## **Project Design Phase-II**

## **Solution Requirements (Functional & Non-functional)**

| Date          | 15 October 2022   |  |  |
|---------------|---|--|--|
| Team ID       | PNT2022TMID43446  |  |  |
| Project Name  | Project – Natural Disasters Intensity Analysis and Classification using Artificial Intelligence |  |  |
| Maximum Marks | 4 Marks   |  |  |

## **Functional Requirements:**

Following are the functional requirements of the proposed solution.

| FR<br>No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task)   |  |
|-----------|-------------------------------|--|--|
| FR-1      | Request Permission            | Access permission from web camera.   |  |
| FR-2      | Disaster Prediction           | Based on the webcam image, natural disaster is classified.                                     |  |
| FR-3      | Accuracy                      | Since the training and testing images are huge, the accuracy is higher.                        |  |
| FR-4      | Speed                         | The generation of results from the input images are faster.                                    |  |
| FR-5      | Resolution                    | The resolution of the integrated web camera should be high enough to capture the video Frames. |  |
| FR-6      | User Interface                | Maximizing the interaction in Web Designing Service.   |  |

## **Non-functional Requirements:**

Following are the non-functional requirements of the proposed solution.

| FR<br>No. | Non-Functional<br>Requirement | Description   |  |
|-----------|-------------------------------|---|--|
| NFR-1     | Usability                     | User friendly and classify the disaster easily.   |  |
| NFR-2     | Security                      | The model is secure due to the cloud deployment models and also there is no login issue.  |  |
| NFR-3     | Reliability                   | Accurate prediction of the natural disaster and the website can also be fault tolerant.   |  |
| NFR-4     | Performance                   | It is shown that the model gives almost 90 percent accuracy after continuous training.  |  |
| NFR-5     | Availability                  | The website will be made available for 24 hours.  |  |
| NFR-6     | Scalability                   | The website can run on web browsers like<br>Google chrome, Microsoft edge and also it can<br>be extended to the NDRF and customers. |  |