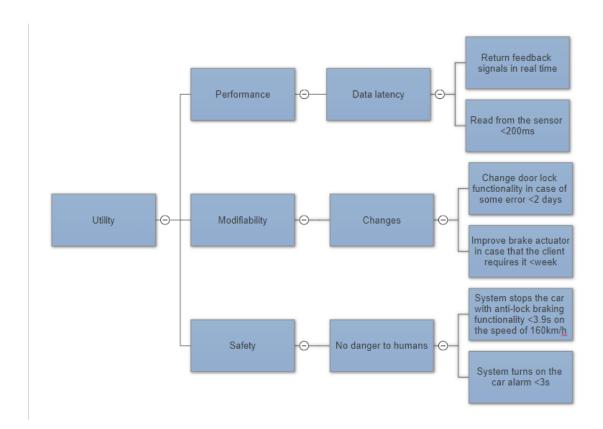
Laboration 3: Software Architecture Evolution

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Utility tree:



ATAM:

Scenario: Return feedback signals

Attribute: Performance

Environment: Normal operations

Stimulus: fault in receiving signals in real time

Response: real time

Scenario: Read from the sensor

Attribute: Performance

Environment: Normal operations

Stimulus: signal is taking longer than expected, so it takes more than 200ms

Response: <200ms

Scenario: Change door lock functionality

Attribute: Modifiability Environment: error

Stimulus: door lock functionality broken

Response: <2 days

Scenario: Improve brake actuator in case that the client requires it

Attribute: Modifiability

Environment: client's request Stimulus: Setting braking range

Response: <week

Scenario: System stops the car with anti-lock braking functionality

Attribute: Safety

Environment: in case of need to stop the car at the speed of 160km/h

Stimulus: Emergency need to stop the car Response: <3.9s on the speed of 160km/h Scenario: System turns on the car alarm

Attribute: Safety

Environment: in case that someone wants to break into

Stimulus: unwanted actions on the car

Response: <3s

Estimated effort: 9 hours