Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	5 October 2022
Team ID	PNT2022TMID09342
Project Name	Project- Car Resale Value Prediction
Maximum Marks	4 Marks

Technical Architecture:

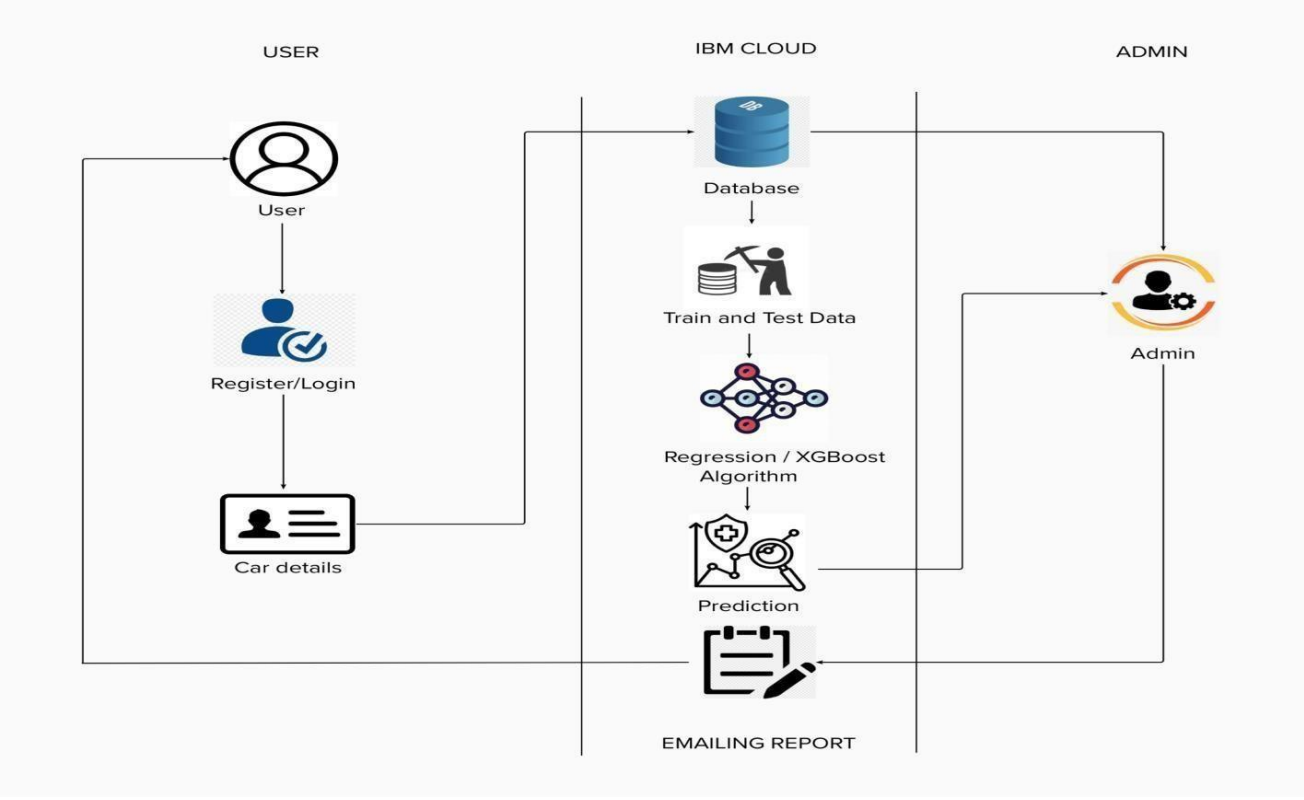

Table-1 : Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	The user interacts with application using Web UI.	HTML, CSS, JavaScript , ReactJS etc.
2.	Database	The dataset containing car details is used for training the model to predict the rate.	Python libraries like NumPy, Pandas etc.
3.	Cloud Database	The dataset is stored in the IBM cloud	IBM Cloud
4.	Machine Learning algorithms	The machine learning algorithms are used to predict the used cars rate.	XG Boost or Regression algorithm
5.	Chart	The user will receive the prediction chart	SMTP

Table-2: Application Characteristics:

S. No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Open-source frameworks used	Python Flask, Python, IBM Cloud
2.	Security Implementations	Authentication process implementation	Encryptions.
3.	Scalable Architecture	Scalability of architecture consists of 3 tiers	Web server-HTML, CSS, Java script Application server-Python Flask Database server-IBM Cloud
4.	Availability	The user can access through cloud	IBM Cloud hosting
5.	Performance	Multiple users can access the web application	IBM Load Balance