

Project Design Phase-I
Proposed Solution Template

Date	20 November 2023
Team ID	Team-592436
Project Name	Crime Vision: Advanced Crime Classification With Deep Learning
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in the proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The aim is to leverage advanced deep learning techniques to accurately identify and classify various types of crimes, enabling enhanced crime scene investigation, forensic analysis, and surveillance. The key problem is to develop a robust deep learning model that can recognize intricate patterns and features, empowering law enforcement agencies with actionable insights to prevent and combat crime effectively.

2.	Idea / Solution description	A CNN-based classification model that efficiently identifies and separates the available crime scene images (and/or videos) into various types. The deep learning model recognizes the appropriate features and patterns in the visual evidence to accurately classify the crime. It will enable law enforcement agencies to gain useful insights related to the investigation and take further actions on time. It may also help such agencies to devise crime prevention policies and strategies, according to the crime trends.
3.	Novelty / Uniqueness	The distinctive aspect of this approach lies in its seamless scalability to a mobile version, enhancing user-friendliness. Furthermore, the precision of the model is significantly heightened by leveraging advanced algorithms, enabling the classification of even sub-categories of crimes for more accurate outputs.
4.	Social Impact / Customer Satisfaction	The deployment of this deep learning model for crime identification is a major step towards ensuring public safety. It would prove to be a powerful tool for the prevention of crime and delivering timely justice to the victims. An automated system would also ensure workload reduction for officers, further allowing them to use their time and resources effectively.

5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> • The business model will center around a subscription-based Software as a Service (SaaS) model. • The model will follow a tiered approach: <ol style="list-style-type: none"> 1. Free tier (available for free for both private companies and law enforcement agencies). Will include basic access to the crime classification system. 2. Premium tier (available for free for law enforcement agencies only). Private companies will have to pay a subscription fee for enhanced real-time surveillance features, tailored customisation and comprehensive data analysis and insights.
6.	Scalability of the Solution	<p>As the Crime Vision model undergoes regular updates and optimizations, it consistently maintains its efficiency in processing increasing amounts of visual evidence, contributing to its overall scalability and long-term viability in the field of law enforcement. It can effectively accommodate growing volumes of crime-scene evidence and thus remain adaptable to</p>

		emerging patterns in criminal activities.
--	--	---