**Project Design Phase-II**

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

| Date | 19 June 2025 |
| --- | --- |
| Team ID | LTVIP2025TMID39799 |
| Project Name | Clean Tech: Transforming waste into Transfer Learning |
| 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 | Image Upload | Upload blood cell image from device |
| FR-2 | Cell Classification | Classify image into eosinophils, lymphocytes, monocytes, or neutrophils |
| FR-3 | Diagnostic Report Generation | Generate downloadable report of cell counts |
| FR-4 | User Registration | Registration via Email, Gmail, or LinkedIn |
| FR-5 | Remote Access for Doctors | Doctors can submit images remotely for diagnosis |
| FR -6 | Feedback Module for Training Mode | Users receive instant classification feedback |

**Non-functional Requirements:**

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

| **FR No.** | **Non-Functional Requirement** | **Description** |
| --- | --- | --- |
| NFR-1 | **Usability** | Easy-to-use UI for uploading and viewing results |
| NFR-2 | **Security** | Secure handling of medical images and user data |
| NFR-3 | **Reliability** | High accuracy and consistency in classification results |
| NFR-4 | **Performance** | Fast response time for classification and report generation |
| NFR-5 | **Availability** | 24/7 availability for remote diagnostics and training |
| NFR-6 | **Scalability** | System can scale with increasing users and image volume |