

Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID21290
Project Name	Project – Early detection of chronic kidney disease 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 application using email and password.	7	High	Team Lead Member 1 Member 2 Member 3
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	6	High	Team Lead Member 1 Member 2 Member 3
Sprint-4		USN-3	As a user, I can register for the application using my Gmail account.	6	Low	Team Lead Member 1 Member 2 Member 3
Sprint-1	Login	USN-4	As a user, I can register for the application by entering my credentials.	5	Medium	Team Lead Member 1 Member 2 Member 3
Sprint-3	Dashboard	USN-5	As a user, I can view my past activities in the application.	6	High	Team Lead Member 1 Member 2 Member 3

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Entry form	USN-6	As a user, I need to enter my pre-diagnostic test results	7	High	Team Lead Member 1 Member 2 Member 3
Sprint-3	Report	USN-7	As a user, I can view the report generated by the application.	7	High	Team Lead Member 1 Member 2 Member 3
Sprint-3	Remedies	USN-8	As a user, I will receive the treatment for my symptoms	6	Medium	Team Lead Member 1 Member 2 Member 3
Sprint-4	Queries	USN-9	As a customer care executive, I should be able to assist the users who are facing any sort of difficulties.	5	Low	Team Lead Member 1 Member 2 Member 3
Sprint-4	Feedback	USN-10	As a customer care executive, I should get input for the tools enhancement.	7	Low	Team Lead Member 1 Member 2 Member 3
Sprint-2	Feature importance	USN-11	As an administrator, I should identify the most significant factors that lead to CKD based on the present thread	6	High	Team Lead Member 1 Member 2 Member 3
Sprint-2	Train model	USN-12	As an administrator, I should use the most suitable ML model for the detection of CKD.	5	High	Team Lead Member 1 Member 2 Member 3

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	19	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	19	6 Days	31 Oct 2022	05 Nov 2022	20	5 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	19	6 Days	14 Nov 2022	19 Nov 2022	20	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)

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

So for our team the velocity is:

$$\text{Sprint 1 AV} = \text{Sprint duration} / \text{Velocity} = 6 / 19 = .315$$

$$\text{Sprint 2 AV} = \text{Sprint duration} / \text{Velocity} = 6 / 19 = .315$$

$$\text{Sprint 3 AV} = \text{Sprint duration} / \text{Velocity} = 6 / 20 = .3$$

$$\text{Sprint 4 AV} = \text{Sprint duration} / \text{Velocity} = 6 / 19 = .315$$

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.

