

## Project Design Phase-I Proposed Solution

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| <b>Date</b>          | 09/10/2022   |
| <b>Team ID</b>       | IBM-EPBL/IBM-Project-34611-1660239929  |
| <b>Project Name</b>  | Natural disaster intensity analysis and classification using artificial intelligence |
| <b>Maximum Marks</b> | 2marks   |

### Proposed Solution Template:

Project team shall fill the following information in proposed template

| Parameter                                       | Description  |
|---|--|
| <b>Problem Statement (Problem to be solved)</b> | <ol style="list-style-type: none"><li>1. Emergency measures.</li><li>2. Investments in risk reduction.</li><li>3. Information sharing on newest research findings.</li><li>4. Reforestation.</li></ol> |

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| <b>Idea / Solution description</b>           | <ol style="list-style-type: none"> <li>1. Raising awareness about potential hazards and how to address them.</li> <li>2. Educating the public about how to properly prepare for different types of disaster.</li> <li>3. Installing and strengthening prediction and warning systems.</li> </ol> |
| <b>Novelty / Uniqueness</b>                  | <p>Natural hazards occur across different time and area scales and each is in some way unique. Tornadoes and flash floods are short-lived, violent events,</p>   |
| <b>Social Impact / Customer Satisfaction</b> | <p>Trauma and grief will put personal, family and community relationships under pressure. The mental health impacts of disasters can lead to an increase in problematic alcohol and drug use, self-harm, violence and abuse – which may well act as early warning signs.</p>                     |
| <b>Business Model (Revenue Model)</b>        | <p>This section defines the overall method for natural disaster intensity analysis and classification based on multispectral images using a multi-layered deep convolutional neural network. Moreover, this method consists of two blocks of a convolutional neural network.</p>                 |
| <b>Scalability of the Solution</b>           | <p>Predictions and warnings can also reduce damage and economic losses. When notice of an impending disaster can be issued well in advance, as it can for some riverine floods, wildfires, and hurricanes, property and natural resources can be protected.</p>                                  |

