

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

Date	03 October 2022
Team ID	PNT2022TMID21557
Project Name	Project - Car Resale Value Prediction
Maximum Marks	4 Marks

Technical Architecture:

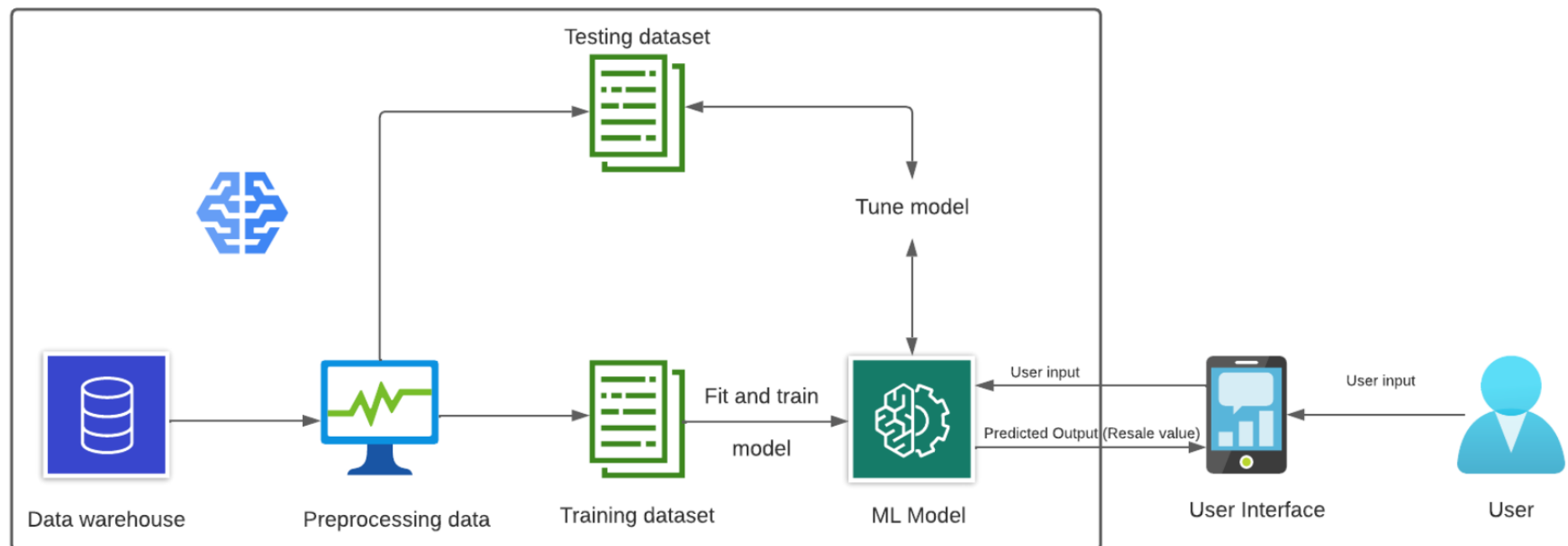


Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user interacts with application using Web UI	HTML, CSS, JavaScript etc.
2.	Application Logic-1	Logic for a process in the application	Python
3.	Database	The dataset containing car details is used for training the model to predict the rate	NoSQL.
4.	Cloud Database	The dataset is stored in the IBM cloud	IBM DB2.
5.	File Storage	File storage requirements	IBM Block Storage.
6.	Machine Learning Model	It is responsible for predicting the resale value of the cars.	Regression Model
7.	Infrastructure (Server / Cloud)	Application will be deployed in cloud.	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Open-source frameworks used	Flask, Python, IBM Cloud
2.	Security Implementations	Security / access controls implemented, use of firewalls etc.	Encryptions
3.	Scalable Architecture	Scalability of architecture consists of 3 tiers	Web Server - HTML, CSS, Javascript Application Server - Python Flask Database Server - IBM Cloud
4.	Availability	User can access our application through cloud all the time	IBM Cloud Hosting.
5.	Performance	Multiple users can access the web application and can perform actions simultaneously	IBM Load Balance