

## Project Planning Phase

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

Date	23rd October 2022
Team ID	PNT2022TMID35886
Project Name	Real Time Communication System Powered by AI for Specially Abled
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	Data Collection		Dataset is collected on the basis of various hand signs and curated according to the problem statement.	4	High	Mohnish, Beulah
Sprint-1	Data Preprocessing		The dataset is preprocessed in order to check noisy data and other inconsistencies before executing it to the algorithm.	6	Low	Krishna Kumar, Ranjith
Sprint-2	Model Building		Model is built according to the image features in such a way that the model identifies the features of the sign image and learns in order to give correct output.	8	High	Mohnish, Ranjith
Sprint-2	Model Training		Data is fed into the model and the model is trained in order to find the optimal weights that give help in predicting the correct output.	8	High	Beulah, Krishna Kumar
Sprint-2	Model Testing		Model is tested in such a way that the collection data or images are trained frame by frame according to the user requirements.	6	Medium	Mohnish, Beulah
Sprint-3	User Registration	USN-1	As a user, I need to register and create a login using my credentials. Once created, I can login into the application and access the site using mobile/Desktop.	8	Medium	Beulah, Krishna Kumar

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Sign Capture / Text input	USN-2	I can see an option to start capturing the video using my camera, so that the signs are converted into text or audio	8	High	Ranjith, Krishna Kumar
		USN-3	As a user, there's an option to convert the text or audio that i provide into signs	4	Low	Ranjith, Beulah
Sprint-4	Converted Message/Sign	USN-4	The signs i capture using my camera are converted to english text or audio	8	High	Mohnish, Krishna Kumar
Sprint-4	Application Testing		The application is then tested under various circumstances.	8	Medium	Mohnish, Ranjith

**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	10	02 Nov 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	22	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	16	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)

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

**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>