

## Project Planning Phase

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

Date	22 November 2023
Team ID	PNT2022TMID593039
Project Name	Project - ASL Alphabet Image Recognition
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	Model Architecture and Data Collection	USN-1	Research and choose a deep learning framework	5	High	Aditi
Sprint-1	Model Architecture and Data Collection	USN-2	Set up the project environment	3	Medium	Khushi
Sprint-1	Model Architecture and Data Collection	USN-3	Design and implement initial CNN architecture	8	High	Siddharth
Sprint-1	Model Architecture	USN-4	Collect and preprocess a small ASL	5	Medium	Shalavya

	and Data Collection		dataset			
Sprint-2	Model Training and Evaluation	USN-5	Train the model using the ASL dataset	8	High	Aditi
Sprint-2	Model Training and Evaluation	USN-6	Implement evaluation metrics	5	Medium	Khushi
Sprint-2	Model Training and Evaluation	USN-7	Fine-tune the model using the ASL dataset	8	High	Siddharth
Sprint-3	User Interface and Deployment	USN-8	Develop a user interface for image testing	8	High	Shalavya
Sprint-3	User Interface and Deployment	USN-9	Integrate the trained model into the interface	5	Medium	Aditi
Sprint-3	User Interface and Deployment	USN-10	Deploy the application for testing	3	Low	Siddharth
Sprint-4	Model Optimization and Expansion	USN-11	Optimize the model for efficiency	5	High	Shalavya
Sprint-4	Model Optimization and Expansion	USN-12	Expand the dataset for a broader set of signs	8	Medium	Khushi
Sprint-4	Model Optimization and Expansion	USN-13	Train and evaluate the model with the expanded data	8	High	Aditi

Sprint-5	Testing, Documentation, and Finalization	USN-14	Conduct thorough testing of the application	8	High	Shalavya
Sprint-5	Testing, Documentation, and Finalization	USN-15	Create documentation for model usage and maintenance	5	Medium	Khushi
Sprint-5	Testing, Documentation, and Finalization	USN-16	Finalize the project for release	3	Low	Siddharth

**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 2023	29 Oct 2023	2 points per day×6 days=12 points	29 Oct 2023
Sprint-2	20	6 Days	31 Oct 2023	05 Nov 2023	2 points per day×6 days=12 points	05 Nov 2023
Sprint-3	20	6 Days	07 Nov 2023	12 Nov 2023	2 points per day×6 days=12 points	12 Nov 2023

Sprint-4	20	6 Days	14 Nov 2023	19 Nov 2023	2 points per day×6 days=12 points	19 Nov 2023
Sprint-5	20	4 Days	19 Nov 2023	22 Nov 2023	2 points per day×4 days=8 points	22 Nov 2023

### 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>