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

Date	18 October 2022
Team ID	PNT2022TMID29870
Project Name	Smart Solution for Railways
Maximum Marks	8 Marks

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1		USN-1	Create the IBM Cloud services which are being used in this project.	6	High	Ajith K Kanchana K Jeeva Yovan E Bharath Raj M
Sprint-1		USN-2	Configure the IBM Cloud services which are being used in completing this project.	4	Medium	Ajith K Kanchana K Jeeva Yovan E Bharath Raj M
Sprint-1		USN-3	IBM Watson IoT platform acts as the mediator to connect the web application to IoT devices, so create the IBM Watson IoT platform.	5	Medium	Ajith K Kanchana K Jeeva Yovan E Bharath Raj M
Sprint-1		USN-4	In order to connect the IoT device to the IBM cloud, create a device in the IBM Watson IoT platform and get the device credentials.	5	High	Ajith K Kanchana K Jeeva Yovan E Bharath Raj M

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2		USN-1	Configure the connection security and create API keys that are used in the Node -RED service for accessing the IBM IoT Platform.	10	High	Ajith K Kanchana K Jeeva Yovan E Bharath Raj M
Sprint-2		USN - 2	Create a Node -RED service	10	High	Ajith K Kanchana K Jeeva Yovan E Bharath Raj M
Sprint	**Functional Requirement (Epic)**	**User Story Number**	**User Story / Task**	**Story Points**	**Priority**	**Team Members**
Sprint-3		USN-1	Develop a python script for publishing the location (latitude and longitude) data to the IBM IoT Platform and the other python code to read the QR Code and fetch the data from Cloudant DB.	20	High	Ajith K Kanchana K Jeeva Yovan E Bharath Raj M
Sprint-4		USN-1	Develop the web application using Node-RED	10	Medium	Ajith K Kanchana K Jeeva Yovan E Bharath Raj M
Sprint-4		USN-2	Testing the Web UI by giving the required inputs	10	High	Ajith K Kanchana K Jeeva Yovan E Bharath Raj 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)

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