

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

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|---------------|---|
| Date | 22 October 2022 |
| Team ID | PNT2022TMID04292 |
| 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 |
|----------|-------------------------------|-------------------|---|--------------|----------|--------------|
| Sprint-1 | Home Page UI | USN-1 | As a user, I can view the home page and I can understand how it works | 2 | Low | Sneha S |
| Sprint-1 | | | Creating the home page | | High | |
| Sprint-1 | | USN-2 | As a user, I will receive confirmation email once I have registered for the application | 5 | High | Thivasini M |
| Sprint-2 | Input of Hand Written digit | USN-3 | As a user, I can input any hand written digits in jpg format. | 5 | High | Dhanya T |
| Sprint-2 | Processing | USN-4 | As a user, Once I upload my image, it will start processing | 3 | Medium | Kishore R |
| Sprint-2 | | | Input image by the user will be trained | | High | |
| Sprint-2 | | | Input image by the user will be tested | | High | |
| Sprint-3 | | | Input image will be evaluated from the trained model | | Medium | |
| Sprint-3 | API | USN-5 | As a user, I will be able to see the progress of the processing bar | 3 | Medium | Sneha S |
| Sprint-2 | IBM Cloudant DB | | The input image will be stored in the database | | High | |
| Sprint-3 | | | The Input image will be evaluated with MNIST data which will be fetched from the DB | | Medium | |

| Sprint | Functional Requirement (Epic) | User Story Number | User Story / Task | Story Points | Priority | Team Members |
|----------|-------------------------------|-------------------|---|--------------|----------|------------------------|
| Sprint-4 | Output | USN-6 | As a user, I will be able to see the desired output | 5 | High | Kishore R |
| Sprint-3 | IBM Cloud | | Deploy the trained model on the cloud | | High | |
| Sprint-4 | Success | USN-7 | As a user, I will be able to see the success image once the output is generated | 2 | Low | Dhanya T |
| Sprint-1 | | USN-8 | As a user, I will get to know how the process works | 2 | Low | |
| Sprint-4 | | USN-9 | As a user, I will be able to watch the video of how to use the software | 2 | Low | Thivasini M |
| Sprint-4 | | USN-10 | As a user, I will be able to contribute to this software as an open source | 3 | Medium | Sneha S, Dhanya T |
| Sprint-3 | | USN-11 | As a user, the uploaded image will get processed in the backend | 5 | High | Thivasini M, Kishore R |
| Sprint-4 | Git and GitHub | | Updating details on GitHub | | Low | |
| Sprint-2 | Python Flask API | | Collecting the data from the API | | Medium | |
| Sprint-2 | IBM Watson Studio | | Data Pre-processing and optimising the data | | High | |

Project Tracker, Velocity & Burndown Chart: (4 Marks)

| Sprint | Total Story Points | Duration | Sprint Start Date | Sprint End Date (Planned) | Story Points Completed (as on Planned End Date) | Sprint Release Date (Actual) |
|----------|--------------------|----------|-------------------|---------------------------|---|------------------------------|
| Sprint-1 | 8 | 4 Days | 22 Oct 2022 | 25 Oct 2022 | | |
| Sprint-2 | 8 | 6 Days | 26 Oct 2022 | 31 Oct 2022 | | |
| Sprint-3 | 8 | 6 Days | 01 Nov 2022 | 06 Nov 2022 | | |
| Sprint-4 | 11 | 8 Days | 04 Nov 2022 | 11 Nov 2022 | | |

Velocity:

Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{\textit{sprint duration}}{\textit{velocity}} = \frac{20}{10} = 2$$

$$AV = 35 / 24 = 1.46$$

Burndown Chart:

We have so far started our first sprint and its burndown chart is the following

Burndown Chart

