

An aerial photograph of a tropical beach scene. In the foreground, there's a sandy beach with several palm trees. A paved road with white lane markings runs horizontally across the middle. Below the road, there's a parking lot with blue markings and a building with a dark roof and blue awnings. The background shows more palm trees and a clear sky. The title 'DRIVE TO YOU' is written in a large, stylized, hand-drawn font across the middle of the image, partially overlapping the road and the building.

# DRIVE TO YOU

2019 Spring CSI 703 Final Project  
Trenton Chen Jin Qianyi Huang Xiaoqian Cai



# Content

01

Motivation and Data Acquisition

Show the webpage

02

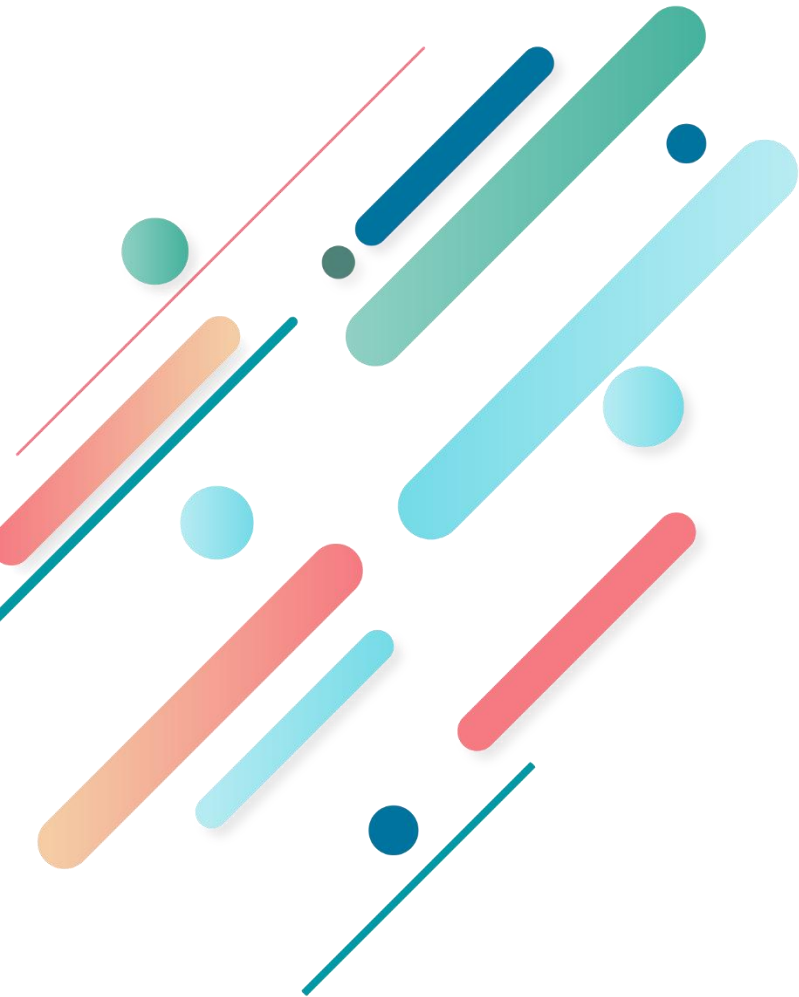
Introduction of Functions

03

Process and Implements

04

Evaluation



DRIVE TO YOU

Motivation & Data Acquisition

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## Current website:

### Messy layout

All of the data are posted without a clear layout,

### Lack of overall evaluation

Unfriendly to people who are not familiar with cars

Add to Comparison

2019 Audi A4  
#1 in Luxury Small Cars

Premium 40 TFSI

20703
Find Best Price

2019 Honda Accord  
#4 in Midsize Cars

LX 1.5T CVT

20703
Find Best Price

^ Prices

MSRP	\$37,400	\$23,720
Avg. Paid	N/A	N/A

^ U.S. News Scores

Overall	8.9 /10	8.7 /10
Critics' Rating	9.3 /10	9.2 /10
Performance	8.6 /10	8.4 /10
Interior	8.8 /10	8.4 /10
Safety	9.5 /10	9.9 /10
Reliability	3.5 /5	N/A

### Dull numbers

It is hard to focus on pure numbers for minutes

### Where to start?

No function similar to “find your match” is provided

1. Drop down list of cars
2. 0-60 acceleration
3. Car dimension (WHL)
4. Radar chart
5. Depreciation & sales
6. Customization

