**Project Design Phase-I**

**Proposed Solution Template**

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| Team ID | PNT2022TMID12053 |
| Project Name | Project – Intelligent vehicle damage assesssment and cost estimator insurance companies |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

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| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | 1.proposed model is that it only identifies the physical visible damage and not of the internal or the interior damage  2.Embedding low-power, low-latency, reliable, and trustworthy intelligence into the network edge is an inevitable trend and disruptive shift in both academia and industry.  3.There are many ways to learn a new skill, but learning in a supervised manner is the most effective and efficient. This is because you're teaching the computer what you want it to do while you're working on the skil.  . |
|  | Idea / Solution description | 1. Split DL further provides a flexible way to train a DNN by dividing it into lower and upper segments located at the edge device-side and edge server-side, respectively . 2. It is generally accepted that AI can be considered in two ways: as a science aimed at trying to discover the essence of intelligence and developing generally intelligent machines, or as a science providing methods for solving complex problems 3. 3..Machine learning is a powerful tool that can be used in almost any situation or task. Here, we will focus on when machine learning is best used in the process of doing research. . |
|  | Novelty / Uniqueness | they applied deep learning-based algorithms, **VGG16 and VGG19**, 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 on an **ImageNet**  **dataset**, and followed by fine-tuning,  because some of the categories can be fine  granular to get a specific task |
|  | Social Impact / Customer Satisfaction | Cars are a major contributor to **air pollution producing significant amounts of nitrogen oxides, carbon monoxide, and particulate matter**. 80-90% of cars' environmental impact comes from fuel consumption and emissions of air pollution and greenhouse gases.  **Vehicle pollutants harm our health and contain greenhouse gases that cause climate change**. Burning gasoline and diesel fuel creates harmful byproducts like nitrogen dioxide, carbon monoxide, hydrocarbons, benzene, and formaldehyde. In addition, vehicles emit carbon dioxide, the most common greenhouse gas. |
|  | Business Model (Revenue Model) | IMG_256 |
|  | Scalability of the Solution | **VGG16.** The transfer  learning could significantly reduce the  training times when it uses the weights of pre  trained VGG models  , it had  demonstrated significant progress on how to  solve classification problems when the small  dataset was not enough to train a **CNN**  **model**  . |