**Project Planning Phase**

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

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| Date | 18 October 2022 |
| 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 (Epic)** | **User Story Number** | **User Story / Task** | **Story Points** | **Priority** | **Team Members** |
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| Sprint-1 | Data Collection | USN-1 | As a user, I can collect the dataset from various resources with different handwritings. | 10 | Low | Aarthi A  Adhithyan K |
| Sprint-1 | Data Preprocessing | USN-2 | As a user, I can load the dataset, handling the missing data, scaling and split data into train and test. | 10 | Medium | Abinaya A  Agastan A |
| Sprint-2 | Model Building | USN-3 | As a user, I will get an application with ML model which provides high accuracy of recognized handwritten digit. | 5 | High | Aarthi A  Abinaya A  Adhithyan K  Agastan A |
| Sprint-2 | Add CNN layers | USN-4 | Creating the model and adding the input, hidden, and output layers to it. | 5 | High | Adhithyan K |
| Sprint-2 | Compiling the model | USN-5 | With both the training data defined and model defined, it's time to configure the learning process. | 2 | Medium | Agastan A |
| Sprint-2 | Train & test the model | USN-6 | As a user, let us train our model with our image dataset. | 6 | Medium | Abinaya A  Adhithyan K |
| 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 | Aarthi A |
| 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 | Aarthi A  Agastan A |
| Sprint-3 |  | USN-9 | As a user, I can know the details of the fundamental usage of the application. | 5 | Low | Agastan A |
| Sprint-3 |  | USN-10 | As a user, I can see the predicted / recognized digits in the application. | 5 | Medium | Abinaya A  Aarthi A |
| 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 | Abinaya A  Adhithyan K  Agastan A |
| 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 | Adhithyan K  Agastan A |