**Project Design Phase-II**

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

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| Date | 14 October 2022 |
| Team ID | PNT2022TMID17271 |
| Project Name | AI For A noval Method For Handwritten Digit  Recognition System |
| Maximum Marks | 4 Marks |

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

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| **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| FR-1 | User registration | Download the app  Registration through Gmail  Create an account  Follow the instructions |
| FR-2 | User Confirmation | Confirmation via Email  Confirmation via OTP |
| FR-3 | Interface sensor | Interface sensor and the application so if Handwritten enter the field it . |
| FR-4 | Accessing datasets | Datasets are retrieved from AI |
| FR-5 | Mobile application | A human learns to perform a task by practicing and repeating it again and again so that it memorizes how to perform the tasks. |

**Non-functional Requirements:**

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

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| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | There are a number of ways and algorithms to recognize handwritten digits, including Deep Learning/CNN. |
| NFR-2 | **Security** | In this section, we will present in details the OSVM  and COSVM since they are the basis of our proposed  method and then introduce the novel SCOSVM. |
| NFR-3 | **Reliability** | handwritten digit recognition, with a recognition accuracy of 99.98%, and 99.40% with 50% noise. |
| NFR-4 | **Performance** | As a consequence, most of the algorithms have failed to make a noticeable improvement in classification accuracy. |
| NFR-5 | **Availability** | It uses different types of neural network architectures for different types of problems. |