Mini Project Report

on

Car Price Prediction

(BTech CSE V Semester) 2023-2024

Submitted to:

Mr.Abhishek Jain

(CC- Section H- V-Sem)

Submitted by:

Aikansh Shridhar

Roll No.: 07

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

GRAPHIC ERA HILL UNIVERSITY, DEHRADUN

CERTIFICATE

Certified that Mr.Aikansh Shridhar (Roll No.- 12) has completed Mini Project with title "Car Price Prediction" for the fulfilment of **Course- BTech CSE** V Semester in Graphic Era Hill University, Dehradun. Student has successfully completed this course as best of my knowledge.

Date: 06-01-2024

(Mr.Abhishek)

Class Coordinator

CC-Section H (V-Sem)

CSE Department

GEHU, Dehradun

ACKNOWLEDGMENT

I would like to express our gratitude to the Almighty, the most Beneficent and the most Merciful Mr. Animesh, for Successful completion of MINI PROJECT.

I wish to thank our parents for their continuing support and encouragement. We also wish to thank them for providing us with the opportunity to reach this far in our studies.

I would like to thank particularly my External Supervisor for his patience, support and encouragement throughout the completion of this Course. At last but not the least I greatly indebted to all other persons who directly or indirectly helped me during this course.

Aikansh Shridhar

Roll No.- 12

Course : BTech CSE -H-V-Sem

Session: 2023-2024

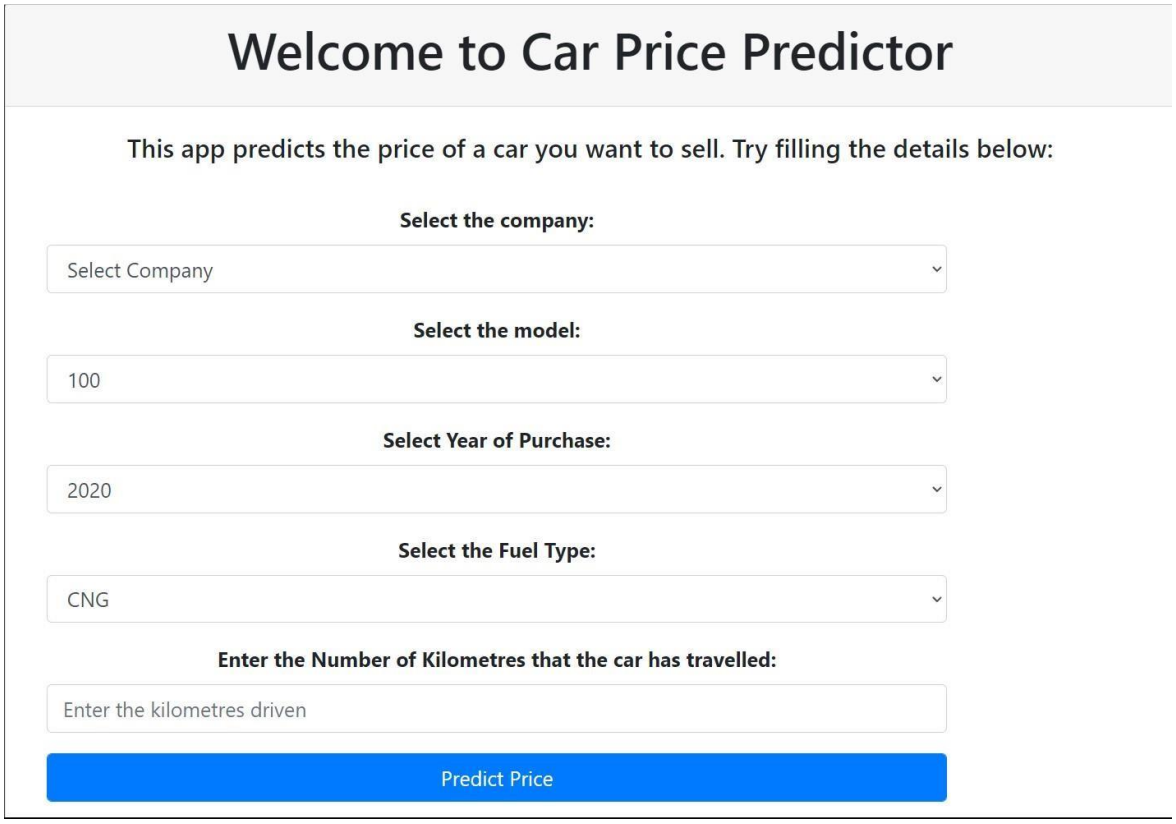
GEHU, Dehradun

TABLE OF CONTENTS

1. INTRODUCTION

The Title of my Mini Project is “Car Price Prediction”. As the name suggests my project is on fetching the details of the car like Manufacturer, Model, Production Year, Fuel Type, Kilometres Driven etc.

