Smart OBD

**Features**

* Car health overview
  + Critical, Fair, Moderate, Good, and Great
  + Determined from car database info
* Alternative gauges(if cars gauge(s) are broken)
  + Will show live info for speed, etc
* OBD log
  + Displays log of info in a readable format
* Will compare to a database of engine code info to reply relevant information to the user
  + Raw data read from a car will be interpreted and displayed in an understandable way
* Logging of Multiple Users
  + You can log in, upload car data from the scanner, and then log in later and review or share certain information
* Monitoring of Car
  + Show information about how car is being driven over time. Like top speed.

**Requirements**

1.)Functional- Ability to read and share data being obtained from vehicle

Non-Functional- Must be able to communicate with browser via wifi

2.)Functional- Ability to display data graphically/visually

Non-Functional-Signals being read from scanner are being translated graphically onto the browser in real-time

3.)Functional-Ability to store user information in order to create and manage accounts

Non-Functional-information from scanner is hosted on a local server & associated with a user account in order to track data

4.)Functional- Ability to keep track of multiple vehicles from one account

Non-Functional- data from each car will be stored in some sort of data structure so that information from multiple cars can be viewed from a single profile.

5.)Functional- Ability to share vehicle data with other users

Non-Functional-if a user is authorized to view another user’s log they will gain access to that information as long as the user allows them to.

6.)Functional- Ability to compile a document with specific data for the purpose of sending to mechanics.

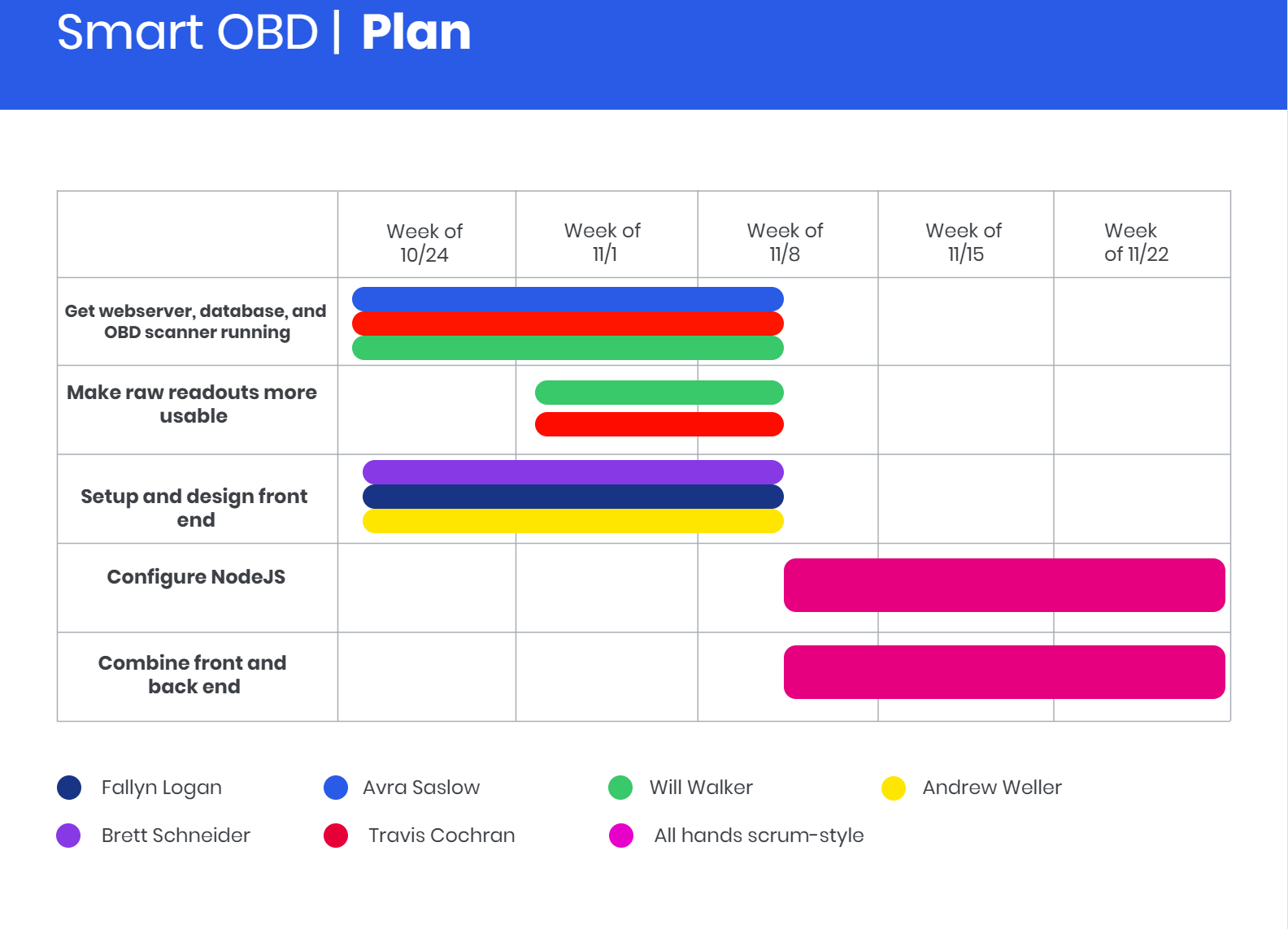
Non-Functional- Format the data in an html document and use some tool to export that to pdf.

**Plan**

* To achieve the above features and requirements several steps are necessary.
* We are breaking into 2 teams assigned to work on the front end and back end of the project.
* Car health overview requires the front end team to make an appealing intuitive design and the back end team must create a database of info for the feature to pull from.
* On website gauges require the front end team to display gauge information in a clear way, the back end team must get live data from cars speedometer/tachometer/etc
* OBD log is mostly the back end team’s job, with some formatting from the front-end team
* Database information must be populated by the back-end team and must be organized and displayed by the front end team
* Multiple users will require a database setup from the back end team and login/account info display are the front ends team’s responsibility
* Live monitoring of car will likely get handled by everyone in the second half of the project.

**Project Timeline**

This is a timeline of what needs to get done to achieve these features.

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