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

Date	**04 October 2022**
Team ID	**PNT2022TMID30316**
Project Name	**Intelligent Vehicle Damage Assessment and Cost Estimator for Insurance Companies**
Maximum Marks	**4 Marks**

Technical Architecture:

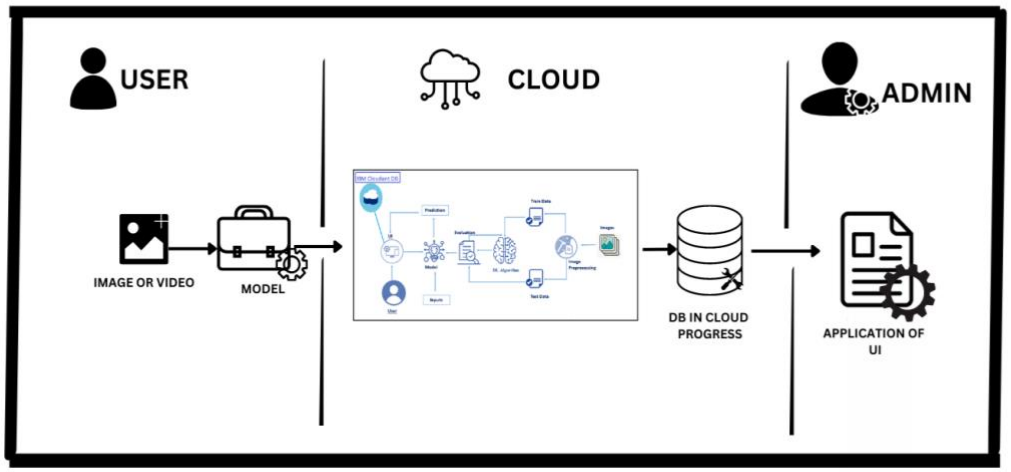

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	Camera	User can predict the damages with camera	HTML, Python,etc.
2.	Process	It process the set of images to pre-processed and to be analysed	Python
3.	Cloud Database	The IBM cloud database contains non structural data such as dataset and damaged vehicle images	IBM cloud_DB
4.	File Storage	The input files to be stored as IBM cloud	IBM block storage or other storage service
5.	Deep learning Model	The deep learning model to use of Image segmentation and damage detection	Algorithm-Support Vector Machine
6.	Infrastructure	Application deployment on insurance companies	Cloud servers and other cloud services.

Table-2 : Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source frameworks	Backend and Frontend framework	Python,IBM cloud
2.	Security Implementations	It is done by each companies to use the method and user protection.	IAM controls and SSH key.
3.	Scalable Architecture	Large number of images can be accessed and detects the damage using data framing	Numpy,pandas
4.	Availability	It is increased by using application load balancers.	IBM cloud network and security.
5.	Performance	The detection should be accurate and estimate the damage level.	IBM load balancers