**Project Design Phase-II**

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

|  |  |
| --- | --- |
| Date | 15 October 2022 |
| Team ID | PNT2022TMID43552 |
| Project Name | Deep learning Fundus image analysis for early detection of Diabetic Retinopathy. |
| 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  Registration through Gmail  Registration through LinkedIN |
| FR-2 | User Confirmation | Confirmation via Email  Confirmation via OTP |
| FR-3 | Describe what the product does | Image pre processing and early detection of DR. |
| FR-4 | Focus on user requirements | Reduce the risk of vision loss. |
| FR-5 | Usually defined by user | Fundus image obtained from operators. |
| FR-6 | Define product features | Deep learning algorithms and cloud database. |

**Non-functional Requirements:**

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

|  |  |  |
| --- | --- | --- |
| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | User friendly interface that can be accessed with ease by users. |
| NFR-2 | **Security** | Permission granted only by the administrator of the system. |
| NFR-3 | **Reliability** | If the system update any fails or bugs in the code even though the system can roll back to its initial state. |
| NFR-4 | **Performance** | The image loading process takes only 2 second .  If internet connection is good it can be accessed by more than 10,000 people at a time. |
| NFR-5 | **Availability** | The treatment should be available at low cost to every people with DR. |
| NFR-6 | **Scalability** | By processing more datasets for the reference of DR detection. |