**Requirements Diagram**

A diagram of a system

Description automatically generatedA screenshot of a computer

Description automatically generated

**Use Case Diagram**

**A diagram of a system

Description automatically generated**

**Activity Diagram**

**A diagram of a computer program

Description automatically generated**

**Sequence Diagram**

**A diagram with text and arrows

Description automatically generated**

**Block Diagram**

**A screenshot of a computer

Description automatically generated**

**Sensor State machine**

**A diagram of a program

Description automatically generated**

**Actuator State machine**

**A diagram of a computer

Description automatically generated**

**Obstacles Detection state machine**

**A diagram of a speedometer

Description automatically generated with medium confidence**

**Simulation Trace**

**A diagram of a computer

Description automatically generated with medium confidence**

**Terminal Messages**

**A screenshot of a computer program

Description automatically generated**