

Project Planning Phase

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

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| Date | 18 October 2022 |
| Team ID | PNT2022TMID20864 |
| Project Name | Real-Time Communication System Powered by AI for Specially Abled |
| Maximum Marks | 8 Marks |

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

Use the below template to create product backlog and sprint schedule

| Sprint | Functional Requirement (Epic) | User Story Number | 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 data | 10 | Low | Sangeetha P Aishwarya B Aishwarya N |
| Sprint-1 | Image Processing | USN-2 | As a user, I can import ImageDataGenerator Library and configure it, Apply ImageDataGenerator functionality to train and test dataset | 10 | Medium | Aishwarya B Aishwarya N |
| Sprint-2 | Model Building | USN-3 | As a user, I will get an application with ML model which provides accurate communication and sharing data with sensor. | 5 | High | Keerthana V Sangeetha P Aishwarya B Aishwarya N |
| Sprint-2 | Add Cnn layers | USN-4 | Creating the model and adding the input, hidden and the output layers to it | 5 | High | Keerthana V Sangeetha P Aishwarya B Aishwarya N |
| 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 | Keerthana V Sangeetha P |
| Sprint-2 | Fit and Save the model | USN-6 | As a user, the model is saved and integrated with an android application or web application in order to predict something | 6 | Medium | Sangeetha P Aishwarya B Aishwarya N |

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| Sprint-2 | Test the model | USN-7 | As a user, let us test our model with our image dataset. | 2 | Medium | Keerthana V |
| Sprint-3 | Building UI Application | USN-8 | As a user, I will use the technical button to operate the microphone for recognition | 10 | High | Keerthana V Sangeetha P |
| Sprint-3 | | USN-9 | As a user, I can know the details of the fundamental usage of the application | 5 | Low | Aishwarya N |
| Sprint-3 | | USN-10 | As a user, I can see the prediction with the help of technical in the application | 5 | Medium | Sangeetha P Aishwarya B |
| Sprint-4 | Train the model | USN-11 | As a user, I train the model IBM and integrate the flask / Django with scoring end point | 10 | High | Keerthana V Sangeetha P Aishwarya B Aishwarya N |
| Sprint-4 | Cloud Deployment | USN-12 | As a user, I can access the web application and make use of the production anywhere. | 10 | High | Keerthana V Sangeetha P Aishwarya B Aishwarya N |

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 | 20 | 6 Days | 24 Oct 2022 | 29 Oct 2022 | 20 | 29 Oct 2022 |
| Sprint-2 | 20 | 6 Days | 31 Oct 2022 | 05 Nov 2022 | 20 | 05 Nov 2022 |
| Sprint-3 | 20 | 6 Days | 07 Nov 2022 | 12 Nov 2022 | 20 | 12 Nov 2022 |
| Sprint-4 | 20 | 6 Days | 14 Nov 2022 | 19 Nov 2022 | 20 | 19 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)

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

Burndown Chart:

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

<https://www.visual-paradigm.com/scrum/scrum-burndown-chart/>
<https://www.atlassian.com/agile/tutorials/burndown-charts>

Reference:

<https://www.atlassian.com/agile/project-management>
<https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software>
<https://www.atlassian.com/agile/tutorials/epics>
<https://www.atlassian.com/agile/tutorials/sprints>
<https://www.atlassian.com/agile/project-management/estimation>
<https://www.atlassian.com/agile/tutorials/burndown-charts>