1. Size decrease from 1000+ to 200+
2. Delete the car dimension part
3. Delete the sales part
4. Safety→reliability

1. Adjust the customization part
2. Add the sales part
3. Delete the 0-60s acceleration animation

Design functions

Data resources

Implements

Data Acquisition

First Draft

Second Draft

1. USNews, Edmunds
2. 0-60accelerate
3. JDPower
4. goodcarbaddcar

1. Web crawler to grab data
2. Collect reliability score on JDPower
3. Collect pictures of 250 cars

1. Add illustrations to graphs
2. Add guidance



# Design Evolusion

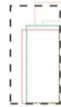
Reviews
Cars for Sale

Make
Model
Year
Search Cars

2019 Acura MDX FWD



MSRP: \$44,300



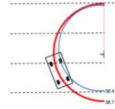
2019 Acura MDX FWD  
MSRP: \$44,300  
2019 Acura MDX FWD  
MSRP: \$44,300  
2019 Acura MDX FWD  
MSRP: \$44,300

Adaptive Cruise Control  
Keyless Entry  
Power Liftgate  
Keyless Start  
Steering Wheel Controls  
Remote Engine Start  
Lane Keeping Assist  
Heated Mirrors  
Hands-Free Steering Wheel

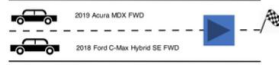
2018 Ford C-Max Hybrid SE FWD



MSRP: \$24,120

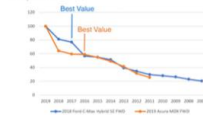


2018 Ford C-Max Hybrid SE FWD  
MSRP: \$24,120



2019 Acura MDX FWD  
2018 Ford C-Max Hybrid SE FWD

Depreciation



Special Car



Drive to You

Find Your Match

What car do you want?

I want luxury I want economic

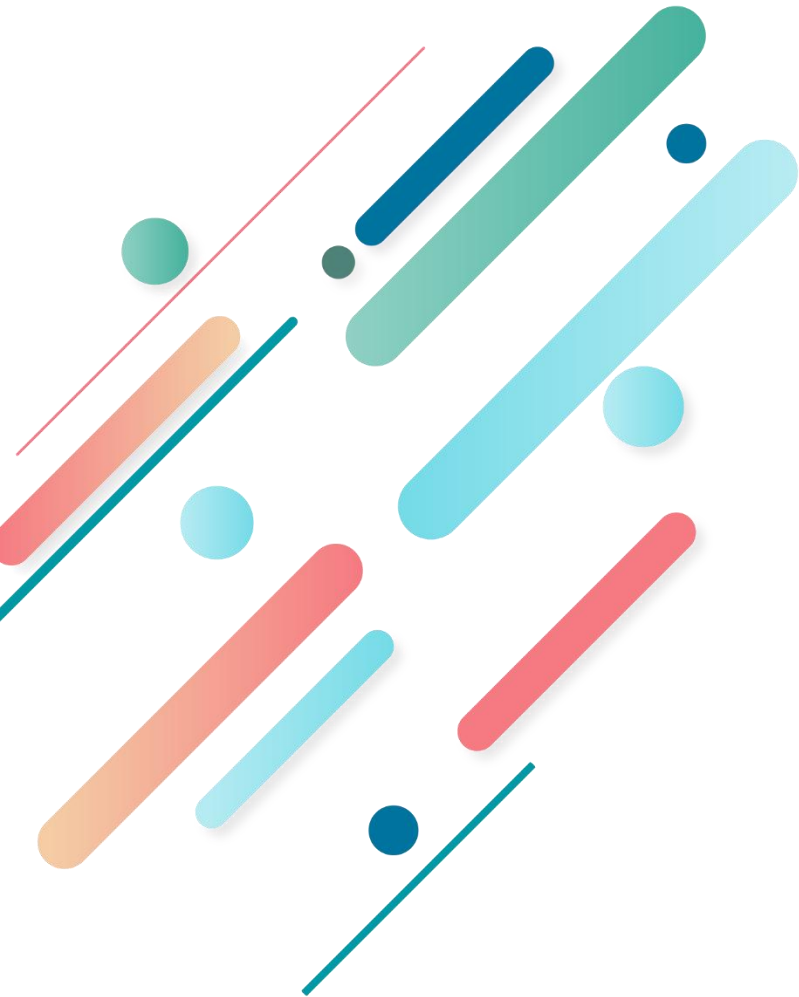
Car Visualization Comparison

Choose your car Choose your car Choose your car Choose your car

Depreciation Comparison

Annual Sales Comparison Among All Cars

Dimension Comparison Among All Cars



## Data

Cars:

