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

Date	18 October 2022
Team ID	PNT2022TMID32277
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	Login	USN-1	As a Developer, I can create the login page with email & password using Node-Red App	2	Medium	Arunkumar
Sprint-1	Dashboard	USN-2	As a Developer, I can create a search box for the trains and seat availability.	6	High	Mahalakshmi
Sprint-1	Booking the Tickets	USN-3	As a Developer, I can provide a facility to bookthe train ticket according to user preference.	6	High	Sarmatha
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 using the Node-redapp.	6	High	Sarmatha
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	Mahalakshmi
Sprint-2	Passenger Details	USN-7	As a developer,I can provide a feature to view thepassenger details which are stored in the Cloud and are retrieved and displayed in the webpage.	2	Medium	Arunkumar

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 code andthe passenger details.	6	High	Yogeshwari
Sprint-3	Collaboration	USN-9	As a developer, I will provide a smooth way tobook the ticket through a website and also to refund if the passenger cancels the ticket.	6	High	Mahalakshmi
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	Sarmatha
Sprint-3	Identification of the passenger	USN-11	As a developer, I will make sure that the on-boarded passenger is not involved in any travelfraudulently.	2	Medium	Arunkumar
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 passengerdetails.	6	High	Yogeshwari
Sprint-4	Tracking webpage	USN-13	As a developer , I can create web page to viewtrain status using Node RED	6	High	Mahalakshmi
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	Yogeshwari
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	Sarmatha
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	Arunkumar

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	5 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)

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