“To analyze and optimize the quarter car model, with a program having a GUI and MVC design pattern, we need to:”

1. Create a GUI ysubg QTDesugber abd oyuic5
2. Write a python file containing classes for carModel, carController, and carView
3. Write a car\_App.py file that instantiates a carController object

Above was given from prompt.

Using QT designer, we’ll create an interface with 8 QlineEdit’s for inputs with Labels next to each. We’ll need two QPushButtons for “calculate” and “optimize performance”. These can be grouped together in a QGroupBox to keep the GUI neat. The extra space will be used later to create position vs time plots inside pycharm.

The next step would be creating the carModel, carController, and carView classes. CarModel should instantiate basic parameters such as car body mass, wheel mass, suspension sprint constant k1, k2, speed, ramp angle, and time max. This section just needs to store the values for each.