Make, Model, Year, Picture

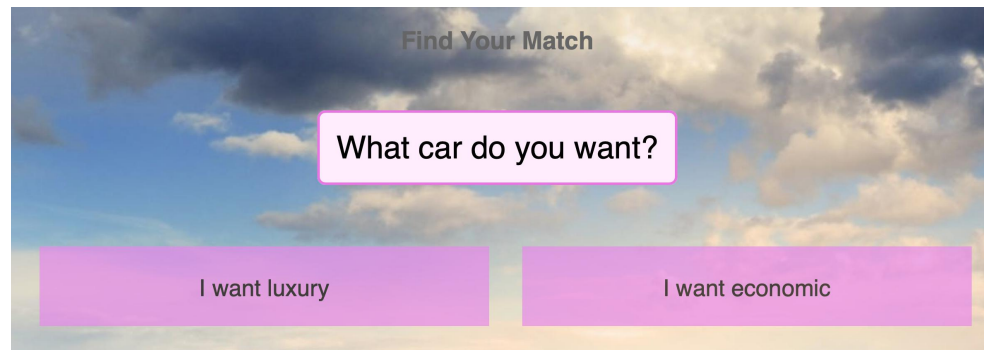
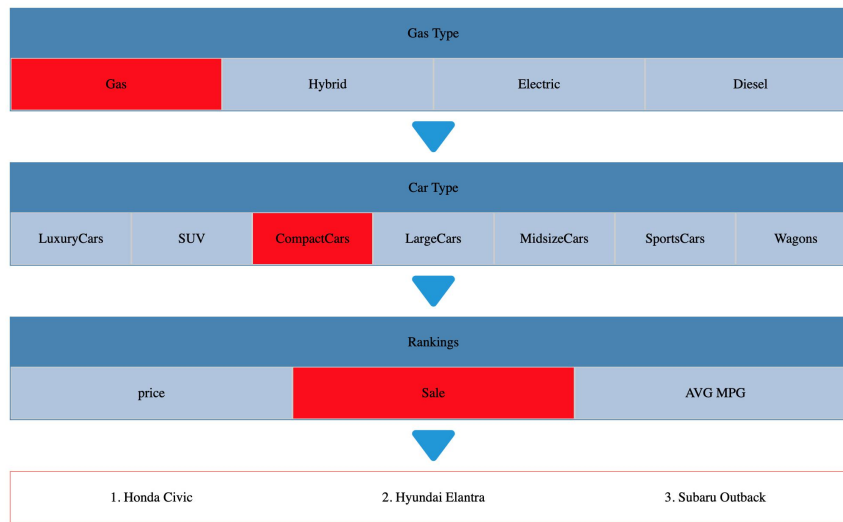
MPG, Reliability, Torque, Wheelbase, Horsepower

Processing:

