IDEATION PHASE

INTELLIGENT VEHICLE DAMAGE ASSESSMENT AND COST ESTIMATOR FOR INSURANCE COMPANIES

PROBLEM STATEMENT

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS1	Shyam M	Claim insurance	It takes long time	Company website slow	Frustrated

List of problem statements:

● A car insurance settlement claim is a process that requires near-perfect accuracy in order to avoid deceiving the customer. If such models are to be trained on the huge data sets required to achieve such accuracy, it is difficult and time-consuming to obtain such sets. In addition, these large datasets also require substantial amounts of storage space and processing resources.

● Furthermore, the training and evaluation phases of such systems usually take a long time to complete, which places significant restrictions on the scalability of the system.

● Maintaining a large set of trained models on multiple devices is a costly endeavor, especially for insurance companies with small budgets. These challenges render traditional computer vision-based damage assessment systems unsuitable for use by insurance companies, forcing them to rely instead on less accurate and less accurate algorithms or to abstain from using such systems altogether.

● Developing such a system requires a significant amount of time and effort due to the significant amount of computation required for training the model and the lack of publicly available data that can be used to validate the accuracy of the model.

● The field of Computer Vision is still in its inchoate state and is not mature enough to deal with modular phone camera quality images. Angle, lighting, and resolution are factors that can easily cause major disruptions in image classification

● Car insurance settlement claims require near-perfect accuracy to avoid deceiving the customer in the process. Such models have to be trained on huge data sets that are very difficult to obtain.

● Running such large datasets to ensure maximum accuracy imposes hardware limitations. Storing, training, and delivering such large datasets via the cloud requires expensive architectures.

● While the computer can avoid human errors, there are often situations that would require such a model to flag for human assistance.

● The task of manually approving or disputing a claim falls on staff who must be both well-trained and well-equipped to deal with a variety of situations, both expected and unexpected.

● Manual approval processes are often time-consuming and require a significant amount of staff to be trained to handle a variety of claims.

● As the volume of claims increases, the probability of mistakes increases as well