

**Project Design Phase-II**  
**Solution Requirements (Functional & Non-functional)**

Date	03 October 2022
Team ID	PNT2022TMID04308
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	User login	<ul style="list-style-type: none"><li>● Login through username or Gmail id.</li><li>● Sign in through google,linkedin,facebook.</li><li>● Login through phone number.</li></ul>
FR-2	User Registration	<ul style="list-style-type: none"><li>● Filling the necessary form.</li><li>● Registration through Gmail.</li><li>● Registration through facebook.</li></ul>
FR-3	User Conformation	<ul style="list-style-type: none"><li>● Verification through Gmail.</li><li>● Verification through sending the otp.</li><li>● Verification through calling the phone by register phone no.</li></ul>
FR-4	User forgot password	<ul style="list-style-type: none"><li>● Sending the change password page through register gmail.</li><li>● Sending the otp and changing the password.</li></ul>
FR-5	Authentication	<ul style="list-style-type: none"><li>● User(normal people).</li><li>● Government.</li><li>● Insurance companies</li></ul>
FR-6	Authorization levels	<ul style="list-style-type: none"><li>● Users,government and some companies(insurance)</li></ul>
FR-7	Uploading the photo	<ul style="list-style-type: none"><li>● Upload the photo through selecting the files in the user's device.</li><li>● Directly taking the photo through application itself.</li></ul>
FR-8	Showing occurrence (page)	<ul style="list-style-type: none"><li>● Showing with colour code for occurrence of disasters or not ,by green for not and red for occurrence of disaster</li></ul>

FR-9	Notifying(users nearby person)page	<ul style="list-style-type: none"> <li>• Message chat functions for notify there nearby person through adding phone no and messaging them</li> </ul>
FR-10	Notifying (government and insurance companies) page	<ul style="list-style-type: none"> <li>• Application automatically sends information to government or insurance if there is any occurrence of disaster in that area.</li> </ul>
FR-11	Log out	<ul style="list-style-type: none"> <li>• Easily clicking the logout button</li> </ul>

### Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	<ul style="list-style-type: none"> <li>• The request from different users ,each request should perform the task which assigned for particular user.</li> </ul>
NFR-2	<b>Security</b>	<ul style="list-style-type: none"> <li>• assuring all data inside the system or its part will be protected against malware attacks or unauthorized access</li> </ul>
NFR-3	<b>Reliability</b>	<ul style="list-style-type: none"> <li>• Is the software system consistently performs the specified functions without failure</li> </ul>
NFR-4	<b>Performance</b>	<ul style="list-style-type: none"> <li>• The software system accomplishes certain functions under specific conditions such as software's speed of response, throughput, execution time, and storage capacity.</li> </ul>
NFR-5	<b>Availability</b>	<ul style="list-style-type: none"> <li>• The process of each process should take less than 10seconds.</li> </ul>
NFR-6	<b>Scalability</b>	<ul style="list-style-type: none"> <li>• The application should perform at high workload without performance degradation.</li> </ul>
NFR-7	<b>Compatibility</b>	<ul style="list-style-type: none"> <li>• The application should work in all phones and pc devices</li> </ul>
NFR-8	<b>Speed</b>	<ul style="list-style-type: none"> <li>• The result from the trained model should show quickly</li> </ul>
NFR-9	<b>Maintainability</b>	<ul style="list-style-type: none"> <li>• The model should be trained with recent dataset for better accuracy ,labelling the disaster and finding the occurrence of disaster.</li> </ul>