## **Project Design Phase-II Functional Requirements**

| Team ID      | PNT2022TMID47895  |
|--------------|---|
| Project Name | A Novel Method for Handwritten Digit Recognition System |

## **Functional Requirements:**

Following are the functional requirements of the proposed solution.

| FR<br>No. | Sub Requirement (Story / Sub-Task)  |
|-----------|---|
| FR-1      | Image Data: Handwritten digit recognition refers to a computer's capacity to identify   |
|           | human handwritten digits from a variety of sources, such as photographs,                |
|           | documents, touch screens, etc., and categorise them into ten established                |
|           | classifications (0-9).  |
|           | In the realm of deep learning, this has been the subject of countless studies.          |
| FR-2      | Website: Web hosting makes the code, graphics, and other items that make up a           |
|           | website accessible online. A server hosts every website you've ever visited. The type   |
|           | of hosting determines how much space is allotted to a website on a server. Shared,      |
|           | dedicated, VPS, and reseller hosting are the four basic varieties.                      |
| FR-3      | Digit Classifier Model: To train a convolutional network to predict the digit from an   |
|           | image, use the MNIST database of handwritten digits. get the training and validation    |
|           | data first.   |
| FR-4      | Cloud: The cloud offers a range of IT services, including virtual storage, networking,  |
|           | servers, databases, and applications. In plain English, cloud computing is described as |
|           | a virtual platform that enables unlimited storage and access to your data over the      |
|           | internet.   |
| FR-5      | Modified National Institute of Standards and Technology dataset: The abbreviation       |
|           | MNIST stands for the MNIST dataset. It is a collection of 60,000 tiny square grayscale  |
|           | photographs, each measuring 28 by 28, comprising handwritten single digits              |
|           | between 0 and 9.  |