PROJECT DESIGN PHASE - 1

PROPOSED SOLUTION

Date	21 October 2022
Team ID	PNT2022TMID37022
Project Name	INTELLIGENT VEHICLE DAMAGE ASSESSMENT AND COST ESTIMATION FOR INSURANCE COMPANIES
Maximum Marks	2 Marks

S.no.	Parameter	Description
1.	Problem Statement	• Nowadays lot of money is being wasted in the car insurance business due to leakage claims. It is characterized as the discrepancy between the actual payment of claims made and the sum that should have been paid if all of the industry's leading practices were applied. Visual examination and testing may be used as one of the possible results. However, they impose delays in the processing of claims. There is no easy way of accessing and knowing about the part of the vehicle getting damaged.

2.	Idea / Solution description	• The aim of this project is to build a VGG16 model that can detect the area of damage on a car. The rationale for such a model is that it can be used by insurance companies for faster processing of claims if users can upload pics and the model can assess damage(be it dent scratch from and estimates the cost of damage. This model can also be used by lenders if they are underwriting a car loan, especially for a used car.
3.	Novelty / Uniqueness	Intelligent damage determination system can be used to determine the appearance damage of vehicles in small cases. The system completes the whole process of survey and damage determination through four functions. They are: • Accident investigation • Intelligent image damage assessment • Damage result output • Vehicle insurance anti-fraud
4.	Social Impact / Customer Satisfaction	• Then at last it generates a detailed report on analysis of the automobile and use this to claim one's reimbursement with the insurance company • This project can be used to save time for calculating the area and level of the damage quickly such that the insurance claim can be made efficiently.
5.	Business Model (Revenue Model)	AI possibilities that enable you to provide more client-based services with better Options for business. Generally, service allows quick understanding and assessment of the level of damage to a car and the location of the damage. It also allows for detecting whether the car is really damaged as a result of a car incident, or is it simply dirty.

6.	Scalability of the Solution	• It segregates the pictures based on 2 factors which are replace and repair. i.e. if the damage percentage exceeds say 80% then the damaged part has to be replaced, whereas in the other case “Replace” even in this case it calculates the reimbursement amount based on its damaged percentage