PROJECT DESIGN PHASE-I
PROPOSED SOLUTION

Date	19 September 2022
Team ID	PNT2022TMID51924
Project Name	Project - Intelligent Vehicle Damage Assessment andCost Estimationfor Insurance Companies
Maximum Marks	2 Marks

PROPOSED SOLUTION :

S.NO.	PARAMETER	DESCRIPTION
1.	Problem Statement (Problem to be solved)	Nowadays, Insurance Companies faced the greatest problem which is the leakage of the insurance claim. Some of the customers claim an extra amount for the damage to the vehicle through fake bills for the claim. So The Insurance Companies lost most of the amount due to the leakage of the claim.
2.	Idea / Solution description	To solve this problem, we have to develop software that helps to insurance companies. The procedures we design involve creative initiative that will inspire thecompany has to believe in that software and also the customer..
3.	Novelty / Uniqueness	We applied deep learning-based algorithms, **Mask R-CNN**, for car damage detection and assessment in real world datasets. The algorithms detect the damaged part of a car and assess its location and then its severity. Initially, it discovers the effect of domain-specific **pre-trained CNN models,** which are trained by **datasets.** .
4.	Social Impact / Customer Satisfaction	On the website, customers have to take a photo of the damaged portion of the vehicle and send it to the company to claim the insurance. The process is quicker and they can easily access the website and post the picture on the company's website and estimate the cost for the damage .so we think it is easy for the customers.
5.	Business Model (Revenue Model)	It is more effective than others. It reduces the delay. This helps the customer to get the claim quickly. It has good accuracy.

6.	Scalability of the Solution	Mask R-CNN. Maximum object detection accuracy for training set is approximately 54% (using data augmentation and hyper-parameter tuning).