

Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID23607
Project Name	Project - Smart Lender - Applicant Credibility Prediction for Loan Approval
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	Dataset	USN-4	Downloading the dataset	1	High	Ram Praveen Dharmesh Gunasekaran Karthikeyan
Sprint-1		USN-5	Visualizing the dataset	2	Low	Ram Praveen Dharmesh Gunasekaran Karthikeyan
Sprint-1		USN-6	Pre-process the dataset	3	Medium	Ram Praveen Dharmesh Gunasekaran Karthikeyan
Sprint-1	Machine Learning Model	USN-7	KNN model building	5	High	Ram Praveen Dharmesh Gunasekaran Karthikeyan
Sprint-2		USN-8	Decision Tree model building	5	High	Ram Praveen Dharmesh Gunasekaran Karthikeyan

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2		USN-9	Naive Bayes model building	5	High	Ram Praveen Dharmesh Gunasekaran Karthikeyan
Sprint-2		USN-10	Fine Tuning the model	3	Low	Ram Praveen Dharmesh Gunasekaran Karthikeyan
Sprint-2		USN-11	Evaluation and saving of the models	5	High	Ram Praveen Dharmesh Gunasekaran Karthikeyan
Sprint-3	Customer User Interface	USN-12	Model Integration with flask	5	High	Ram Praveen Dharmesh Karthikeyan Gunasekaran
Sprint-3		USN-1	As a user, I should be able to access the dashboard.	3	Medium	Ram Praveen Dharmesh Karthikeyan Gunasekaran
Sprint-3		USN-2	Select the type of loan	3	Low	Ram Praveen Dharmesh Gunasekaran Karthikeyan
Sprint-3		USN-3	Fill the application and check the eligibility of loan approval	5	High	Ram Praveen Dharmesh Gunasekaran Karthikeyan
Sprint-4	Deployed the website	USN-13	Register on IBM Cloud	3	Low	Ram Praveen Dharmesh Gunasekaran Karthikeyan
Sprint-4		USN-14	Train the ML model on IBM Cloud	5	Medium	Ram Praveen Dharmesh Gunasekaran Karthikeyan

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4		USN-15	Deploy the website on IBM Cloud	8	High	Ram Praveen Dharmesh Gunasekaran Karthikeyan

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	11	6 Days	24 Oct 2022	29 Oct 2022	11	29 Oct 2022
Sprint-2	18	6 Days	31 Oct 2022	05 Nov 2022	18	05 Nov 2022
Sprint-3	16	6 Days	07 Nov 2022	12 Nov 2022	16	12 Nov 2022
Sprint-4	16	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)

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

Our Project velocity

Sprint-1 = $11/6 = 1.833$

Sprint-2 = $18/6 = 3$

Sprint-3 = $16/6 = 2.67$

Sprint-4 = $16/6 = 2.67$

Total Velocity = $61/24 = 2.54$

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.

Burndown Chart

