

## Project Planning Phase

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

Team ID	PNT2022TMID31975
Project Name	Real Time Communication System Powered by AI for Specially Abled

#### 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	Indhuja,Mounikasri
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	Hemamalini,Abirami
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	Thangamani , Indhuja
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	Mounikasri,Abirami
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	Hemamalini,Thangamani
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	Indhuja,Abirami

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	Hemamalini,Mounikasri
		USN-3	As a user, there's an option to convert the text or audio that i provide into signs	4	Low	Indhuja,Mounikasri
Sprint-4	Converted Message/Sign	USN-4	The signs i capture using my camera are converted to english text or audio	8	High	Abirami,Thangamani
Sprint-4	Application Testing		The application is then tested under various circumstances.	8	Medium	Indhuja,Hemamalini

#### 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-1	20	6 Days	01 Nov 2022	06 Nov 2022	10
Sprint-2	20	6 Days	01 nov 2022	06 Nov 2022	22
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	16

**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>