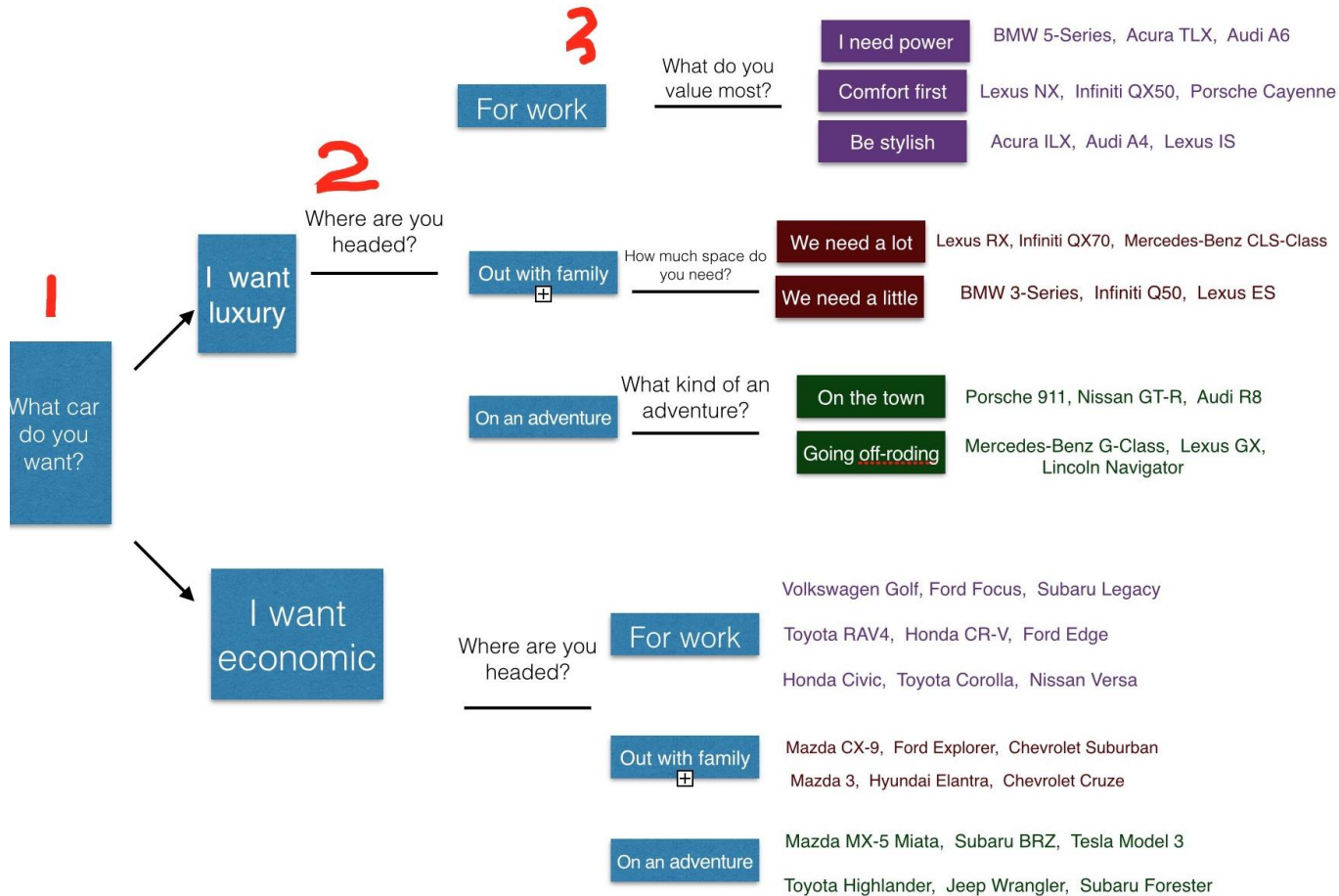
Year: 2018

Electric Cars: MPG

Reliability: Missing data for some models







Choose Your Car

Choose Car Make:

Choose Car Model:

Choose Year:


Choose Your Comparison Car

Choose Car Make:

Choose Car Model:

Choose Year:

Car Visulization Comparison




Choose Your Car

Choose Car Make:

Choose Car Model:

Choose Year:



Choose Your Comparison Car

Choose Car Make:

Choose Car Model:

Choose Year:

