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

Date	14 November 2022
Team ID	PNT2022TMID21127
Project Name	Project - Car Resale Value Prediction
Maximum Marks	4 Marks

Technical Architecture:
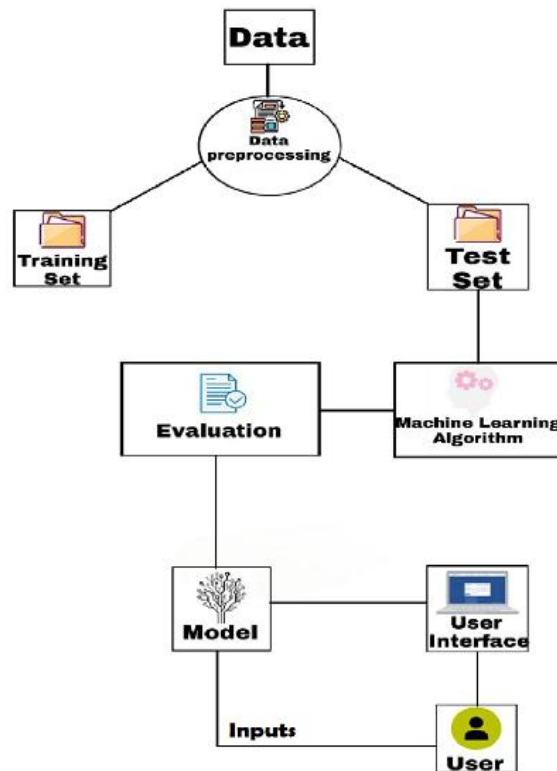
Table-1 : Components & Technologies:

S.no	Component	Description	Technology
1.	User Interface	User interacts with the application using Web UI	HTML, CSS, JavaScript
2.	Application Logic-1	The user create login id and password	Python
3.	Application Logic-2	The user add the car's details in the application	Python
4.	Application Logic-3	The user can place their orders by best predicted values	Python
5.	Database	Stores the user's id and vehicles information in database	MySQL / SQL Server
6.	Cloud Database	The dataset stored in IBM cloud	IBM cloud
7.	File Storage	Stores the users and vehicles details	Local Storage System
8.	Machine Learning Model	The different types of ML models are used for the application. Like, KNN, Random Forest Regression	Regression Algorithm
9.	Infrastructure (Server / Cloud)	Application Deployment : Local System / Cloud Local Server Configuration : User's local data stored in local network Cloud Server Configuration : Car details, prediction process and car value are in cloud	Local

Table-2: Application Characteristics:

S.no	Characteristics	Description	Technology
1.	Open-Source Frameworks	It is a code, that is designed to be accessible publicly	HTML, CSS, Python Flask
2.	Security Implementations	Protection for authentication process and securing data in cloud	Encryptions
3.	Scalable Architecture	It is the property of a model to handle a raising amount of work by adding resources to the model. It consists of 3 tiers	Web Server - HTML, CSS, Java Script Database Server - IBM Cloud Application Server - Python Flask
4.	Availability	It is for use of distributed servers and load balancers	IBM cloud
5.	Performance	It is defines the function of application and how responsive to the user	IBM Cloud environment