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

Team ID	PNT2022TMID42137
Project Name	Car Resale Value Prediction
College Name	AVS College Of Technology

Technical Architecture:

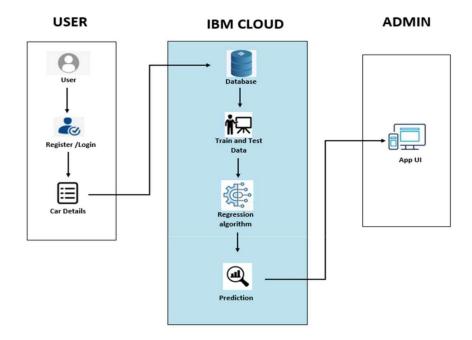


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	A website where the user interacts	HTML, CSS, Js, Python Flask
2.	Data Preprocess	Preprocessing of the dataset	Pandas, Numpy
3.	Prediction	Resale value Prediction	Python models
4.	Cloud Database	Database Service on Cloud	IBM Cloud
5.	Machine Learning Model	ML model for predicting prices	Regression Model

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	open-source frameworks used for development	Python, Flask, Python Libraries
2.	Security Implementations	User Authentication	SHA-256 Encryption
3.	Scalable Architecture	The 3-tier architecture (Web, Application, Database) is scalable.	IBM Cloud
4.	Availability	Application made available even under heavy load	IBM Cloud - cloud hosting
5.	Performance	Able to handle multiple requests	IBM Cloud - load balancers