It shows the predict price of the car whose detail has been mentioned.



2. RESOURCES USED

2.1 HTML

HTML is an acronym which stands for **Hyper Text Markup Language** which is used for creating web pages and web applications. Let's see what is meant by Hypertext Markup Language, and Web page.

Hyper Text: HyperText simply means "Text within Text." A text has a link within it, is a hypertext. Whenever you click on a link which brings you to a new webpage, you have clicked on a hypertext. HyperText is a way to link two or more web pages (HTML documents) with each other.

Markup language: A markup language is a computer language that is used to apply layout and formatting conventions to a text document. Markup language makes text more interactive and dynamic. It can turn text into images, tables, links, etc.

Web Page: A web page is a document which is commonly written in HTML and translated by a web browser. A web page can be identified by entering an URL. A Web page can be of the static or dynamic type.

2.2 CSS (Cascading Style Sheets)

- 1. Compatibility While using CSS, a user can be stress-free with its older language versions as it is well compatible even with the older versions.
- 2. E-Commerce Domain.
- 3. Website Maintenance.
- 4. Social Media Impact.
- 5. Web-based Online Community and UI Approach.
- 6. Easy Accessibility.
- 7. Image File Handling.
- 8. Handling Dynamic Website Templates.

2.3 JAVA SCRIPT

JavaScript might be a client-side scripting language, inferring that the client's browser handles ASCII text file processing rather than an online server. With the aid of JavaScript, this can load the webpage without contacting the primary server.

JavaScript is simple to comprehend and pick up.

Accelerates programme execution by eliminating the wait time for server connections.

Because JavaScript seamlessly integrates with other programming languages, many developed favour using it to create a variety of applications.

2.4 PYCHARM

PyCharm is an integrated development environment (IDE) specifically designed for Python programming. It is developed by JetBrains and provides a comprehensive set of tools for Python development, including code editing, debugging, code analysis, and project management features.
PyCharm offers a user-friendly interface with a wide range of features to enhance productivity and streamline the development process.

2.5 JUPYTER NOTEBOOK

Jupyter Notebook, now known as JupyterLab, is an open-source web-based interactive computing environment that allows you to create and share documents containing live code, visualizations, explanatory text, and more. It supports various programming languages, including Python, R, Julia, and others.

2.6 DATASET

Dataset used in this project was downloaded from Kaggle.com. The dataset contain name of the model, name of the company, price of the car, year of purchase and fuel type(Deisel,Petrol,Gas) and kilometres travelled. On the basis of these categories the model trains itself and predicts the price to sell.