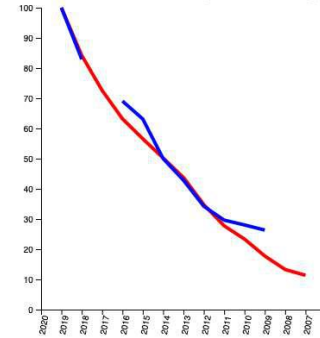
Vertical to horizontal

# Depreciation

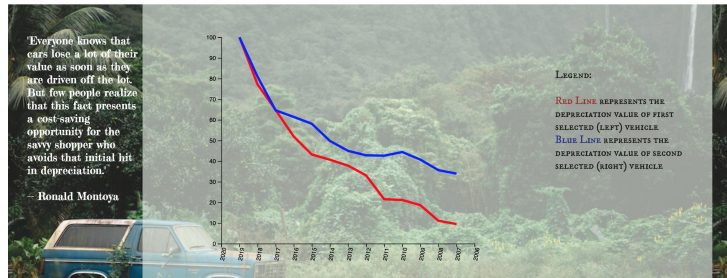


C A4 A5

Depreciation Comparison



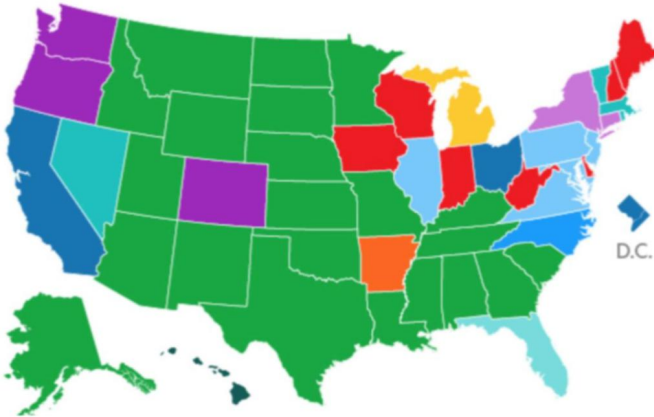
Depreciation Comparison



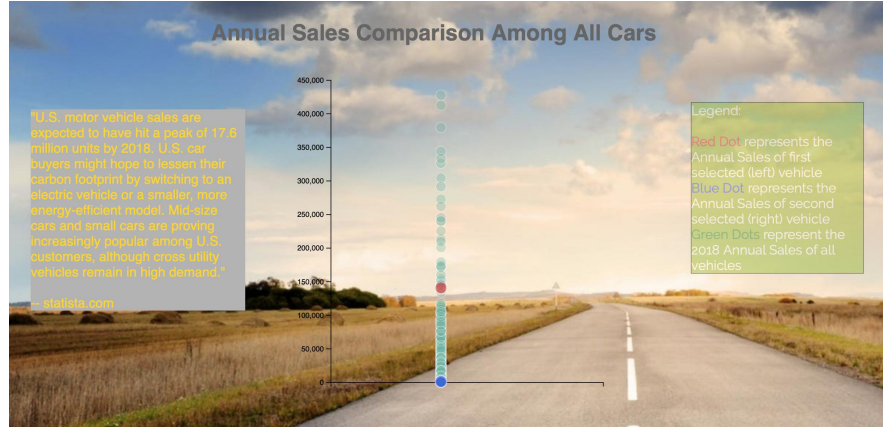
1. Remove the year of best value
2. Add the illustrations

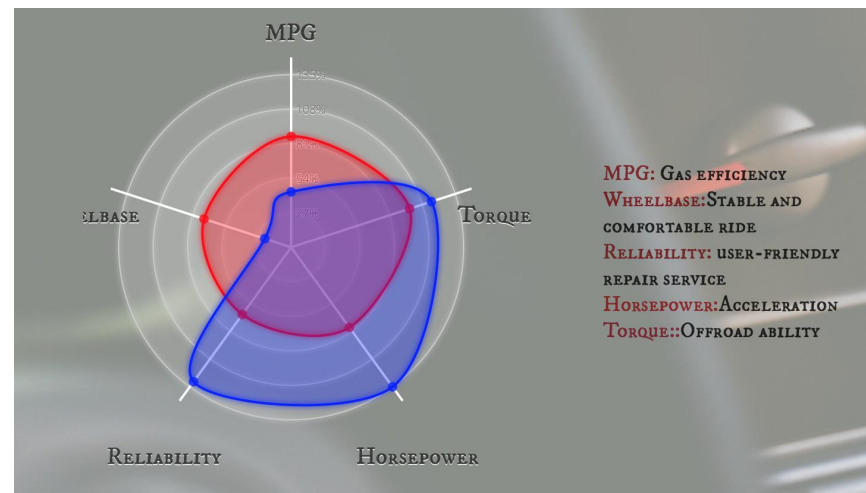
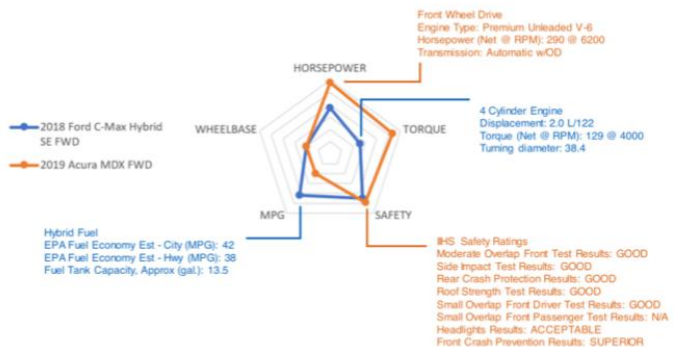
## MOST POPULAR VEHICLES

Top vehicles sold in each state based on new car registrations in 2016.



## Annual Sales Comparison Among All Cars





# Evaluation



1 Electric cars: MPG ( add some illustrations or do the calculation to compare the cost of electricity with the cost of gasoline)

2 At the level of visualization of the data we have, dataset of 200+ model is fine.  
At the level of a car website, we need to enlarge the dataset of trims.

3 Reliability score of 2018 is not completed, and we use the score of 2017, 2016 and even 2015 for substitute.

4 Add more guidance to our website to lead users since each function is not independent.



# Q & A

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