

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

Date	17 NOVEMBER 2022
Team ID	PNT2022TMID47932
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

<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>
Sprint-1	Login	USN-1	As a Developer, I can create the login page with email & password using Node-Red App	2	Medium	Dharani
Sprint-1	Dashboard	USN-2	As a Developer, I can create a search box for the trains and seat availability.	6	High	maheshwari
Sprint-1	Booking the Tickets	USN-3	As a Developer, I can provide a facility to book the train ticket according to user preference.	6	High	pandiraman
Sprint-1	QR code Generation	USN-4	As a Developer, I can write a code to view and download the QR code for the Booked Ticket.	6	High	Yogeshwari
Sprint-2	Login for TTE	USN-5	As a Developer, I can create the login page for TTE with email and password	6	High	varsha

			using the Node-redapp.			
Sprint-2	Dashboard	USN-6	As a Developer,I can create a drop down box forthe number of passengers on boarded and remaining number of passengers yet to be boarded	6	High	pandiraman
Sprint-2	Passenger Details	USN-7	As a developer,I can provide a feature to viewthepassenger details which are stored in the Cloud and are retrieved and displayed in the webpage.	2	Medium	pandiraman

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Ticket verification	USN-8	As a developer,I can provide a verification mechanism to check the integrity of QR codeandthe passenger details.	6	High	varsha
Sprint-3	Collaboration	USN-9	As a developer, I will provide a smooth waytobook the ticket through a website and also to refund if the passenger cancels the ticket.	6	High	varsha
Sprint-3	Verifying the passenger details	USN-10	As a developer, I will check whether the passengeris taking his/her journey with a proper confirmed ticket.	6	High	dharani
Sprint-3	Identification of thepassenger	USN-11	As a developer, I will make sure that the on-boarded passenger is not involved in any travelfraudulently.	2	Medium	maheshwari

Sprint-3	Verifying the tickets	USN-12	As a developer, I will scan the QR code generated by python code to extract and verify the passenger details.	6	High	maheshwari
Sprint-4	Tracking webpage	USN-13	As a developer , I can create web page to view train status using Node RED	6	High	varsha
Sprint-4	Live location details	USN-14	As a developer I can extract details from IoT device using python code and IBM watson.	6	High	pandiraman
Sprint-4	Retrieving from cloud	USN-15	As a developer, I can upload the details to cloud and display it to user by connecting it with NodeRED application.	6	High	varsha
Sprint-4	Sending updates	USN-16	As a passenger, I would like to receive updates over my train status during my journey via fastSMS or App notification.	2	Medium	dharani

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

<b>Sprint</b>	<b>Total Story Points</b>	<b>Duration</b>	<b>Sprint Start Date</b>	<b>Sprint End Date (Planned)</b>	<b>Story Points Completed (as on Planned End Date)</b>	<b>Sprint Release Date (Actual)</b>
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	20	11 november 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	14 Nov 2022

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-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 Nov2022

### 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)

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