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| --- | --- | --- |
|  | **Project Design Phase-II** | |
|  | **Solution Requirements (Functional & Non-functional)** | |
|  |  |  |
| Date |  | 18 October 2022 |
| Team ID |  | PNT2022TMID31240 |
| 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 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 tocapture 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.

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| --- | --- | --- |
| **FR No.** | **Non-Functional 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 Google |
|  |  | chrome, Microsoft edge and also it can be extended |
|  |  | to the NDRF and customers. |
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