

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

|               |   |
|---------------|---|
| Date          | 18 October 2022   |
| Team ID       | PNT2022TMID01254  |
| Project Name  | Project – AI BASED LOCALIZATION AND CLASSIFICATION OF SKIN DISEASE USING ERYTHEMA |
| 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 Registration                          | Registration through Form<br>Registration through Gmail<br>Registration through LinkedIn                                     |
| FR-2   | User Confirmation                          | Confirmation via Email<br>Confirmation via OTP   |
| FR-3   | Get User Input                             | Upload image as jpeg<br>Upload image as png  |
| FR-4   | Image Pre-processing                       | Image of the skin disease is pre-processed to analyze image more efficiently and quickly                                     |
| FR-5   | Feature Extraction                         | After image pre-processing , Feature extraction is done to achieve better classification of the skin disease using erythema. |
| FR-6   | Skin disease Type Prediction with erythema | After feature extraction , According to the given image the type of skin disease is predicted.                               |

**Non-functional Requirements:**

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

| FR No. | Non-Functional Requirement | Description   |
|--------|----------------------------|---|
| NFR-1  | <b>Usability</b>           | The application should have user friendly Graphics User Interface                     |
| NFR-2  | <b>Security</b>            | Only authorized users can view the data so that user data is secured                  |
| NFR-3  | <b>Reliability</b>         | User data should not be shared to any third-party applications.                       |
| NFR-4  | <b>Performance</b>         | The application should detect Erythema as fast as possible with more accuracy         |
| NFR-5  | <b>Availability</b>        | The software should be available for multiple user access simultaneously.             |
| NFR-6  | <b>Scalability</b>         | The application should be scalable to upload multiple images at a time for detection. |