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

Date	29 October 2022
Team ID	PNT2022TMID42691
Project Name	Project – CAR RESALE VALUE PREDICTION
Maximum Marks	4 Marks

TECHNOLOGICAL ARCHITECTURE FOR CAR RESALE VALUE PREDICTION:

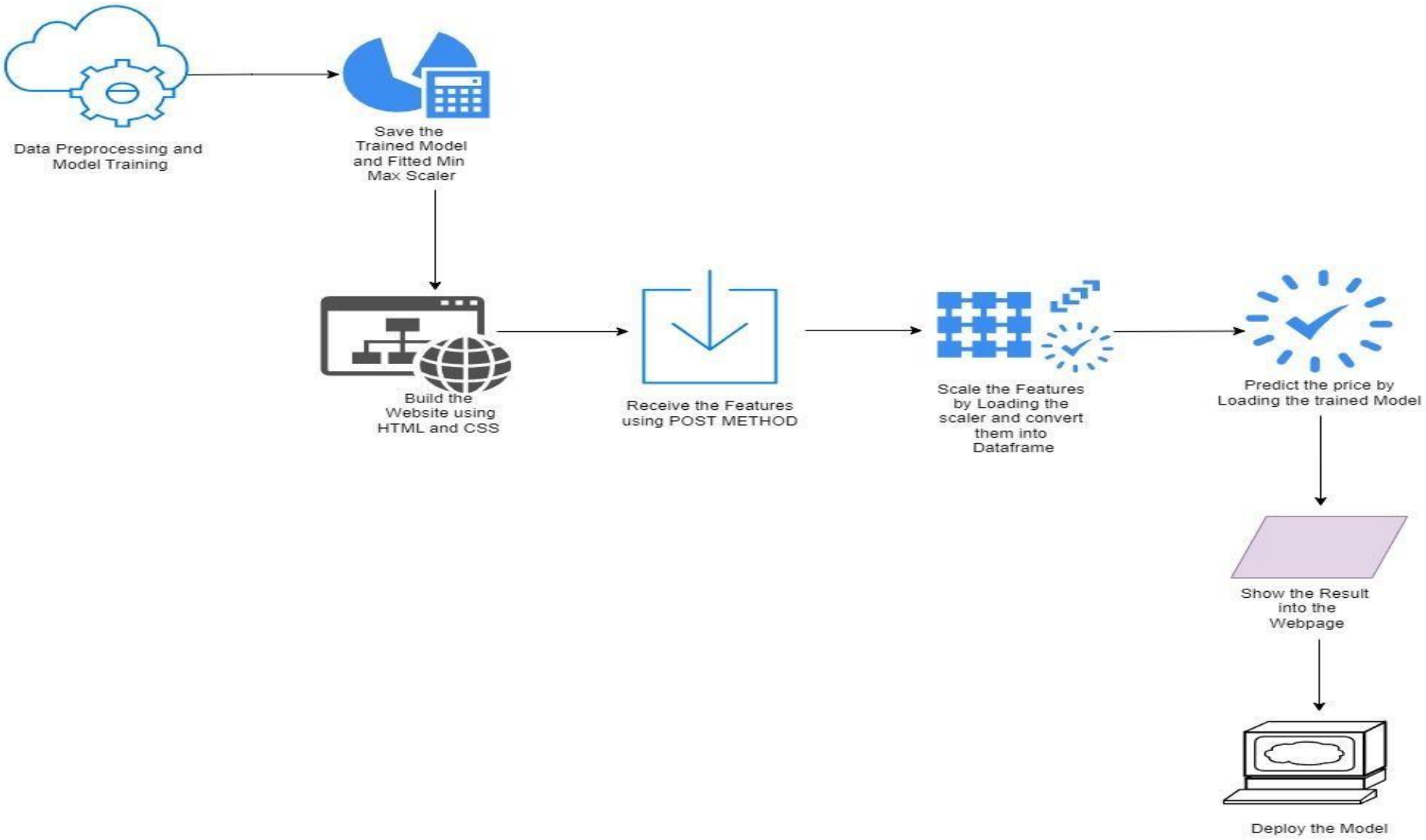
Data Preprocessing and Model Training
Save the Trained Model and Fitted Min Max Scaler
Build the Website using HTML and CSS
Receive the Features using POST METHOD
Scale the Features by Loading the scaler and convert them into Dataframe
Predict the price by Loading the trained Model
Show the Result into the Webpage
Deploy the Model

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web UI	HTML and CSS
2.	Application Logic-1	Worked with datasets composed of details about cars	Datasets and task formalization using python
3.	Application Logic-2	Pre –process the data and make it suitable for machine learning	Encoding categorical variables
4.	Database	Containing the details about car like fuel type,price etc.,	Datasets
5.	Cloud Database	Database Service on Cloud	Google cloud platform (GCP)
6.	File Storage	File storage requirements	Local file systems
7.	Machine Learning Model	Used to predict the best resale value model	Linear Regression model, Lasso Regression etc.,
8.	Infrastructure (Cloud)	Application Deployment on Cloud Cloud Server Configuration : Enable developers to build, run and operate applications in the cloud	Heroku platform

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Software library built for machine learning that enable developers to create a best model	Tensor Flow
2.	Security Implementations	Used to detect unknown attacks with no established signature	Malware analysis

S.No	Characteristics	Description	Technology
3.	Scalable Architecture	It can handle any amount of data and perform many computations	HTML , CSS and Python flask framework
4.	Availability	Uninterrupted services must be available in all the time except the time of server updation.	Classification and regression model
5.	Performance	Multiple users can access the web application.	Firebase Machine learning