

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

| | |
|---------------|--|
| Date | 15 October 2022 |
| Team ID | PNT2022TMID39323 |
| Project Name | Project – A Novel Method For Handwritten Digit Recognition System. |
| 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 | Input images | Handwritten digit recognition refers to a computers capacity to identify human handwritten digits in a form of input image and classify them into 10 predefined classes (0-9) |
| FR-4 | Voice | We can hear a predicted results in a voice mode. |
| FR-5 | Prediction | The output digit will be displayed in a user interface. Our model gives a good accuracy. |

Non-functional Requirements:

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

| FR No. | Non-Functional Requirement | Description |
|--------|----------------------------|--|
| NFR-1 | Usability | Handwritten digit recognition is one of the practically important issues in pattern recognition applications. The applications of digit recognition include postal mail sorting, bank check processing, form data entry etc. |
| NFR-2 | Security | In registering, security (or PC security) is the strategies for guaranteeing that information put away in a PC can't be perused or bargained by any people without approval. Most PC efforts to establish safety include information encryption and passwords. Information encryption is the interpretation of information into a structure that is indiscernible without a disentangling system. A watchword is a mystery word or expression that gives a client access to a specific project or framework. |

| | | |
|-------|---------------------|---|
| NFR-3 | Reliability | Unwavering quality is a property of any PC related part (programming, or equipment, or a system, for instance) that reliably performs as by its determinations. It has for some time been viewed as one of three related qualities that should be considered when making, purchasing, or utilizing a PC item or part. |
| NFR-4 | Performance | Execution relying upon the connection, high PC execution might include one or a greater amount of the accompanying: short reaction time for a given bit of work. Execution is described by the measure of valuable of work achieved by a PC framework or PC system contrasted with the time and assets utilized. |
| NFR-5 | Availability | In PC framework and systems administration, accessibility is a general term that is utilized to depict the measure of time over a one-year period that the framework assets is accessible with its all assets are viewed as fruitful. |
| NFR-6 | Scalability | Scalability is the measure of a system's ability to increase or decrease in performance and cost in response to changes in application and system processing demands. |