

# Design Review

By: Romel, Leeza, Anish, Ray, Nina, Lipika  
Racer 2



## Top Level Architecture

Front End:

User interface

Controller buttons

odometer



Content management layer:

Context graphs that show multithreading



Service layer

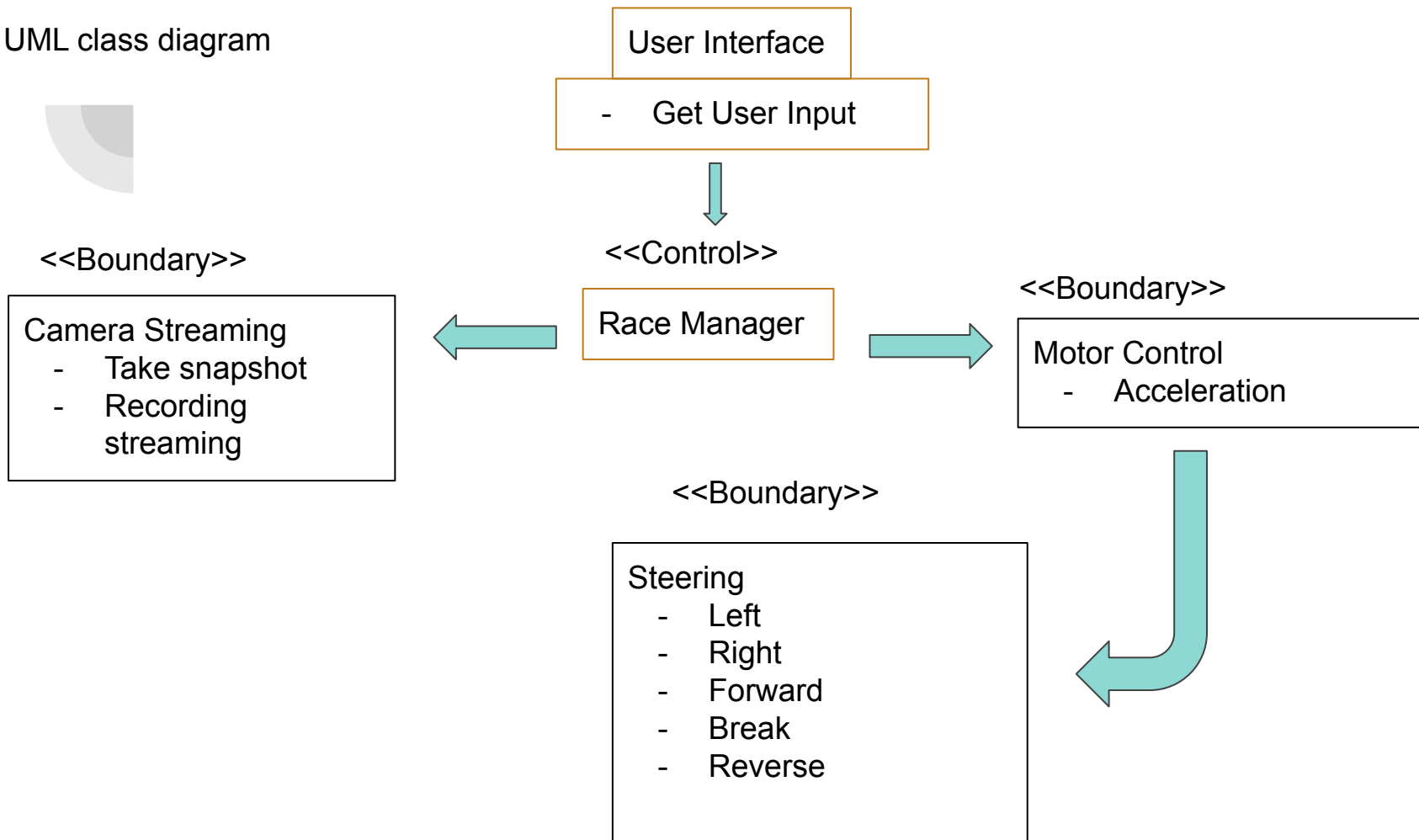
- Input from user on controller
- Java interface(GUI)
- Python controller running beaglebone



Physical layer:

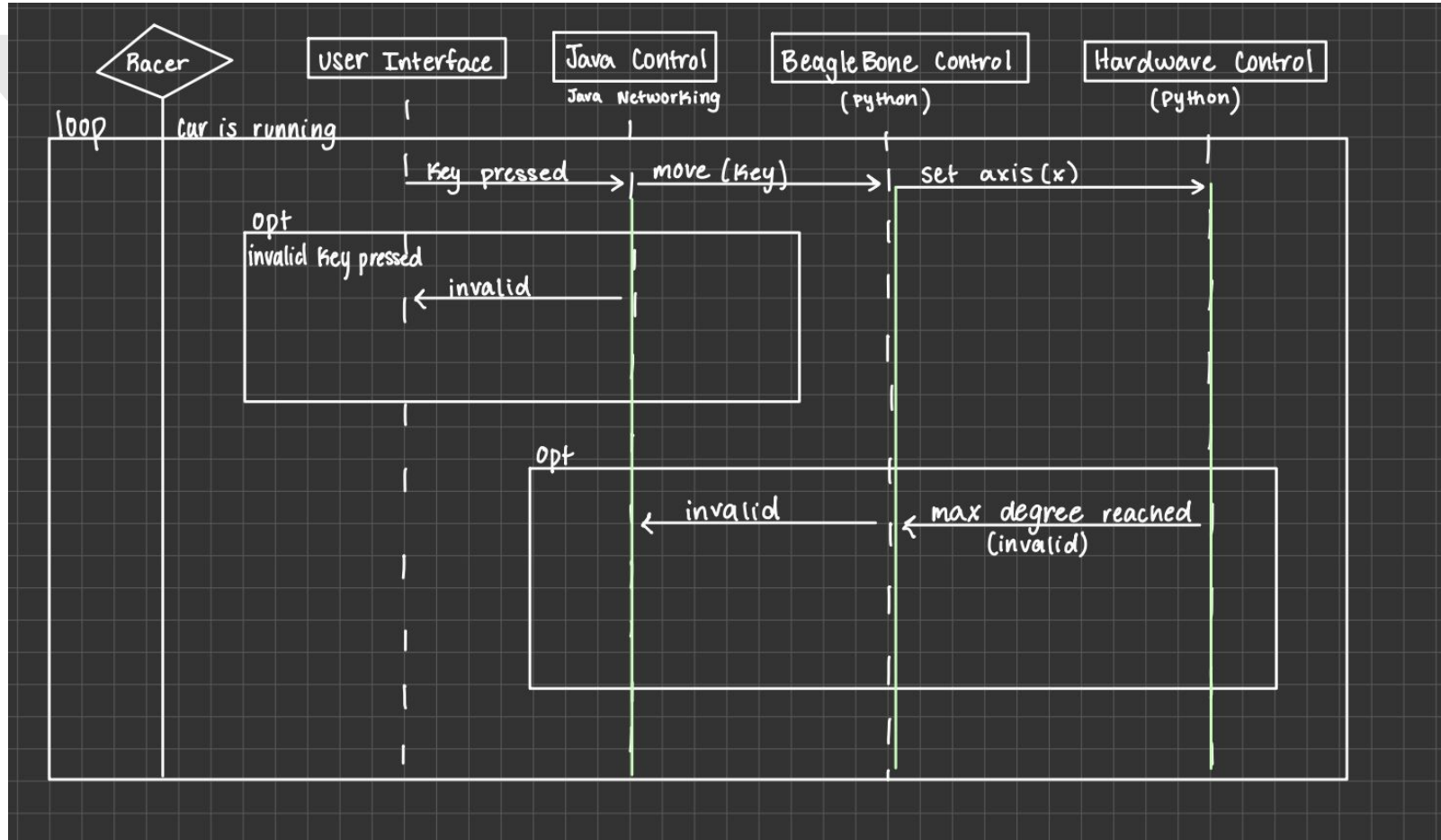
- Servo for controlling movement left/right
- Motor control for going forward and back
- Camera hardware

## UML class diagram



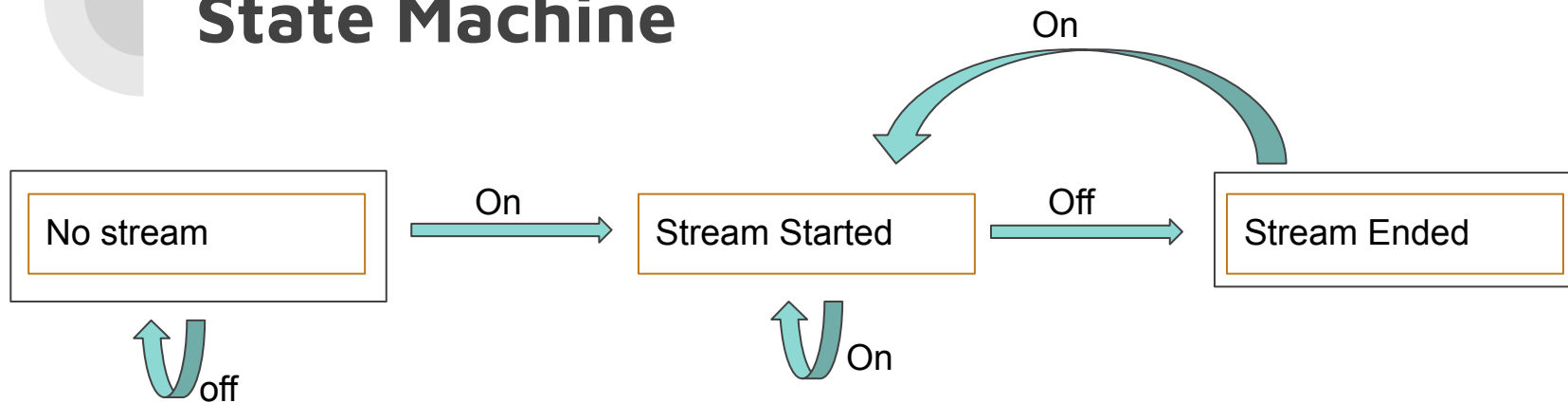
# Sequence Diagram

User story: Car Movement (engine on)





# State Machine





- Java frontend with GUI connected via socket to the beaglebone.
  - One thread sending commands
  - One thread receiving video
  - One thread for the GUI
  - One thread for speedometer
- Beaglebone running python scripts to both receive commands via socket and to send video via socket
  - One thread receiving commands
  - One thread streaming video data
  - One thread for speedometer