

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

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	Registration	USN-1	I can sign up for the application as a user by providing my email address, a password, and a password confirmation.	3	High	Yogesh Bala B Sanjay Karthick R
Sprint-1	Configuration Email	USN-2	When I register for the application as a user, I will get a confirmation email.	4	High	Manoj kumar Sethupathi sivaprakasam
Sprint-1	Authentication	USN-3	I can sign up for the application as a user using Gmail and a mobile app.	4	Medium	Yogesh Bala B Sanjay Karthick R
Sprint-1	Login	USN-4	I can access the application as a user by providing my email address and password.	3	High	Yogesh Bala B Sanjay Karthick R
Sprint-1	Dashboard	USN-5	I must be able to see the actions that I can take as a user.	4	High	Manoj kumar Sethupathi sivaprakasam
Sprint-2	Notification	USN-1	I should be allowed to alert my parents and legal guardians in an emergency as a user.	10	High	Yogesh Bala B Sanjay Karthick R
Sprint-2	Store data	USN-5	I must continually enter my location information into the database as a user.	10	Medium	Manoj kumar Sethupathi sivaprakasam
Sprint-3	Communication	USN-6	I should be able to communicate with user	6	Low	Yogesh Bala B Sanjay Karthick R

Sprint-3	IoT Device – Watson communication	USN-1,4	The IBM Cloud should receive the data from IoT devices.	7	Medium	Manoj kumar Sethupathi sivaprakasam
Sprint-3	Node RED-Cloudant DB communication	USN-5,2	The Cloudant DB should be correctly connected with the IBM Cloud's data.	7	High	Yogesh Bala B Sanjay Karthick R
Sprint-4	User – WebUI interface	USN-1,4	The Web UI should get inputs from the user	6	High	Manoj kumar Sethupathi sivaprakasam
Sprint-4	Alarm	USN-2,3,5	Based on the time for the medication, the rest of the alarm should be set.	7	High	Yogesh Bala B Sanjay Karthick R

Project Tracker, Velocity & Burndown Chart:

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:

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)

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

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.

