

Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID53311
Project Name	Smart Lender - Applicant Credibility Prediction for Loan Approval
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	Dataset	USN-4	Download the dataset	1	High	Allen Manoj Benita Majo Janani K Kumaran
Sprint-1		USN-5	Visualize the dataset	2	Low	Allen Manoj Benita Majo Janani K Kumaran
Sprint-1		USN-6	Pre-process the dataset	3	Medium	Allen Manoj Benita Majo Janani K Kumaran
Sprint-1	Machine Learning Model	USN-7	KNN model building	5	High	Allen Manoj Benita Majo Janani K Kumaran
Sprint-2		USN-8	Decision Tree model building	5	High	Allen Manoj Benita Majo Janani K Kumaran

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	Allen Manoj Benita Majo Janani K Kumaran
Sprint-2		USN-10	Fine Tuning of the model	3	Low	Allen Manoj Benita Majo Janani K Kumaran
Sprint-2		USN-11	Evaluation and saving of the model	5	High	Allen Manoj Benita Majo Janani K Kumaran
Sprint-3	Customer User Interface	USN-12	Model Integration with flask	5	High	Allen Manoj Benita Majo Janani K Kumaran
Sprint-3		USN-1	As a user, I should be able to access the dashboard.	3	Medium	Allen Manoj Benita Majo Janani K Kumaran
Sprint-3		USN-2	Selecting the loan type	3	Low	Allen Manoj Benita Majo Janani K Kumaran
Sprint-3		USN-3	Fill the application and check the eligibility for loan approval	5	High	Allen Manoj Benita Majo Janani K Kumaran
Sprint-4	Deployed the website	USN-13	Register on IBM Cloud	3	Low	Allen Manoj Benita Majo Janani K Kumaran
Sprint-4		USN-14	Train the ML model on IBM Cloud	5	Medium	Allen Manoj Benita Majo Janani K Kumaran

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	Allen Manoj Benita Majo Janani K Kumaran

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 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.

Burndown Chart

