

## Project Planning Phase

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

|               |  |
|---------------|--|
| Date          | 18 October 2022                        |
| Team ID       | PNT2022TMID03026                       |
| 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 | Registration                  | USN-1             | As a user, I can register through the form by Filling in my details   | 2            | High     | Swathi        |
| Sprint-1 |                               | USN-2             | As a user, I can register through phone numbers, Gmail, Facebook or other social sites  | 1            | High     | Vijayalakshmi |
| Sprint-1 | Conformation                  | USN-3             | As a user, I will receive confirmation through email or OTP once registration is successful   | 2            | Low      | Vinisha       |
| Sprint-1 | login                         | USN-4             | As a user, I can login via login id and password or through OTP received on register phone number                                     | 2            | Medium   | Yamuna        |
| Sprint-1 | Display Train details         | USN-5             | As a user, I can enter the start and destination to get the list of trains available connecting the above                             | 1            | High     | Vinisha       |
| Sprint-2 | Booking                       | USN-6             | As a use, I can provide the basic details such as a name, age, gender etc...  | 2            | High     | Swathi        |
| Sprint-2 |                               | USN-7             | As a user, I can choose the class, seat/berth. If a preferred seat/berth isn't available I can be allocated based on the availability | 1            | Low      | Vijayalakshmi |
| Sprint-2 | Payment                       | USN-8             | As a user, I can choose to pay through credit Card/debit card/UPI.  | 1            | High     | Yamuna        |

| Sprint   | Functional Requirement (Epic) | User Story Number | User Story / Task  | Story Points | Priority | Team Members  |
|----------|-------------------------------|-------------------|--|--------------|----------|---------------|
| Sprint-2 |                               | USN-9             | As a user, I will be redirected to the selected  | 2            | High     |               |
| Sprint-3 | Ticket generation             | USN-10            | As a user, I can download the generated e-ticket for my journey along with the QR code which is used for authentication during my journey. | 1            | High     | Vijayalakshmi |
| Sprint-3 | Ticket status                 | USN-11            | As a user, I can see the status of my ticket Whether it's confirmed/waiting/RAC.   | 2            | High     | Yamuna        |
| Sprint-3 | Reminders notification        | USN-12            | As a user, I get reminders about my journey A day before my actual journey.  | 1            | High     | Vinisha       |
| Sprint-3 | Ticket cancellation           | USN-13            | As a user, I can track the train using GPS and can get information such as ETA, Current stop and delay                                     | 2            | High     | Swathi        |
| Sprint-4 |                               | USN-14            | As a user, I can cancel my tickets if there's any Change of plan   | 1            | High     | Yamuna        |
| Sprint-4 | Raise queries                 | USN-15            | As a user, I can raise queries through the query box or via mail.  | 2            | Medium   | Vijayalakshmi |
| Sprint-4 | Answer the queries            | USN-16            | As a user, I will answer the questions/doubts Raised by the customers.   | 2            | High     | Vinisha       |
| Sprint-4 | Feed details                  | USN-17            | As a user, I will feed information about the trains delays and add extra seats if a new compartment is added.                              | 1            | High     | Swathi        |

#### 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)

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