

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

Date	03 October 2022
Team ID	PNT2022TMID12421
Project Name	Project - Car Resale Value Prediction
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

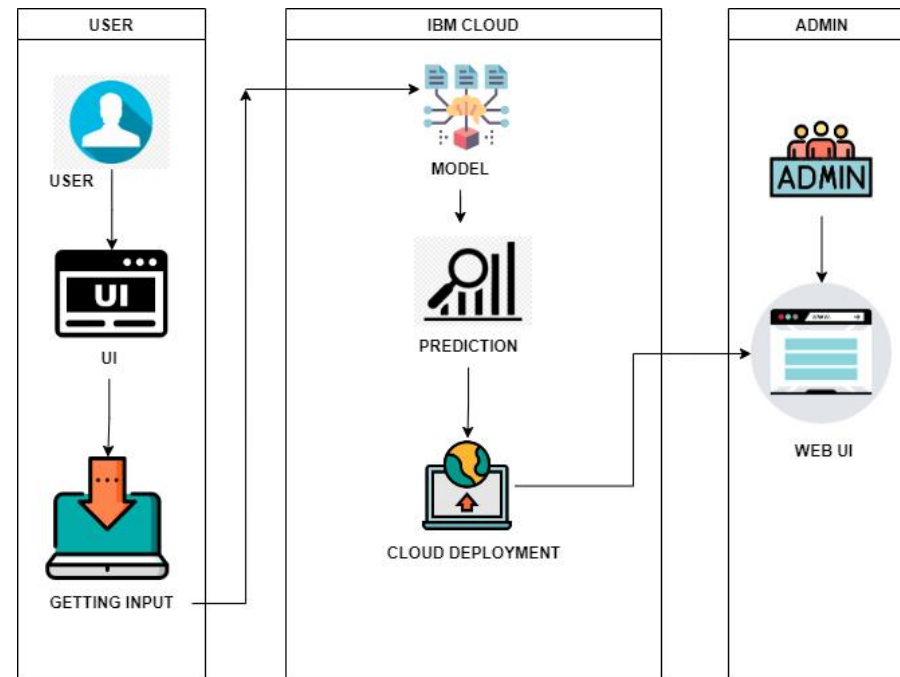


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Value Prediction	ML model to predict the price of the used cars.	Python
3.	Database	Big data that are stored In nosql databases.	NoSQL, etc.
4.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
5.	File Storage	File storage requirements	IBM Block Storage.
6.	Machine Learning Model	Purpose of Machine Learning Model	Used Car value Prediction model.
7.	Infrastructure (Server / Cloud)	Application Deployment on Cloud Cloud Server Configuration :	Cloud Foundry.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List of open-source frameworks used	Google Colab, Anaconda Navigator, Python flask.
2.	Security Implementations	User Encryption	SHA-256, Encryptions,
3.	Scalable Architecture	Must supports higher workload.	IBM cloud, Model performance.
4.	Availability	Availability of application.	Deployment on IBM cloud
5.	Performance	Performance of the application is high as we used Random forest algorithm and the model deployment on cloud.	Random forest regressor, IBM cloud.