# **Project Planning Phase**

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

| Date          | 22 October 2022                 |
|---------------|---------------------------------|
| Team ID       | PNT2022TMID51648                |
| Project Name  | Smart Solution for Railways-IoT |
| 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<br>Number | User Story / Task   | Story Points | Priority | Team Members  |
|----------|--|----------------------|---|--------------|----------|---|
| Sprint-1 | Monitor the<br>Speed of Train                      | USN-1                | The Railway must take care of passengers and peoples. In the train there are so many families we should secure them.  | 2            | High     | Bency Bethees<br>Brinesh B.P<br>Binex Biju Samuel<br>Athul Anil |
| Sprint-2 | Avoid From Accidents                               | USN-2                | If any accident occurs their technical team will take care of it and save the passengers.   | 1            | High     | Bency Bethees<br>Brinesh B.P<br>Binex Biju Samuel<br>Athul Anil |
| Sprint-3 | Detect the Motions                                 | USN-3                | We have monitor the motions and delays by 24/7 hrs. To avoid the accidents,and delays by using only sensors. The railway must takecare of what are the necessary process to avoid the train accidents and delays. | 2            | Low      | Bency Bethees<br>Brinesh B.P<br>Binex Biju Samuel<br>Athul Anil |
| Sprint-4 | The model is trained and tested by sample dataset. | USN-4                | The programmer design the model to detect the Train Details.  | 2            | Medium   | Bency Bethees<br>Brinesh B.P<br>Binex Biju Samuel<br>Athul Anil |

| Sprint   | Functional         | User Story | User Story / Task   | Story Points | Priority | Team Members  |
|----------|--------------------|------------|---|--------------|----------|---|
|          | Requirement (Epic) | Number     |   |              |          |   |
| Sprint-5 | Warning message    | USN-5      | In case any accident or delay occur, the device give the alarm and alert message to concerned department within a minute. | 1            | High     | Bency Bethees<br>Brinesh B.P<br>Binex Biju Samuel<br>Athul Anil |

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

| Sprint   | Total Story<br>Points | Duration | Sprint Start Date | Sprint End Date<br>(Planned) | Story Points<br>Completed (as on<br>Planned End Date) | Sprint Release Date<br>(Actual) |
|----------|-----------------------|----------|-------------------|------------------------------|---|---------------------------------|
| Sprint-1 | 20                    | 3 Days   | 8 Nov 2022        | 10 Nov 2022                  | 20  | 10 Nov 2022                     |
| Sprint-2 | 20                    | 3 Days   | 11 Nov 2022       | 13 Nov 2022                  | 20  | 13 Nov 2022                     |
| Sprint-3 | 20                    | 3 Days   | 14 Nov 2022       | 16 Nov 2022                  | 20  | 16 Nov 2022                     |
| Sprint-4 | 20                    | 3 Days   | 17 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 us calculate the team's average velocity (AV) per iteration unit (story points per day)

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