

## Project Planning Phase

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

|               |                             |
|---------------|-----------------------------|
| Date          | 24 October 2022             |
| Team ID       | PNT2022TMID32810            |
| 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 | Registration                     | USN-1             | As a user, I can register for the application by entering my email, password, and confirming my password.                | 10           | High     | Subikshaa.M<br>Ritheswetha.R<br>Subapreethi.B<br>Vasunthara.K |
| Sprint-1 |                                  | USN-2             | As a user, I will receive confirmation email once I have registered for the application and can login to the application | 10           | High     | Subapreethi.B<br>Vasunthara.K                                 |
| Sprint-2 | Ticket Reservation and tracking  | USN-3             | As a user I can enter my details and book tickets.   | 15           | High     | Ritheswetha.R<br>Subapreethi.B                                |
| Sprint-2 |                                  | USN-4             | As a user, I can track the exact location of the train   | 5            | Medium   | Subikshaa.M<br>Ritheswetha.R<br>Vasunthara.K                  |
| Sprint-3 | Connection with service provider | USN-5             | As a User , I can utilize the services like payment gateways by receiving OTPs   | 10           | High     | Subikshaa.M<br>Ritheswetha.R                                  |
| Sprint-3 | Queue Clearance                  | USN-6             | As a user, I can use the automatic waiting list clearance  | 10           | Medium   | Subikshaa.M<br>Vasunthara.K                                   |
| Sprint-4 | QR code generation               | USN-7             | As a user , I am able to get a QR code for ticket verification   | 20           | High     | Subikshaa.M<br>Ritheswetha.R<br>Subapreethi.B<br>Vasunthara.K |

**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               |   |                              |
| Sprint-2 | 20                 | 6 Days   | 31 Oct 2022       | 05 Nov 2022               |   |                              |
| Sprint-3 | 20                 | 6 Days   | 07 Nov 2022       | 12 Nov 2022               |   |                              |
| Sprint-4 | 20                 | 6 Days   | 14 Nov 2022       | 19 Nov 2022               |   |                              |

**Velocity:**

We have a 6-day sprint duration, and the velocity of the team is 20 (points per sprint). The team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{\text{sprint duration}}{\text{velocity}} = \frac{20}{6} = 3.33$$

**Burndown Chart:**

