## Project Planning Phase Project Planning (Product Backlog, Sprint Planning, Stories, Story points)

| Date          | 25 October 2022                      |
|---------------|--------------------------------------|
| Team ID       | PNT2022TMID06491                     |
| Project Name  | A Novel Method for Handwritten Digit |
|               | Recognition System                   |
| Maximum Marks | 8 Marks                              |

## **Product Backlog, Sprint Schedule, and Estimation (4 Marks)**

| Sprint   | Functional          | User Story | User Story / Task                             | Story         | Priority | <b>Team Members</b> |
|----------|---------------------|------------|---|---------------|----------|---------------------|
|          | Requirement (Epic)  | Number     |   | <b>Points</b> |          |                     |
| Sprint-1 | Data Collection     | USN-1      | As a user, I can collect the dataset from     | 10            | Low      | Kavenesh N          |
|          |                     |            | various resources with different              |               |          | Dharani R           |
|          |                     |            | handwritings.                                 |               |          | Akash M             |
|          |                     |            |   |               |          | Nandhakumar S       |
| Sprint-1 | Data Preprocessing  | USN-2      | As a user, I can load the dataset, handling   | 10            | Medium   | Kavenesh N          |
|          |                     |            | the missing data, scaling and split data into |               |          | Dharani R           |
|          |                     |            | train and test.                               |               |          | Akash M             |
|          |                     |            |   |               |          | Nandhakumar S       |
| Sprint-2 | Model Building      | USN-3      | As a user, I will get an application with ML  | 5             | High     | Kavenesh N          |
|          |                     |            | model which provides high accuracy of         |               |          | Dharani R           |
|          |                     |            | recognized handwritten digit.                 |               |          | Akash M             |
|          |                     |            |   |               |          | Nandhakumar S       |
| Sprint-2 | Add CNN layers      | USN-4      | Creating the model and adding the input,      | 5             | High     | Kavenesh N          |
|          |                     |            | hidden, and output layers to it.              |               |          | Dharani R           |
|          |                     |            |   |               |          | Akash M             |
|          |                     |            |   |               |          | Nandhakumar S       |
| Sprint-2 | Compiling the model | USN-5      | With both the training data defined and       | 2             | Medium   | Kavenesh N          |
|          |                     |            | model defined, it's time to configure the     |               |          | Dharani R           |
|          |                     |            | learning process.                             |               |          | Akash M             |
|          |                     |            |   |               |          | Nandhakumar S       |

| Sprint   | Functional<br>Requirement (Epic) | User Story<br>Number | User Story / Task  | Story<br>Points | Priority | Team Members  |
|----------|----------------------------------|----------------------|--|-----------------|----------|---|
| Sprint-2 | Train & test the model           | USN-6                | As a user, let us train our model with our image dataset.  | 6               | Medium   | Kavenesh N<br>Dharani R<br>Akash M<br>Nandhakumar S |
| Sprint-2 | Save the model                   | USN-7                | As a user, the model is saved & integrated with an android application or web application in order to predict something. | 2               | Low      | Kavenesh N<br>Dharani R<br>Akash M<br>Nandhakumar S |
| Sprint-3 | Building UI<br>Application       | USN-8                | As a user, I will upload the handwritten digit image to the application by clicking a upload button.                     | 5               | High     | Kavenesh N<br>Dharani R<br>Akash M<br>Nandhakumar S |
| Sprint-3 |                                  | USN-9                | As a user, I can know the details of the fundamental usage of the application.   | 5               | Low      | Kavenesh N<br>Dharani R<br>Akash M<br>Nandhakumar S |
| Sprint-3 |                                  | USN-10               | As a user, I can see the predicted / recognized digits in the application.   | 5               | Medium   | Kavenesh N<br>Dharani R<br>Akash M<br>Nandhakumar S |
| Sprint-4 | Train the model on IBM           | USN-11               | As a user, I train the model on IBM and integrate flask/Django with scoring end point.                                   | 10              | High     | Kavenesh N<br>Dharani R<br>Akash M<br>Nandhakumar S |
| Sprint-4 | Cloud Deployment                 | USN-12               | As a user, I can access the web application and make the use of the product from anywhere.                               | 10              | High     | Kavenesh N<br>Dharani R<br>Akash M<br>Nandhakumar S |