

Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	15 October 2022
Team ID	PNT2022TMID31751
Project Name	Project – CAR RESALE VALUE PREDICTION
Maximum Marks	4 Marks

TECHNOLOGICAL ARCHITECTURE FOR CAR RESALE VALUE PREDICTION:

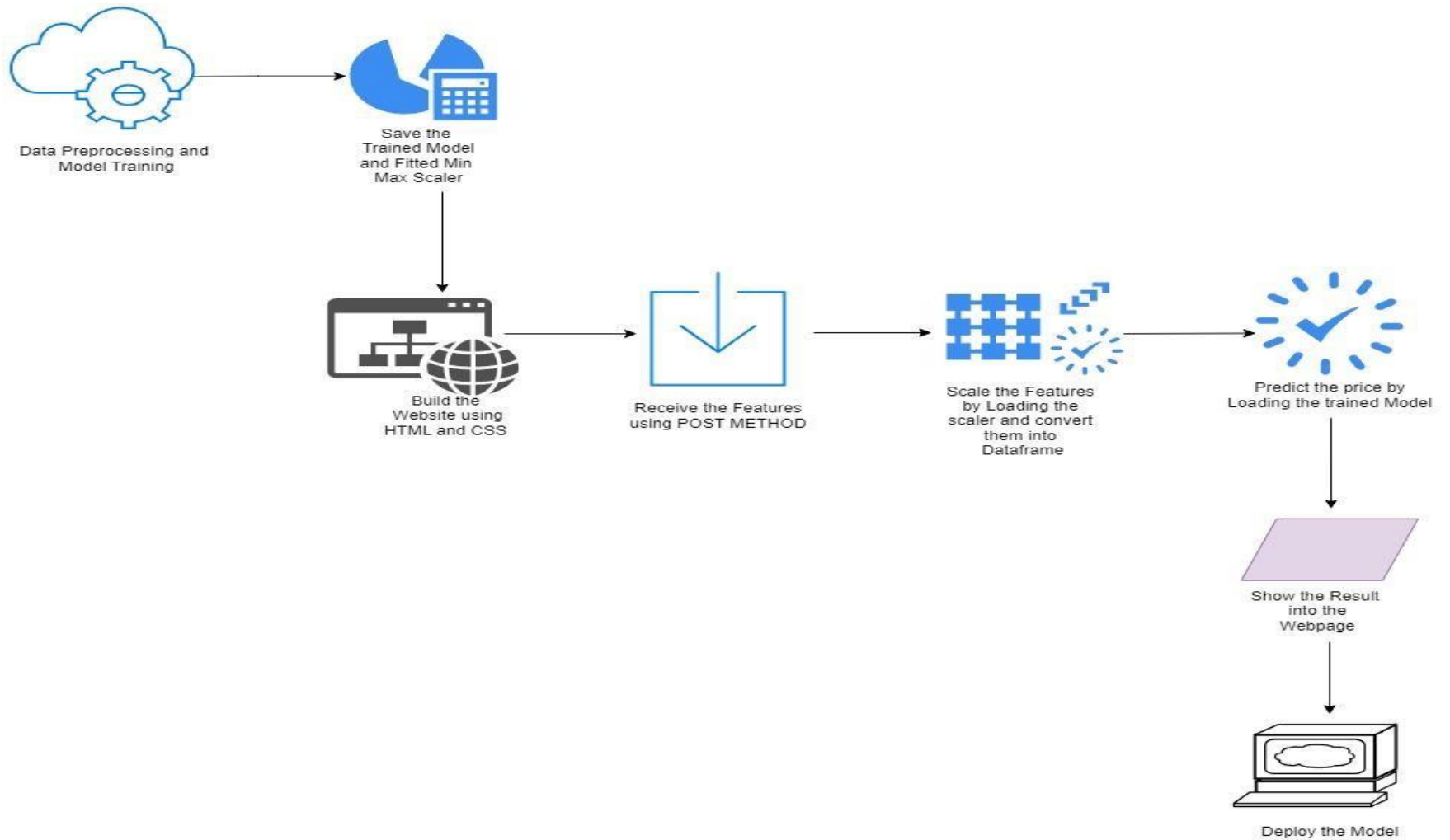


Table-1 : Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	Web UI	HTML and CSS
2.	Application Logic-1	Using databases containing information about cars	Datasets and task formalization using python
3.	Application Logic-2	The data should be pre-processed to make it appropriate for machine learning.	Encoding categorical variables
4.	Database	Including information on the car, such as the price and type of fuel,	Datasets
5.	Cloud Database	Cloud database service	Google cloud platform (GCP)
6.	File Storage	Storage requirements for files	Local file systems
7.	Machine Learning Model	used to determine the most accurate resale value model	Linear Regression model, Lasso Regression etc.,
8.	Infrastructure (Cloud)	Cloud Application Deployment Cloud Server Configuration : allow developers to create, launch, and manage cloud-based applications.	Heroku platform

Table-2: Application Characteristics:

S. No	Characteristics	Description	Technology
1.	Open-Source Frameworks	A machine learning software package that enables programmers to build the optimal model	Tensor Flow
2.	Security Implementations	used to identify unidentified attacks without a recognised signature	Malware analysis
3	Scalable Architecture	It can handle any volume of data and carry out a variety of calculations.	HTML , CSS and Python flask framework
4.	Availability	Services must be available without interruption all the time, excluding when the servers are being updated.	Classification and regression model
5.	Performance	The web application can be accessed by multiple users.	Firebase Machine learning