CarTracker

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- Project Title: Car Tracker
- Project Summary
  - The goal of this product is to provide a sort of guided encyclopedia for car owners who may not be as savvy about the mechanical aspects of their car. The app will take in basic information about the car such as mileage, and recommend maintenance that should be done based on past information.
  - The information the app will provide will include (but isn't limited to):
    - Fluid change intervals:
      - Oil
      - Transmission
      - Coolant
      - Brake fluid
      - Steering fluid
    - Spark Plugs/Coils
    - Tire Rotations/Replacement
    - Brake Pads/Rotors/Flush
    - Battery Check
- Project Goals
  - The goal of this project is to provide the end user with a tool to help them keep organized very easily. Even if they know nothing about cars or how to maintain them, this app will ideally provide a a way to instruct them how in the most convenient way possible. It is our goal to have both an android and web version of the tool, although the web version will not have as robust functionality as the mobile app.
- Product Features
  - By typing in car make model and year, product should be able to generate basic info about the car e.g. standard tire pressure
  - Notify user to update their car mileage.
  - Different users should be able to log in and out of the app. User information will be stored in a database.
  - The app will utilize GPS to get information on mileage, user location information and locations of various mechanics or automobile shops.
- Any Limitations
  - Since we will be focusing on creating the app primarily for Android and web, we will be limited to using programming languages such as Java and Javascript.
  - Since nobody in the group has prior experience with the OBDII, GPS functionality or database utilization, we have to spend time researching each and making a decision on which to use based on availability and ease of access.
  - In most cases we are limited to open source limitations due to available cost.
  - Potential APIs are not entirely free:
    - http://developer.edmunds.com/api-documentation/vehicle/

- - - http://www.carqueryapi.com/
    - https://startbootstrap.com/template-overviews/sb-admin-2/
- Future plans
  - Full fluid interval tracking (generic and per-vehicle) as well as other maintenance tracking
  - Recommend which tuneups the user should get for their vehicle or time until the next tune up
  - The app may utilize the OBDII to get information about such things as engine codes, emissions, etc
  - Vehicle modification compatibility
  - Step-by-step maintenance (generic and per-vehicle)
  - Torque Specs per vehicle per bolt
  - Include a database of vehicle manuals so that users can learn more about their own cars