

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

|               |   |
|---------------|---|
| Date          | 28 October 2022   |
| Team ID       | PNT2022TMID41079  |
| Project Name  | A Novel Method for Handwritten Digit Recognition System |
| Maximum Marks | 8 Marks   |

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

| Sprint   | Functional Requirement | User Story | User Story / Task   | Story Points | Priority | Team Members                                       |
|----------|------------------------|------------|---|--------------|----------|--|
| Sprint-1 | Data Collection        | USN-1      | As a user, I can collect the dataset from various resources with different handwriting.                           | 10           | Low      | P Murugan<br>R Gowtham<br>P Mohan<br>T Tamilarasan |
| Sprint-1 | Data Preprocessing     | USN-2      | As a user, I can load the dataset, handle the missing data, scaling and split data into train and test.           | 10           | Medium   | P Murugan<br>P Mohan                               |
| Sprint-2 | Model Building         | USN-3      | As a user, I will get an application with ML model which provides high accuracy of recognized handwritten digits. | 5            | High     | R Gowtham<br>T Tamilarasan                         |
| Sprint-2 | Add CNN layers         | USN-4      | Creating the model and adding the input, hidden, and output layers to it.   | 5            | High     | R Gowtham<br>T Tamilarasan                         |
| Sprint-2 | Compiling the model    | USN-5      | With both the training data defined and the model defined, it's time to configure the model.                      | 2            | Medium   | R Gowtham<br>T Tamilarasan                         |

| <b>Sprint</b> | <b>Functional Requirement</b> | <b>User Story</b> | <b>User Story / Task</b>   | <b>Story Points</b> | <b>Priority</b> | <b>Team Members</b>                                |
|---------------|-------------------------------|-------------------|--|---------------------|-----------------|--|
| Sprint-2      | Train & test the model        | USN-6             | As a user, let us train our model with our image dataset.  | 6                   | Medium          | P Murugan<br>P Mohan                               |
| 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             | P Murugan<br>P Mohan                               |
| Sprint-3      | Building UI Application       | USN-8             | As a user, I will upload the handwritten digit image to the application by clicking a upload button.                     | 5                   | High            | P Mohan  |
| Sprint-3      |                               | USN-9             | As a user, I can know the details of the fundamental usage of the application.   | 5                   | Low             | P Murugan<br>R Gowtham<br>P Mohan<br>T Tamilarasan |
| Sprint-3      |                               | USN-10            | As a user, I can see the predicted / recognized digits in the application.   | 5                   | Medium          | P Murugan<br>R Gowtham<br>P Mohan<br>T Tamilarasan |
| 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            | T Tamilarasan<br>P Mohan                           |
| 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            | R Gowtham<br>P Murugan                             |