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

| Team ID       | PNT2022TMID00387                       |
|---------------|--|
| Project Name  | Retail Store Stock Inventory Analytics |
| Maximum Marks | 8 Marks                                |

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

| Sprint   | Functional                    | User         | User Story / Task   | Story Points | Priority | Team   |
|----------|-------------------------------|--------------|---|--------------|----------|--|
|          | Requirement (Epic)            | Story Number |   |              |          | Members                                      |
| Sprint-1 | Registration                  | USN-1        | I can sign up for the app as a user by providing my email address, a password, and a password confirmation. | 2            | High     | Venkatesh.S,<br>Ram Kumar.K.                 |
| Sprint-1 | Confirmation                  | USN-2        | As a user, I will receive confirmation email once I have registered for the application                     | 1            | High     | Venkatesh.S,<br>Ram Kumar.K.                 |
| Sprint-2 | Registration through Facebook | USN-3        | As a user, I can register for the application through Facebook  | 2            | Low      | Venkatesh.S,<br>Ram Kumar.K.                 |
| Sprint-1 | Registration through Gmail    | USN-4        | As a user, I can register for the application through Gmail   | 2            | Medium   | Venkatesh.S,<br>Ram Kumar.K.                 |
| Sprint-1 | Login                         | USN-5        | As a user, I can log into the application by entering email & password                                      | 1            | High     | Venkatesh.S,<br>Ram Kumar.K.                 |
| Sprint-2 | Dashboard                     | USN-6        | As a user, I can view my dashboard and can perform stock prediction and analysis                            | 3            | High     | Venkatesh.S,<br>Ram Kumar.K,<br>Vaikhunth.S. |
| Sprint-2 | View list of stocks           | USN-7        | As a user I can view the list of categorized products and their details                                     | 4            | High     | Venkatesh.S,<br>Sriram.G.                    |
| Sprint-2 | Search products               | USN-8        | As a user I can search through the product using barcode  | 2            | Medium   | Venkatesh.S,<br>Sriram.G.                    |
| Sprint-3 | Report generation             | USN-9        | As a user I can generate reports based on product sales   | 5            | High     | Ram Kumar.K,<br>Vaikhunth.S,<br>Sriram.G.    |

| Sprint     | Functional Requirement (Epic) | User Story<br>Number | User Story / Task  | Story Points | Priority | Team<br>Members   |
|------------|-------------------------------|----------------------|--|--------------|----------|---|
| - Sprint 3 | Stock Prediction              | USN-10               | As a user I can predict out of stock and less stock for a product                  | 5            | High     | Ram Kumar.K,<br>Vaikhunth.S,<br>Sriram.G.                 |
| Sprint-4   | Notification system           | USN-11               | As a user I can view notification for expired and out of stock products            | 4            | High     | Ram Kumar.K,<br>Venkatesh.S.                              |
| Sprint-4   | Re-Ordering stock             | USN-12               | As a user I can reorder stocks based on predictions and notification               | 3            | High     | Venkatesh.S,<br>Vaikhunth.S,<br>Sriram.G.                 |
| Sprint-2   | Updating stock                | USN-13               | As a user I can add/delete products  | 5            | High     | Venkatesh.S,<br>Ram Kumar.K,<br>Vaikhunth.S,<br>Sriram.G. |
| Sprint-4   | Invoice generation            | USN-14               | As a user I can generate invoice calculating taxes, discount and calculate credits | 4            | High     | Vaikhunth.S,<br>Venkatesh.S.                              |
| Sprint-4   | Discount system               | USN-15               | As a user I can provide discount based on credit points                            | 3            | Medium   | Ram Kumar.K,<br>Venkatesh.S.                              |

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

| Sprint   | Total Story<br>Points | Duration | Sprint Start Date | Sprint End Date<br>(Planned) | Story Points Completed (as on Planned End Date) | Sprint Release Date (Actual) |
|----------|-----------------------|----------|-------------------|------------------------------|---|------------------------------|
| Sprint-1 | 6                     | 6 Days   | 24 Oct 2022       | 29 Oct 2022                  | 6   | 29 Oct 2022                  |
| Sprint-2 | 16                    | 6 Days   | 31 Oct 2022       | 05 Nov 2022                  | 16  | 05 Nov 2022                  |
| Sprint-3 | 10                    | 6 Days   | 07 Nov 2022       | 12 Nov 2022                  | 10  | 12 Nov 2022                  |
| Sprint-4 | 14                    | 6 Days   | 14 Nov 2022       | 19 Nov 2022                  | 14  | 19 Nov 2022                  |

### Velocity:

Consider a scenario in which the sprint will last 10 days and the team's velocity is 20. (points per sprint). Let's determine the group's average velocity (AV) for each iteration (story points per day)

