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

Date	03 October 2022
Team ID	PNT2022TMID34712
Project Name	Intelligent Vehicle Damage Assessment and Cost Estimator for Insurance Companies
Maximum Marks	4 Marks

Technical Architecture:

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

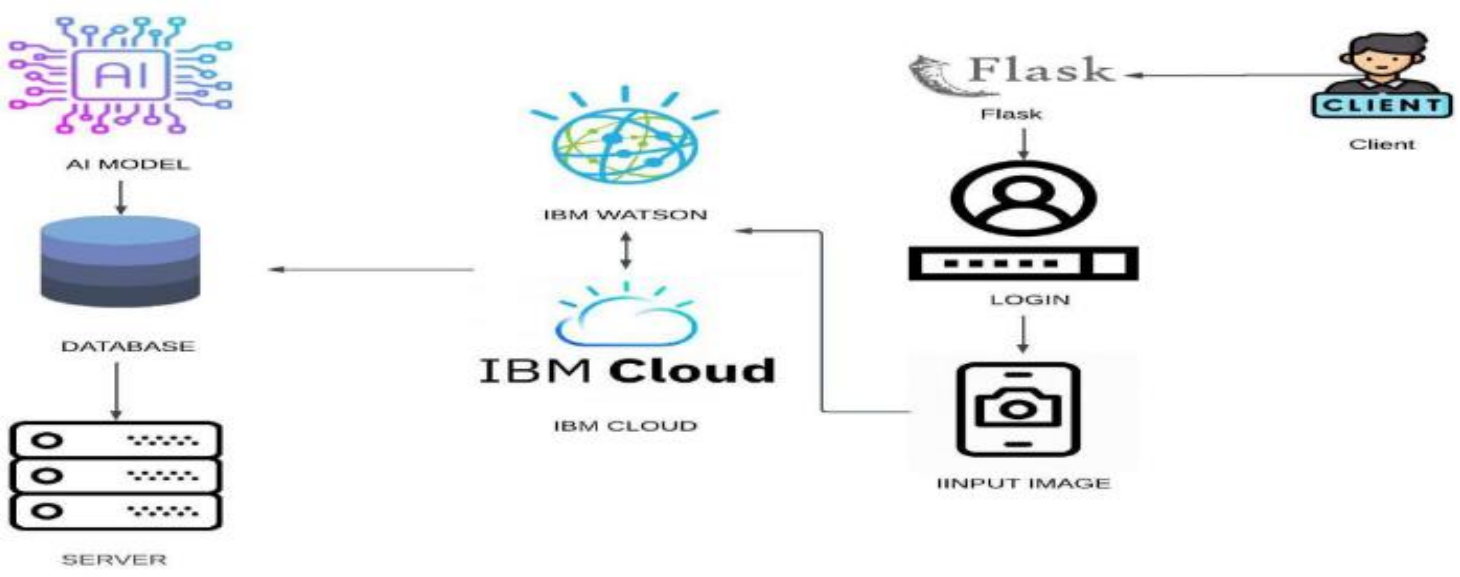

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user interface with the web application	HTML, CSS, python
2.	Application Logic-1	Gets the user input image	Python
3.	Application Logic-2	Obtaining model output for damage prediction	IBM Watson ,python
4.	Application Logic-3	Obtaining model output for cost estimation	IBM Watson,python
5.	Database	Data Type-– Details of images and user inputs sis stored.	MySQL, js,,IBM DB2
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	User details and user input received The images of the vehicle are stored in the cloud	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	The purpose of the AI model is to estimate cost of the damaged vehicle.	Object Recognition Model, CNN Based model, etc. .
9.	External API-2	Let's use the AI model on the cloud server Using Flask on a Web Page	Local, Cloud Foundry, Kubernetes,Python Flask etc
10.	Machine Learning Model	Use machine learning model	Object Recognition Model, etc.
11.	Infrastructure (Server / Cloud)	Cloud service	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	IBM Watson open source frameworks are used	Open source architecture technology IBM Watson
2.	Security Implementations	IBM Cloud	vertified Watson Assistant Encrypted file systems are encrypted Storage systems, key management systems.
3.	Scalable Architecture	Web Server - Static and dynamic website content Existing on the website will be updated accordingly User requests and suggestions Application Server - Basic Upgrade Integrating website functionality and updates The logic in the website can be done Database Server – Based on varying inputs The user supplied database will be modified continuously	IBM Watson Assistant, Python, MySQL
4.	Availability	The AI model is readily available to users any time	IBM Watson Cloud assistance
5.	Performance	IBM Watson - Automated processes, deep The learning model is trained using IBM Watson Studio For better performance and faster access.	IBM Watson Assistant