3. INFORMATION ABOUT PROJECT

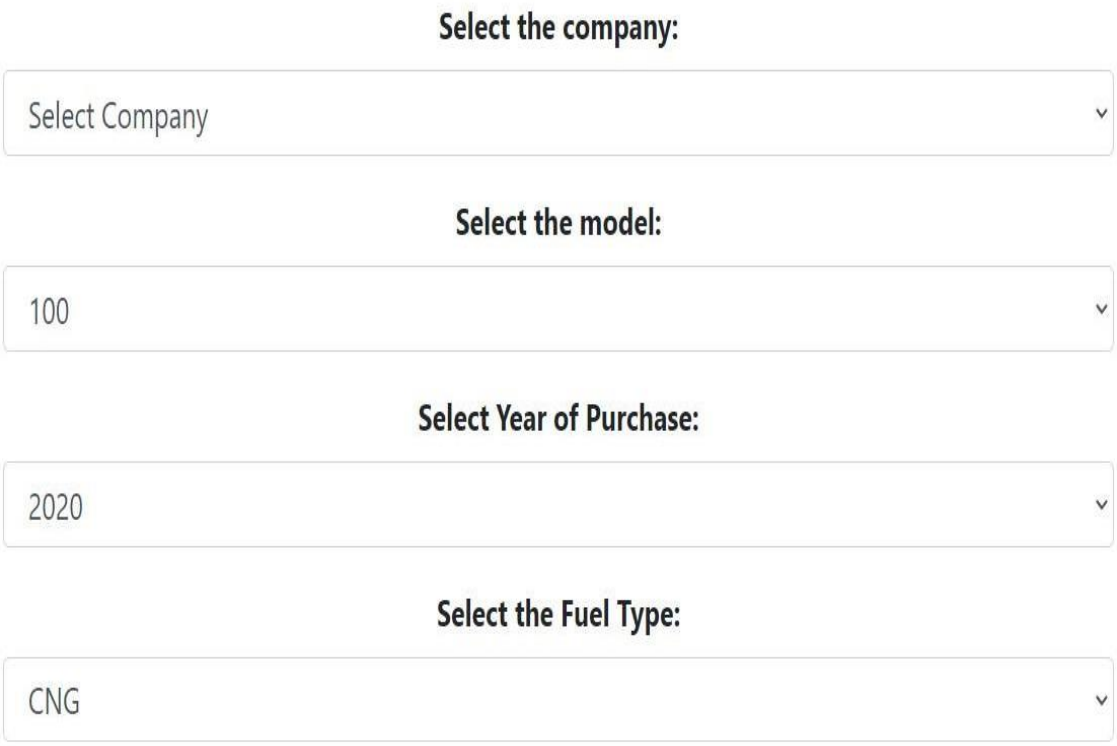
1- We have used a dataset having the features as Manufacturer, Car Model, Year of manufacturing, Fuel Type, Kilometers Travelled and Price of the Car.

	name	company	year	Price	kms_driven	fuel_type
0	Hyundai Santro Xing XO eRLX Euro III	Hyundai	2007	80,000	45,000 kms	Petrol
1	Mahindra Jeep CL550 MDI	Mahindra	2006	4,25,000	40 kms	Diesel
2	Maruti Suzuki Alto 800 Vxi	Maruti	2018	Ask For Price	22,000 kms	Petrol
3	Hyundai Grand i10 Magna 1.2 Kappa VTVT	Hyundai	2014	3,25,000	28,000 kms	Petrol
4	Ford EcoSport Titanium 1.5L TDCi	Ford	2014	5,75,000	36,000 kms	Diesel

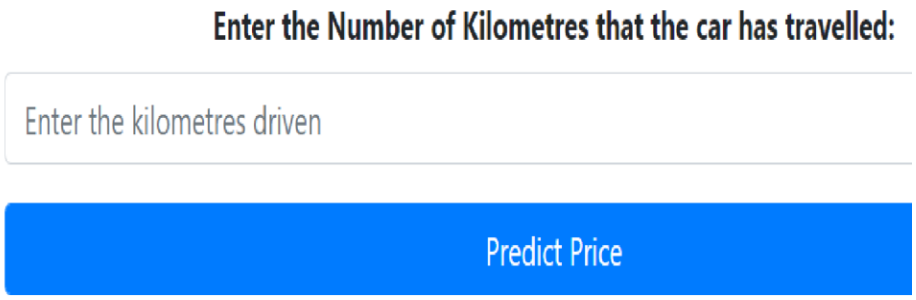
2- We have used Linear Regression Algorithm for predicting the linear relation between the dependent and independent variables.

3- Linear Regression Algorithm :- Linear regression is a popular algorithm used in statistical modeling and machine learning to establish a relationship between a dependent variable (target variable) and one or more independent variables (features). It assumes a linear relationship between the input variables and the target variable and aims to find the best-fit line that minimizes the difference between the predicted and actual values.

4- We have to select company, model, year of purchase, fuel type of the car.



5- We can add the kilometers the car have travelled and can predict the price to sell the car.



4. CONCLUSION

This was all about the mini project “Car Price Prediction”. The model helps us in finding the predicted price of the car we want to sell using various attributes like name of the company, name of the model, year of purchase, fuel type of the car and kilometres travelled. Though there are many websites like this but by making this I learned new things and I’ll be looking forward to improve my knowledge and make other projects.