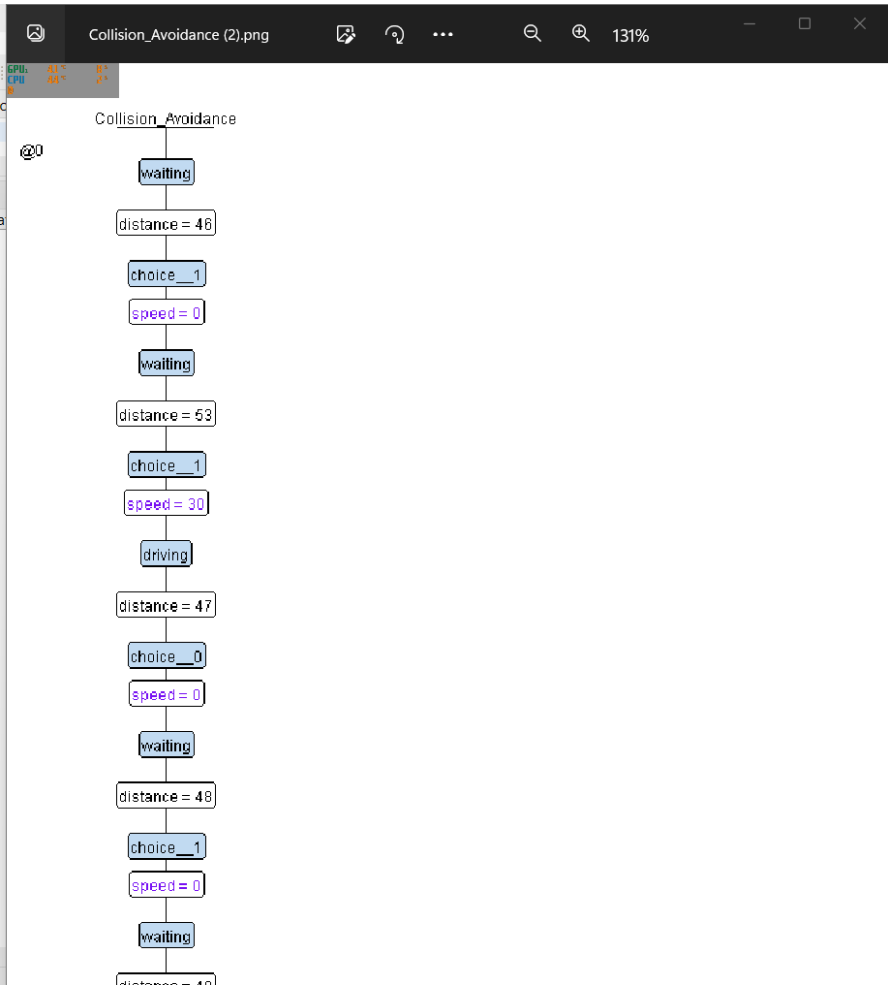


State Machine:



