Requirements Document for ODBII Project

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**Part I: User requirements in the form of User Stories** (40 points)

1. A car owner would like to determine why the check engine light is on.
2. A car owner would like to monitor some aspect of the car during a trip.
3. A car owner would like to review historic car data from multiple trips.

**Part II: System requirements in the form of tasks** (40 points)

The user will perform the following steps to achieve user story 1:

1. Connect ODBII dongle to car
2. Connect dongle to computer (could be bluetooth)
3. User runs diagnostic routine from the program GUI.
4. User is presented with information about each fault code received.

The user will perform the following steps to achieve user story 2:

1. Connect ODBII dongle to car
2. Connect dongle to computer (could be bluetooth)
3. User selects aspect to monitor such as average speed, fuel consumption, air intake volume, etc.
4. User drives car
5. User parks car and stops the monitor in the program GUI.
6. User optionally disconnects from ODBII sensor
7. User reviews graph of data gathered during the trip

The user will perform the following steps to achieve user story 3:

1. Connect ODBII dongle to car
2. Connect dongle to computer (could be bluetooth)
3. Dongle will automatically connect to computer and transfer data when car pull up to garage.
4. User will open GUI application login.
5. User chooses the correct car.
6. User chooses which data collections to graph.
7. User will review graph of the combined data sets.

**Part III: Non‐functional requirements** (20 points)

* Provide historical graphing of collected ODBII data.
* Provide failure prediction based on historical ODBII data.
* Provide total cost of ownership of the car based on historic ODBII data gathered over the life of the car.