

Project Planning Phase

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

Date	26 OCTOBER 2022
Team ID	PNT2022TMID37095
Project Name	Developing a Flight Delay Prediction using Machine Learning
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	Registration	USN-1	As a user, I can register for the diagnosis tool using my name, mobile number, email, password, and confirming my password.	5	High	A Akash
Sprint-1		USN-2	As a user, I will receive confirmation email on registering for the diagnosis tool.	5	High	N Akash(TL)
Sprint-1	Login	USN-3	As a user, I can log into the application by entering my credentials.	5	High	Balamurugan P
Sprint-1	Dashboard	USN-4	As a user, I can see my past records and activities.	5	High	Akash N
Sprint-2	Data Collection	USN-5	As a user, I will enter the input data for disease prediction in the form.	10	High	Akash N

Sprint	Functional Requirement (Epic)	User Story Number	User Story/Task	Story Points	Priority	Team Members
Sprint-2		USN-6	As a user, I must enter my pre-diagnostic test results.	10	High	Balamurugan P
Sprint-3	Data preprocessing	USN-7	As the admin, I will develop modules to preprocess and store the data.	6.7	High	A Akash
Sprint-3		USN-8	As the admin, I will build a Machine Learning model to predict the disease.	6.7	High	N Akash(TL)
Sprint-3		USN-9	As the admin, I should identify the most significant factors that lead to CKD based on present trend.	6.6	Medium	Akash N
Sprint-4	Result Display	USN-10	As the user, I can get the result of the output with accuracy in a result page.	10	High	A Akash
Sprint-4	Deployment	USN-11	Deploy the application in IBM cloud and make it available for use.	10	High	Balamurugan P

Project Tracker, Velocity & Burndown Chart:(4Marks)

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 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	19 Nov 2022

Velocity:

We have a 6-day sprint duration, and the velocity of the team is 20 (points per sprint). The team's average velocity (AV) per iteration unit (story points per day)

$$AV = \text{Sprint duration/velocity} = 20/6=3.3$$

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.

Sprint	Start Hours	Hours Spend Day 1	Hours Spend Day 2	Hours Spend Day 3	Hours Spend Day 4	Hours Spend Day 5	Hours Spend Day 6	Total hours
Sprint 1	12	4	2	2	2	1	1	12
Sprint 2	8	3	1	1	1	1	1	8
Sprint 3	10	3	2	2	1	1	1	10
Sprint 4	10	3	3	1	1	1	1	10
Actual remaining Hours	40	27	19	13	8	4	0	
Estimated remaining Hours	40	26	14	8	6	3	0	