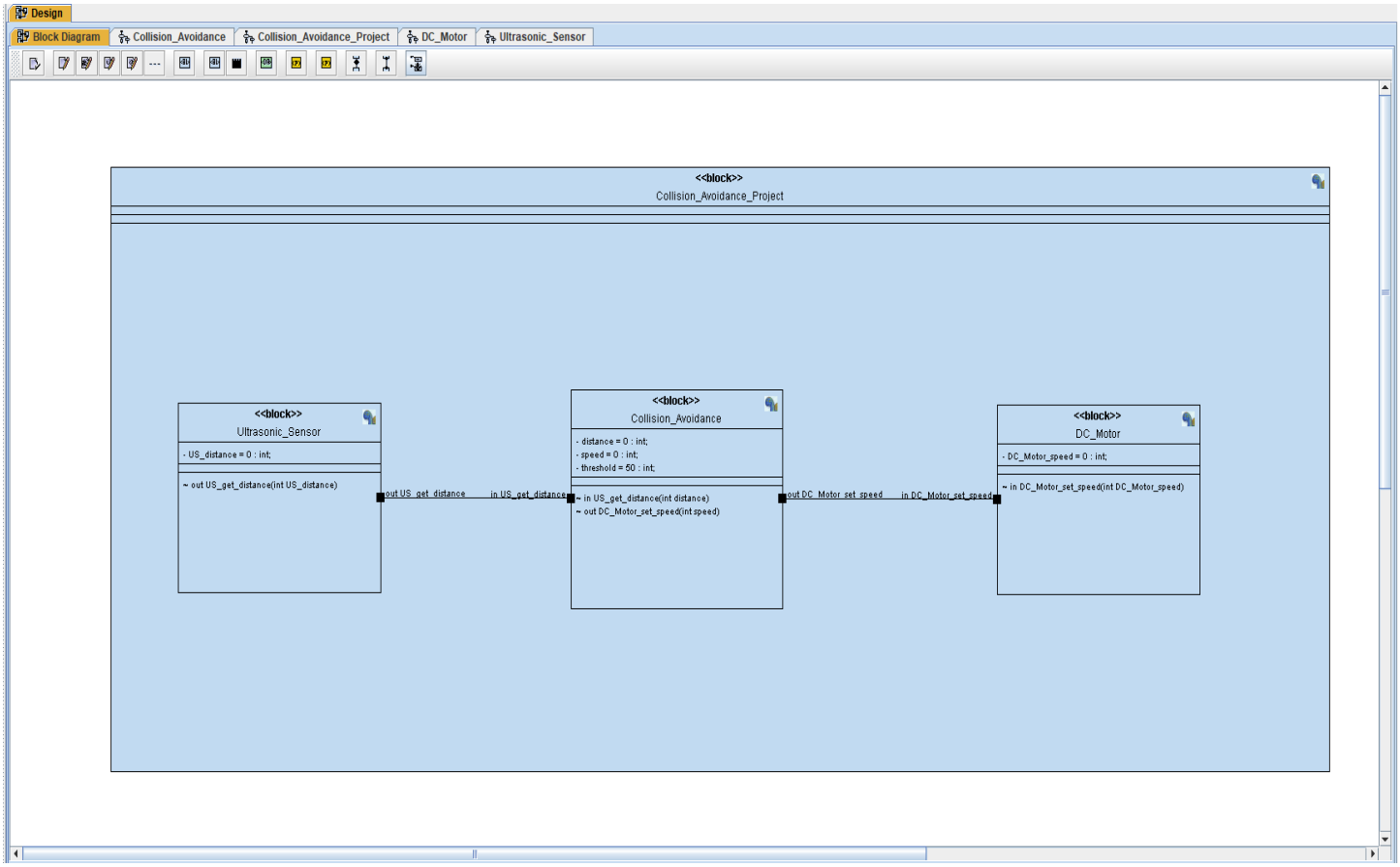
The output of system:





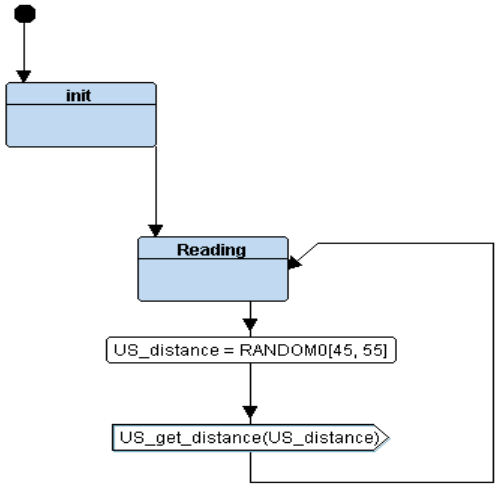
1) Multiple Modules Project (V2.0)

Block diagram of the system:

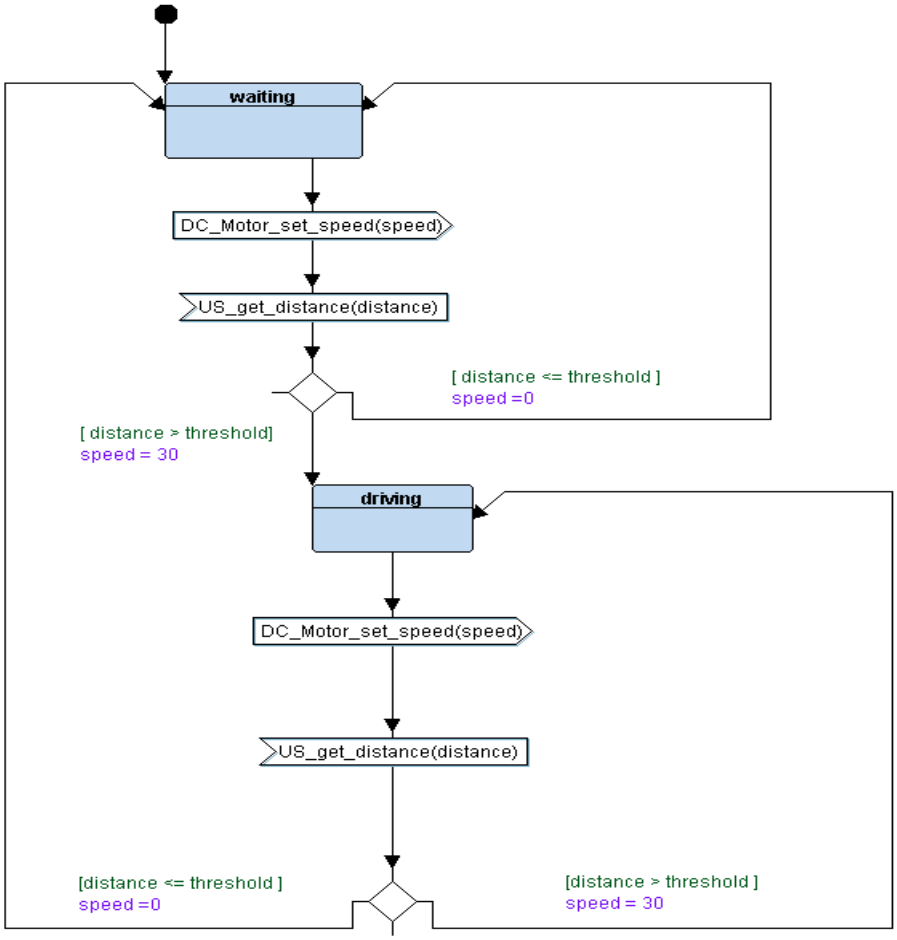


State Machine:

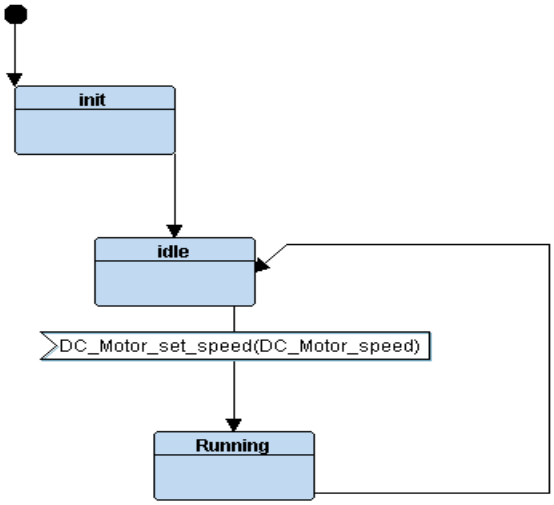
a) Ultrasonic Sensor



b) Collision avoidance



c) DC Motor



The output of system: