

## Project Planning Phase

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

Date	03 November 2022
Team ID	PNT2022TMID25909
Project Name	Project – Smart Solutions for Railways
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 by entering my email, password, and confirming my password.	5	High	Kavimathi A, Nivedha J, Sneha E, Sandhiya Lakshmi M.
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	3	High	Kavimathi A, Nivedha J, Sneha E, Sandhiya Lakshmi M.
Sprint-1		USN-3	As a user, I can register for the application through Facebook	2	Low	Kavimathi A, Nivedha J, Sneha E, Sandhiya Lakshmi M.
Sprint-1		USN-4	As a user, I can register for the application through Gmail	5	Medium	Kavimathi A, Nivedha J, Sneha E, Sandhiya Lakshmi M.
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password	5	High	Kavimathi A, Nivedha J,

<b>Sprint</b>	<b>Functional Requirement (Epic)</b>	<b>User Story Number</b>	<b>User Story / Task</b>	<b>Story Points</b>	<b>Priority</b>	<b>Team Members</b>
						Sneha E, Sandhiya Lakshmi M.
Sprint-2	Dashboard	USN-6	As a user, I will search for the train, check the availability status and book my trip.	10	High	Kavimathi A, Nivedha J, Sneha E, Sandhiya Lakshmi M.
Sprint-2		USN-7	As a user, I will pay for my journey via online payment.	5	High	Kavimathi A, Nivedha J, Sneha E, Sandhiya Lakshmi M.
Sprint-2		USN-8	As a user, I will receive confirmation email with a QR code generated after successful payment.	5	High	Kavimathi A, Nivedha J, Sneha E, Sandhiya Lakshmi M.
Sprint-3	Live train location	USN-9	As a passenger, I want to know the current location of the train.	10	Medium	Kavimathi A, Nivedha J, Sneha E, Sandhiya Lakshmi M.
Sprint-3	Ticket Verification	USN-10	As a TTE, I will cross-check the passenger for their tickets by scanning the QR code	10	Medium	Kavimathi A, Nivedha J, Sneha E, Sandhiya Lakshmi M.
Sprint-4	Seasons Generation	USN-11	As a user, I will apply for the season tickets by filling the necessary details and a upload a government ID proof	10	High	Kavimathi A, Nivedha J, Sneha E, Sandhiya Lakshmi M.
Sprint-4		USN-12	As a user, I will pay for my season via online payments.	5	Medium	Kavimathi A, Nivedha J, Sneha E,

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
						Sandhiya Lakshmi M.
Sprint-4		USN-13	As a user, I will receive confirmation email with a QR code generated after successful payment.	5	Medium	Kavimathi A, Nivedha J, Sneha E, Sandhiya Lakshmi M.

#### 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	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)

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

#### **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.

<https://www.visual-paradigm.com/scrum/scrum-burndown-chart/>

<https://www.atlassian.com/agile/tutorials/burndown-charts>

#### **Reference:**

<https://www.atlassian.com/agile/project-management>

<https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software>

<https://www.atlassian.com/agile/tutorials/epics>

<https://www.atlassian.com/agile/tutorials/sprints>

<https://www.atlassian.com/agile/project-management/estimation>

<https://www.atlassian.com/agile/tutorials/burndown-charts>