Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	03 October 2022
Team ID	PNT2022TMID40634
Project Name	Project - Natural Disaster Intensity analysis and classification using Artificial Intelligence
Maximum Marks	4 Marks

Technical Architecture

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

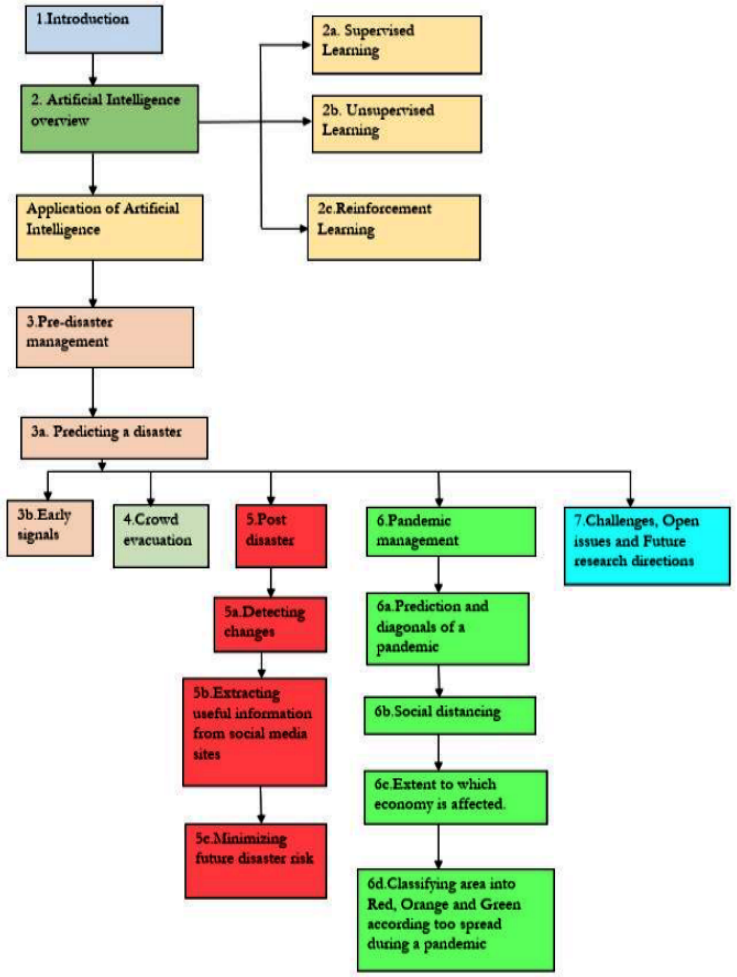

Table-1: Components and Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	NLP, CNN, Deep Learning, etc
2.	Application Logic-1	Logic for a process in the application	Python-flask
3.	Application Logic-2	Logic for a process in the application	IBM Watson Assistant, IBM cloud
4.	Application Logic-3	Logic for a process in the application	NLP, Deep learning
5.	Database	Data Type, Configurations etc.	IBM Weather API
6.	Cloud Database	Database Service on Cloud	Machine Learning, Deep Learning
7.	File Storage	File storage requirements	IBM Cloudant DB
8.	External API-1	Purpose of External API used in the application	Adhar API
9.	External API-2	Purpose of External API used in the application	My SQL, No SQL
10.	Convolutional Neural Network	Purpose of Convolutional neural network	Image Recognition

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	With the goal to facilitate evaluation and mitigation of the risks from natural hazards, the Natural Hazards Engineering Research Infrastructure's Computational modeling.	Technology of neural network
2.	Security Implementations	Geographical information to share problems in the prediction.	GPS using disaster detection.
3.	Scalable Architecture	Disaster damages are measured involves examining the number of fatalities, of injuries, of people affected.	Technology used in AI
4.	Availability	It can be available at the any time and we can access during disasters.	Technology used in CNN
5.	Performance	Web enabled research Network can help limit the impact of natural disaster	Land-based sensors