Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID34177
Project Name	Project - Natural Disasters Intensity Analysis and Classification using Artificial Intelligence
Maximum Marks	2 Marks

Proposed Solution Template:

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

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	In our daily we are facing more natural disasters in our state and in many countries like Covid, flood, earthquake, volcanic eruptions etc. Disaster leads to various issues and development of artificial intelligence would fill the gap of management before any event occurs to reduce the impact of loss. By using AI we can predict natural disaster by AI systems can be trained with the help of seismic data to analyse the magnitude and patterns of earth quakes and predict the location of earthquakes. It can predict flood simulatons and monitor flooding .AI based algorithms can organize disaster data in the order of severity andit can identify climate patterns at risk areas and populations, and send early warnings for potentially disastrous weather events
2.	Idea / Solution description	AI-based solutions enable governments to accelerate the execution of planned projects and reduce the potential recovery cost from post-natural hazards. AI solutions will have an adoption and learning curve for government departments as the outputs from these solutions will have to go through compliance and regulatory approvals
3.	Novelty / Uniqueness	The current study presents a novel technique to detect floods from image using most fitting methods from image processing and machine learning. UAV can be used to capture images of the target area, as it is a battery - operated aerial Vehicle, which can be used to capture high quality spatial images of the affected area quickly. It will be particularly helpful in post-flood circumstances where technologies like Global Positioning System (GPS), WiFi and internet are not available

4.	Social Impact / Customer Satisfaction	The current study presents a novel technique to detect floods from image using most fitting methods from image processing and machine learning. UAV can be used to capture images of the target area, as it is a battery - operated aerial Vehicle, which can be used to capture high quality spatial images of the affected area quickly. It will be particularly helpful in post-flood circumstances where technologies like Global Positioning System (GPS), WiFi and internet are not available
5.	Business Model (Revenue Model)	With AI, organizations can more quickly analyze data and identify the potential risks and gaps that exist within their current environment. AI can model the impact of various disasters, forecast disruptions and act as security surveillance. When disaster strikes, AI can commence the DR response faster than any human can, saving precious time and resources
6.	Scalability of the Solution	The companies that have scaled AI across the business and achieved meaningful value from their investment typically dedicate 10% of their AI investment to algorithms, 20% to technologies, and 70% to embedding AI into business processes and agile ways of working. In other words, these organizations invest twice as much in people and processes as they do in technologies. Earthquakes are measured using the Richter scale, volcanic eruptions using the VEI and Tornadoes using Enhanced Fujita Scale (EF-Scale).