

## Project Planning Phase

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

Date	28 October 2022
Team ID	PNT2022TMID35329
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	User registration	USN-1	As a user, I can register through the form by filling in my details.	3	High	1. Sreeratcha B
Sprint-1	User Login	USN-2	As a user, I can log into the application by entering email & password	3	High	1. Keshikaa R
Sprint-2	User, Train and Booked Tickets Database	USN-3	Database is created to store all the necessary details for the booking.	2	Medium	1. Sreeratcha B 2. Keshikaa R
Sprint-1	Simulation of the tracker device	USN-4	The live location tracker is simulated to check its backend working.	2	Medium	1. Prithivi M 2. Akshaya R
Sprint-1	Ticket Booking System	USN-5	As a user, I can provide my details and book the train ticket, select class/berth based on the availability.	3	High	1. Sreeratcha B 2. Akshaya R 3. Keshikaa R
Sprint-1	Payment portal	USN-6	As a user, I can choose to pay through credit card/debit card/UPI in the portal.	3	High	1. Akshaya R 2. Sreeratcha B
Sprint-1	Ticket generation	USN-7	As a user, I can download the generated e-ticket for my journey	3	High	1. Keshikaa R 2. Akshaya R
Sprint-2	Live train Tracking system	USN-8	As a user, I can view my live location reading through mobile GPS.	3	High	1. Prithivi M 2. Akshaya R
Sprint-2	Alerts, notifications and Reminders	USN-9	As a user, I get reminders about my journey and any emergency alerts.	1	Low	1. Sreeratcha B

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	UI for QR Code Scanner	USN-10	As a user, I can get my ticket verified through the QR code Scanner.	3	High	1. Sreeratcha B 2. Keshikaa R
Sprint-3	Ticket Cancellation	USN-11	As a user, I can cancel my ticket if there's any change of plan.	2	Medium	1. Sreeratcha B 2. Prithivi M
Sprint 3	Web UI Integration	USN-12	Front-End of the Web UI is integrated with the database through the server.	3	High	1. Sreeratcha B 2. Keshikaa R
Sprint-3	GPS module Integration	USN-13	GPS tracking system is connected with the Web Interface.	3	High	1. Prithivi M 2. Akshaya R
Sprint-3	Cloud service	USN-14	Local application infrastructure is incorporated into Cloud services.	2	Medium	1. Prithivi M
Sprint-4	Application Testing	USN-15	The application is tested over various test cases to guarantee that it successfully meets the user requirements.	2	Medium	1. Akshaya R 2. Keshikaa R 3. Prithivi M
Sprint-4	Deployment	USN-16	The final application is deployed on the IBM Cloud and is made available for users.	3	High	1. Prithivi M 2. Akshaya R

#### 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	17	6 Days	24 Oct 2022	29 Oct 2022	17	29 Oct 2022
Sprint-2	9	6 Days	31 Oct 2022	05 Nov 2022	9	05 Nov 2022
Sprint-3	10	6 Days	07 Nov 2022	12 Nov 2022	10	12 Nov 2022
Sprint-4	5	6 Days	14 Nov 2022	19 Nov 2022	5	19 Nov 2022

#### Velocity:

$$AV = \text{Velocity} / \text{Sprint duration} = 41 / 4 = 10.25$$

## 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.

