CMPS165 Fall 16
UC SANTA CRUZ

Final Group Project Proposal

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Storyline & Title

Car Maintenance | When & What should I Replace?

A data visualization that shows when and what should be replaced on your vehicle to keep it maintained using average expected mileage interval changes that would be expected on a car part. The data to help understand this visualization is pulled from articles and answered questions from YourMechanic.com and Edmunds.com.

Data & Design

What data variables/files will you will be using?

We will be using a csv file that is filled out from the data that can be found on Yourmechanic.com and Edmunds.com

Data will be provided by:

YourMechanic edmunds.com

DataBinding | What variables you will be binding the data to?

Data variables will be binded to dynamically made Buttons and images. We intially want to investigate into making our own shape file and seeing if that will work. If not possible, our back up plan would be to tackle it using Jquery. With Jquery, we can alter values of the selected option easily. Since we are both familiar with Jquery, it won't be a struggle.

Visualization Design

What is the main layout?

A force-spring based car visuali zation. The main data visualization is an outline of a car that contains components that will represent the car part at the l ocation it would typically be found. When you click on one of the dynamically generated buttons from the list of parts, it will show the car part, name of part, and mileage interval/ time it is typically changed/maintained. The layout of the page would be such that at the top is a brief overview/story of what the visualization is about. The middle chunk of the page will be of the main visualization. After the visualization will be notes on why we did this, sources we used, and how it can be applied.

Colors:
Black outline of the car
Red car components of red border and faint red fill
Simple black/white theme

Legends: Div containg dynamically made buttons that correlate to the car parts from data.
Grids: Car and parts were drawn to scale to remain in their correct positions at all times.
Sub- theme: 1940's type aesthetic

Interaction Design

The user will click on a button of the car part they would like to see and know more about. The program will show hide all the other parts that aren't the selected part to show what the part looks like. The part name and mileage interval change will appear next to the car along.

If there is enough time, we would like to incorporate a d3 scatter plot at the bottom that shows how frequently something is changed given an expected Car lifespan.

The Team

Brian: Data visualization & Graphic design

Haris: Data visualization & Design organization

Made with: