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

Date	08 October 2022
Team ID	PNT2022TMID53349
Project Name	CAR RESALE VALUE PREDICTION
Maximum Marks	4 Marks

Technical Architecture:

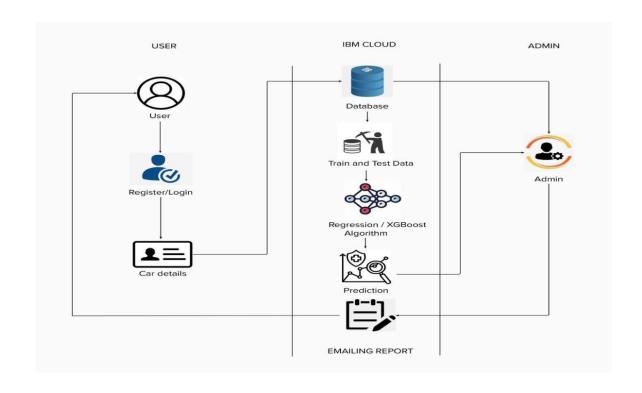


Table-1 : Components & Technologies:

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	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	
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	