

Project Planning Phase

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

Date	27 October 2023
Team ID	PNT2022TMIDxxxxxx
Project Name	Unleashing the Potential of our Youth
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	Project Planning and Infrastructure	USN-1	To set up the development environment with the necessary tools and frameworks to start building the Mentorship Module of our education platform.	1	High	Aakarsh
Sprint-1	Development Environment	USN-2	To upload and manage diverse educational content, including images, videos, and documents, to enrich the learning experience for students and provide a wide range of resources.	2	High	Devika
Sprint-2	Data Collection	USN-3	Preprocess the collected educational content dataset, including resizing images, normalizing pixel values, and splitting it into training and validation sets. This will ensure that the educational materials are optimized for the platform, making them accessible to students while maintaining data quality and performance.	3	High	Aakarsh
Sprint-1	Data Preprocessing	USN-4	Explore and evaluate different machine learning models and algorithms to recommend the most effective approach for personalized student support and performance analysis within the education platform.	2	Medium	Evleen
Sprint-2	Model Development	USN-5	Train the selected machine learning model using the preprocessed	4	High	Devika

			educational content dataset and monitor its performance on the validation set. This will help improve the model's effectiveness in providing personalized support and insights for students, parents, and educators.			
Sprint-3	Training	USN-6	Implement data augmentation techniques for the educational content to enhance the learning experience and engagement of students. This may include techniques like enriching multimedia content, creating interactive elements, and improving content diversity to make the educational materials more engaging and effective.	6	Medium	Aakarsh
Sprint-4	Model Deployment and Integration	USN-7	Deploy the machine learning model as an API and integrate it into the platform for users to upload content and receive personalized insights, enhancing interactivity and utility for all users.	7	Low	Evleen
Sprint-5	Testing & quality assurance	USN-8	Test the platform for issues and collaborate with the data team to optimize the model based on user feedback and testing results. This ensures a seamless learning experience for all platform users	4	Medium	Devika

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	5	4 Days	19 Oct 2023	22 Oct 2023	5	22 Oct 2023
Sprint-2	7	6 Days	23 Oct 2023	27 Oct 2023	7	27 Oct 2023
Sprint-3	6	5 Days	28 Oct 2023	2 Nov 2023	6	2 Nov 2023
Sprint-4	7	7 Days	3 Nov 2023	10 Nov 2023		
Sprint-5	4	5 Days	11 Nov 2023	15 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)

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

$$AV=27/29=0.93$$

Burndown Chart:

A burndown 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>