

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

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 | Upload image | Image upload via files Image upload via folders Image upload via drive Image upload via web Image upload via scan/camera |
| FR-4 | Spelling support | Identifies handwriting of different styles and fonts Spelling check |
| FR-5 | Translation | Handwritten digits from the image are extracted. Conversion of handwritten digits into machine readable form |
| FR-6 | Log out | Log out / sign out. |

Non-functional Requirements:

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

| FR No. | Non-Functional Requirement | Description |
|--------|----------------------------|---|
| NFR-1 | Usability | The proposed system gives good results for images that contain handwritten text written in different styles, different size and alignment with varying background |
| NFR-2 | Security | Only authorized people can access the system data and modify the database. |
| NFR-3 | Reliability | The Database is frequently updated with handwriting of different styles and size and will rollback when any update fails. |
| NFR-4 | Performance | The proposed system is advantageous as it uses fewer features to train the neural network, which results in faster convergence. |
| NFR-5 | Availability | The system functionality and services are available for use with all operations. |
| NFR-6 | Scalability | The website traffic limit must be scalable enough to support 2 lakhs users at a time |