## **Technical Architecture:**

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

Date	16 November 2022
Team ID	PNT2022TMID44460
Project Name	Intelligent Vehicle Damage Assessment and Cost Estimator for Insurance Companies
Maximum Marks	4 Marks

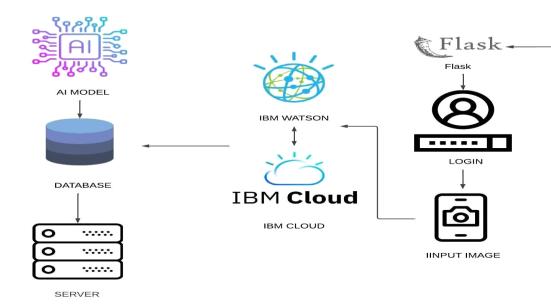


Table-1 : Components & Technologies:

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	Local, Cloud Foundry, Kubernetes,PythonFlask
	Cloudy	serverUsing Flask on a Web Page	etc.

**Table-2: Application Characteristics:** 

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	IBM Watson open source	Open source
		frameworks are used	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	IBM Watson Assistant,
		Application Server - Basic	Python, MySQL
		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	
4.	Availability	The AI model is	
		readily available to	IBM Watson Cloud
		usersany time	assistance