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

Date	15 November 2022
Team ID	PNT2022TMID13926
Project Name	Project - Smart Solutions For Railways
Maximum Marks	8 Marks

Product Backlog, Sprint Schedule, and Estimation

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1						
Sprint-1	Login	USN-1	As a Developer, I can create the login page with email & password using Node-Red App.	2	Medium	HARISANJAI A HEMALATHA M HEMAPRIYA KS
Sprint-1	Dashboard	USN-2	As a Developer, I can create a search box for the trains and seat availability.	6	High	HARISANJAI A HEMALATHA M HEMAPRIYA KS
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	HARISANJAI A INDHUMATHI S HEMAPRIYA KS
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	HARISANJAI A HEMAPRIYA KS HEMALATHA M

			Sprint-2			
Sprint-2	Login for TTE	USN-1	As a Developer, I can create the login page for TTE with email and password using the Node-red app.	6	High	HARISANJAI A INDHUMATHI S HEMAPRIYA KS
Sprint-2	Dashboard	USN-**2**	As a Developer, I can create a drop-down box for the number of passengers on boarded and remaining number of passengers yet to be boarded	6	High	HARISANJAI A HEMAPRIYA KS HEMALATHA M
Sprint-2	Passenger Details	USN-3	As a developer, I can provide a feature to view the passenger details which are stored in the Cloud and are retrieved and displayed in the webpage.	2	Medium	HARISANJAI A HEMALATHA M HEMAPRIYA KS INDUMATHI S
Sprint-2	Ticket verification	USN-4	As a developer, I can provide a verification mechanism to check the integrity of QR code and the passenger details.	6	High	HARISANJAI A HEMALATHA M HEMAPRIYA KS INDHUMATHI S
			Sprint-3			
Sprint-3	Collaboration	USN-1	As a developer, I will provide a smooth way to book the ticket through a website and also to refund if the passenger cancels the ticket.	6	High	HARISANJAI A HEMALATHA M HEMAPRRIYA KS
Sprint-3	Verifying the passenger details	USN-2	As a developer, I will check whether the passenger is taking his/her journey with a proper confirmed ticket.	6	High	HARISANJAI A INDUMATHI S HEMALATHA M

Sprint-3	Identification of the passenger	USN-3	As a developer, I will make sure that the on-boarded passenger is not involved in any travel fraudulently.	2	Medium	HARISANJAI A HEMAPRIYA KS INDUMATHI S
Sprint-3	Verifying the tickets	USN-4	As a developer, I will scan the QR code generated by python code to extract and verify the passenger details.	6	High	HARISANJAI A HEMALATHA M HEMAPRIYA KS INDHUMATHI S
Sprint-4						
Sprint-4	Tracking webpage	USN-1	As a developer, I can create web page to view train status using Node RED	6	High	HARISANJAI A HEMALATHA M HEMAPRIYA KS INDHUMATHI S
Sprint-4	Live location details	USN-2	As a developer I can extract details from IoT device using python code and IBM Watson.	6	High	HARISANJAI A HEMALTHA M HEMAPRIYA KS INDHUMATHI S
Sprint-4	Retrieving from cloud	USN-3	As a developer, I can upload the details to cloud and display it to user by connecting it with Node RED application.	6	High	HARISANJAI A HEAMALTHA M HEMAPRIYA KS INDHUMATHI S
Sprint-4	Sending updates	USN-4	As a passenger, I would like to receive updates over my train status during my journey via fast SMS or App notification.	2	Medium	HARISANJAI A HEAMALTHA M HEMAPRIYA KS INDHUMATHI S

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:

Sprint 1 Average Velocity:

Average Velocity = 20/6 = 3.3

Sprint 2 Average Velocity:

Average Velocity = 20/6 = 3.3

Sprint 3 Average Velocity:

Average Velocity = 20/6 = 3.3

Sprint 4 Average Velocity:

Average Velocity = 20/6 = 3.3

Burndown Chart:

burndown chart