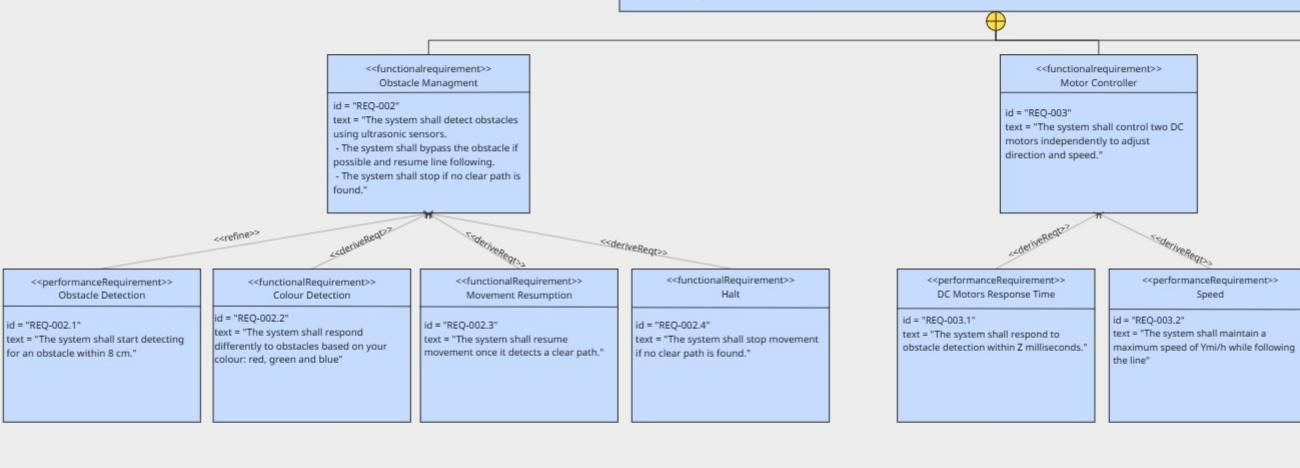
<<requirement>> Obstacle Avoiding and Track Following Arduino Car

id = "REQ-001"

text = "This system shall avoid obstacles and follow the track it will be given particularly a figure 8 or oval pattern, shall steer around an obstacle (could be based on colour) if it is within 8cm of its range (which is when it shall start detecting), shall stop if there is no path available and park when called to."



<<functionalrequirement>> Path Tracking id = "REQ-004" text = "The system shall detect and follow a black line using IR sensors." <<pre><<performanceRequirement>> <<functionalrequirement>> Line Detection Accuracy Route Navigation id = "REQ-004.2" text = "The system shall be capable of text = "The system shall detect and navigating predefined route patterns." follow the line with a maximum deviation of 2 cm"

<<functionalrequirement>>

Figure 8 Pattern

text = "The system shall navigate in a

id = "REQ-004.2.2"

figure-eight pattern."

<<functionalrequirement>>

Parking

text = "The system shall be able to park

id = "REQ-004.2.3"

properly anywhere"

id = "REQ-004.1"

<<functionalrequirement>>

Oval Path

text = "The system shall navigate in an

id = "REQ-004.2.1"

oval track pattern."

<<refine>>