

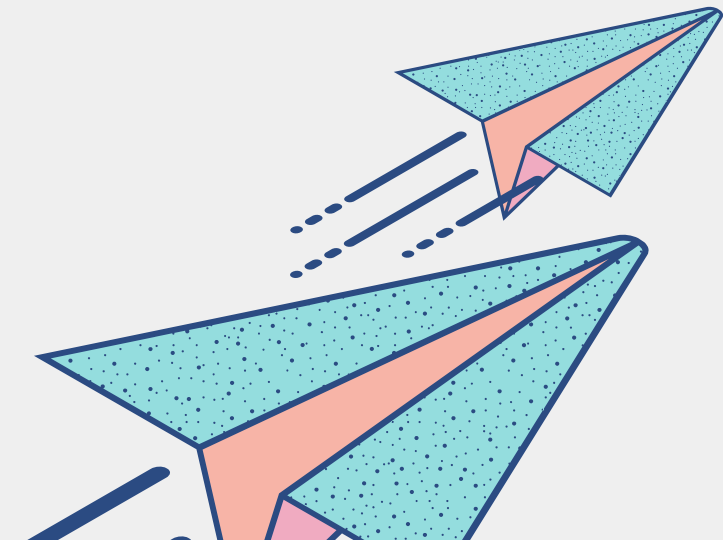
MICROSOFT ENGAGE 2022



Project :
Data Analysis

Data Analysis in Automotive Industry

- Analysis of Cars



Overview

Welcome to AutoCARs. Here you can get a complete analysis and recent trends in all types of Car in the Automotive Industry. You can demonstrate how the Automotive Industry could harness data to take informed decisions. The project aims to perform various visualizations and provide various insights from the considered Indian automobile dataset by performing data analysis that utilizes machine learning algorithms in Python programming language. The considered dataset is of Indian cars that consist of various features. The insights that could be estimated from this dataset would be features such as the price of a specific car model that could be estimated using the other attributes of that particular car model using machine learning algorithms.

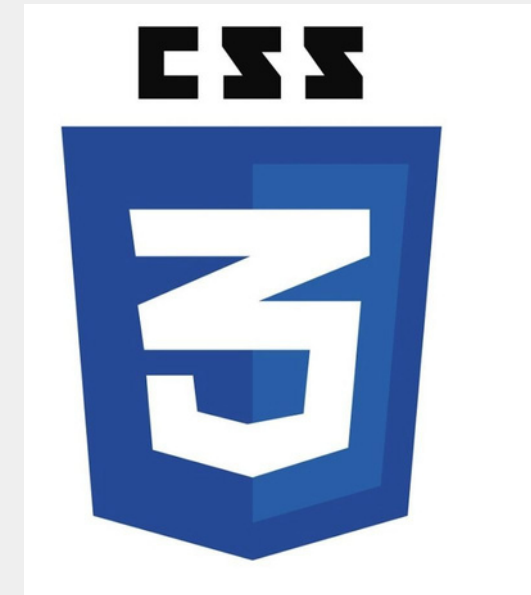
The sections include:-

1. Car Sales Analysis in Ukraine
2. Car Sales Analysis in the US
3. Predict Used Car Price

Structure Of The Project

- The home page consists of an about section, a services section, and a contact section where in the section you will find three options i.e, car Sales Analysis in Ukraine, Car Sales Analysis in US, and Car Price Prediction.
- In the first section, there is a Car Sales Analysis in Ukraine where there are different queries answered related to recent Car Sales in Ukraine in form of different visualization using Plotly.
- The next section consists of a Car Sales Analysis in the US where different quires are answered in form of visualization related to Car Sales in the US. The user gets to know about the different trends in the automotive industry.
- Using the above two analyses, we can get a complete understanding of the automotive industry.
- The last section consists of Used Car price prediction where the Machine Learning Model uses the Random Forest Regression to predict the price of the car.
- The prediction section consists of forms that take a few different features as input from the user in a given specified range. The most relevant features are taken into consideration for prediction also these features
- So the user can get a complete analysis of the current trends related to the automotive industry and Car sales.

Teck Stack



Model Deployment

- The web application is built using python library -> Flask and Web Programming languages -> HTML, CSS, Bootstrap
- The entire application is finally deployed on Heroku by adding - Procfile (informs Heroku which application is to be run first), Requirements (notifies Heroku about the libraries that need to be installed before deploying or running our application)
- See the deployed application [here](#).

Github Link: <https://github.com/tandrimasingha/Data-Analysis>

Deployed Application: <https://data-auto-visual.herokuapp.com>

Demo Video Link: <https://youtu.be/WyZ1jjludDo>



Thank You....