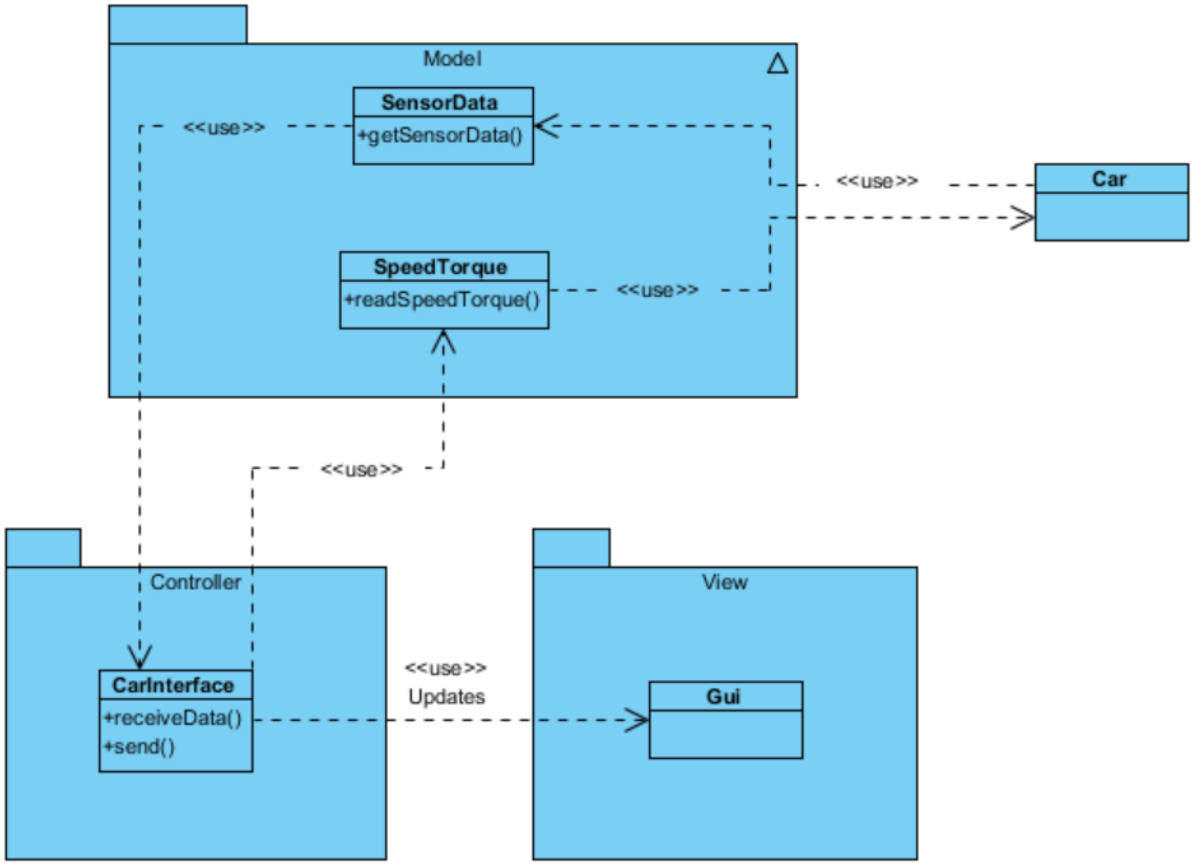
PHASE 2

Part 1: Architectural Design

In the instructions for Phase 1, methods for receiving speed and torque data was to be developed. This method will be used for receiving speed and angle data in Phase 2.



The Odroid board, represented by our **Car** class, sends speed and angle date in the form of a bitstream. The stream is read by the **SpeedTorque** class (developed during phase 1) which looks for the first valid data packet in the stream, and returns an object with speed and angle data. The object is received by the **CarInterface** every _ seconds and displayed in the **GUI**.

As the user puts in sensor values…

Part 2: TDD of New Modules

Gui

CarInterface: CarInterfaceTest

Part 3: Integration Testing

Scenarios capturing the main functionality of the application

1. Connection to Odriod lost; no speed, angle data received

If we lose connection to the Odriod board, no packet/empty packet is received. An error is thrown, and a message is displayed in the GUI. As soon as a valid packet is received, the GUI is reset to its working state, and the data is updated as normal.

2. Received data packets are corrupt

If a packet is corrupt, an error is thrown. A message is displayed to the user in the GUI, while the application waits for the next packet. When a valid packet is received, the application continues to operate as normal.

3. The application receives normal data

The torque and speed data is displayed in the GUI, and updated every second.