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

Date	15 October 2022
Team ID	PNT2022TMID53870
Project Name	Intelligent Vehicle Damage Assessment & Cost Estimator for Insurance Companies
Maximum Marks	4 Marks

Technical Architecture:

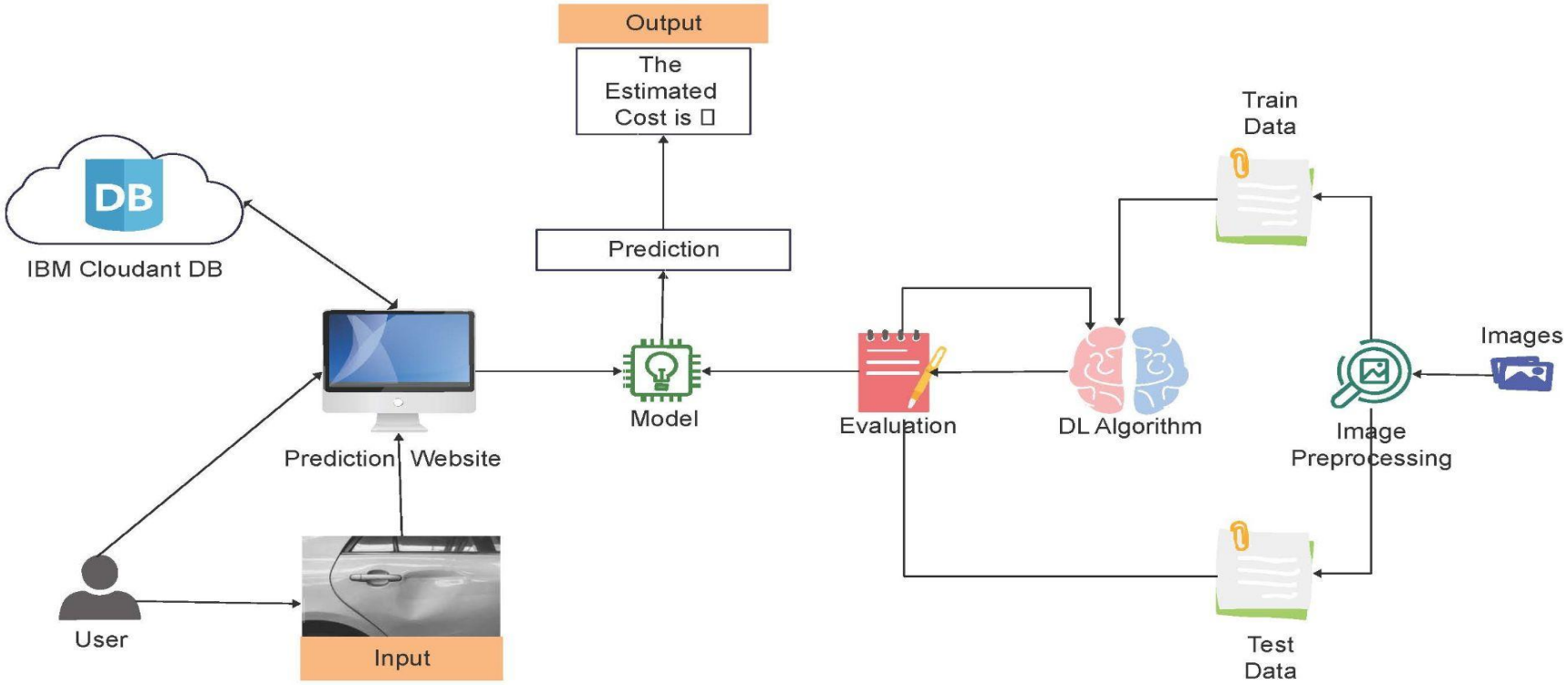

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript
2.	Application Logic-1	Logic for a process in the application	Python
3.	Application Logic-2	Logic for a process in the application	IBM Cloudant
4.	Application Logic-3	Logic for a process in the application	Flask
5.	Database	Data Type, Configurations etc.	MySQL
6.	Cloud Database	Database Service on Cloud	IBM Cloudant
7.	File Storage	File storage requirements	Local Filesystem
8.	External API-1	To store the users' details in the cloud	IBM Cloudant API
9.	Machine Learning Model	The main purpose of this CNN model is to predict the part of damage and severity of damage	Convolutional Neural Network, Artificial Technology
10.	Infrastructure (Server / Cloud)	Application Deployment on Local System Local Server Configuration: The application runs defaultly on local host address (127.0.0.1:8080 in our case)	Localhost address-HTML

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Google Colab, IBM Watson Studio, IBM Cloudant	Jupyter Notebook, Cloud Database, IAM Controls
2.	Security Implementations	HTTPS	SSL
3.	Scalable Architecture	This system is scalable to a large extent if implemented by a well known Insurance Company	Artificial Intelligence
4.	Availability	The system will be available 24*7, the claimants can check the estimated cost for their damaged car	IBM Cloud, HTML, CSS
5.	Performance	The system can assess the damage and gives out the estimation within 20 seconds of uploading the damaged part's photo	VGG16 model, Artificial Intelligence