Technical Architecture:

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

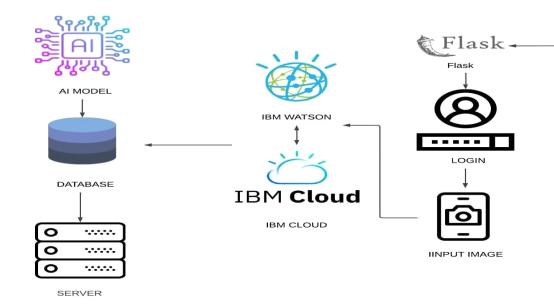| Date	19 October 2022
Team ID	PNT2022TMID37798
Project Name	Intelligent Vehicle Damage Assessment and Cost Estimator for Insurance Companies
Maximum Marks	4 Marks

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user interacts 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 inputsis stored	MySQL, Js, IBM DB2
6.	Cloud Database	A database service in the 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 StorageService or Local Filesystem
8.	Machine Learning Model	The purpose of the AI model is to estimate cost of the damaged vehicle.	Object Recognition Model, CNN Based model, etc.

9.	Infrastructure (Server / Cloud)	Let's use the AI model on the cloud serverUsing Flask on a Web Page	Local, Cloud Foundry, Kubernetes,PythonFlask 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	ertified Watson Assistant Encrypted file systems are encrypted Storage systems, key managementsystems.
3.	Scalable Architecture	Web Server - Static and dynamic website content Existing on the website will be updated accordinglyUser requests and suggestions Application Server - Basic Upgrade Integrating website functionality and updatesThe 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 usersany time	IBM Watson Cloud assistance