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

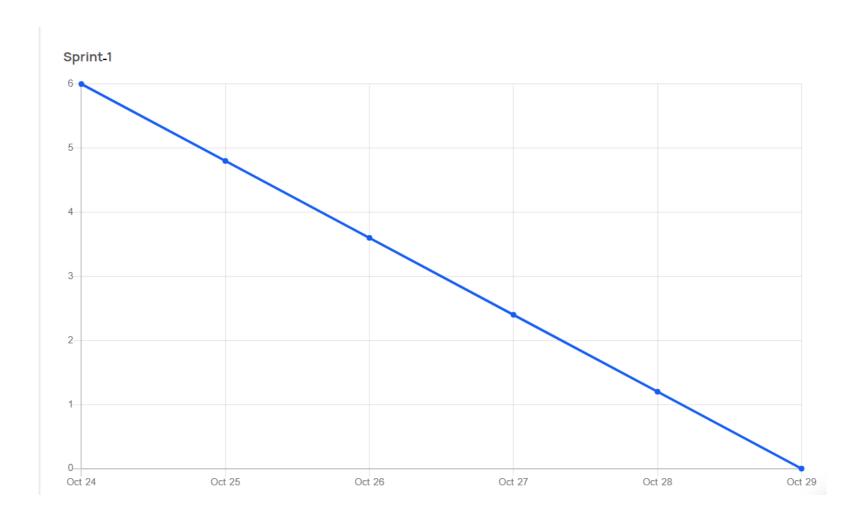
| Sprint   | Total Story Points | Duration | Average Velocity |  |
|----------|--------------------|----------|------------------|--|
| Sprint-1 | 6                  | 6 Days   | 6/6=1            |  |
| Sprint-2 | 16                 | 6 Days   | 16/6=2.67        |  |
| Sprint-3 | 10                 | 6 Days   | 10/6=1.67        |  |
| Sprint-4 | 14                 | 6 Days   | 14/6=2.33        |  |
| Total    | 46                 | 24       | 46/24=1.91       |  |

#### **Burndown Chart:**

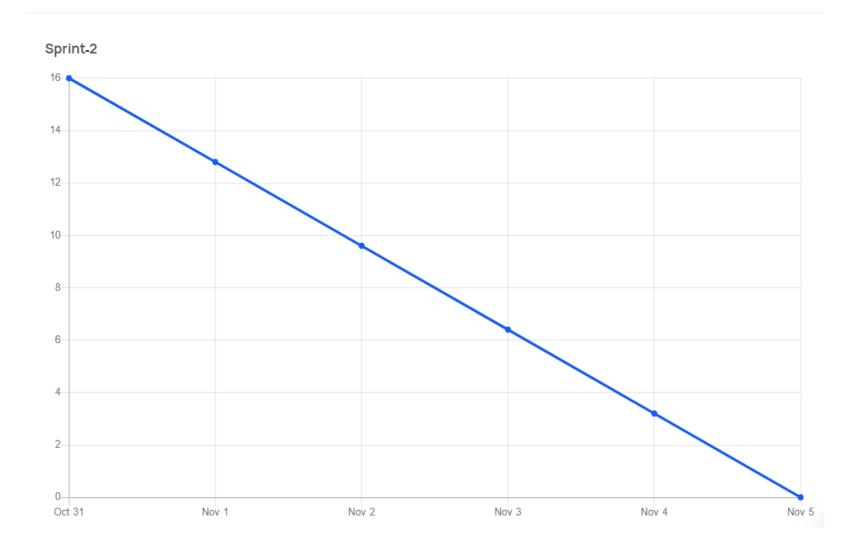
A burn down chart plots the amount of work remaining to perform against the amount of time. In agile software development approaches like Scrum, it is frequently employed. Burn down charts, however, can be used for any project that makes observable progress over time.

### **Estimated Effort:**

# Sprint - 1:

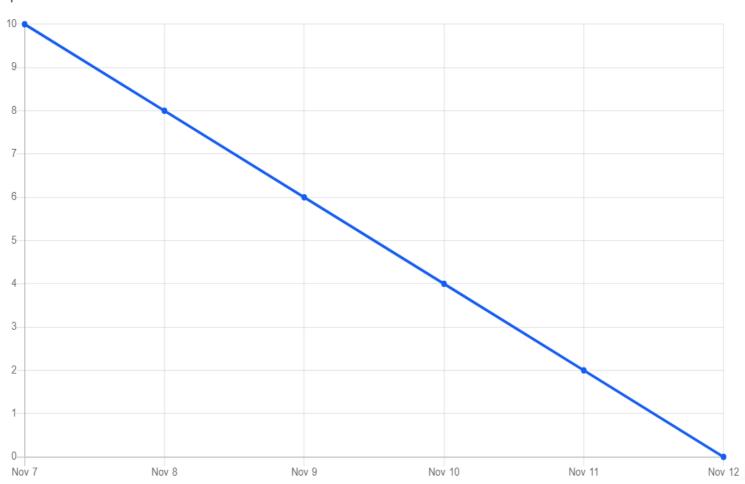


## Sprint - 2:

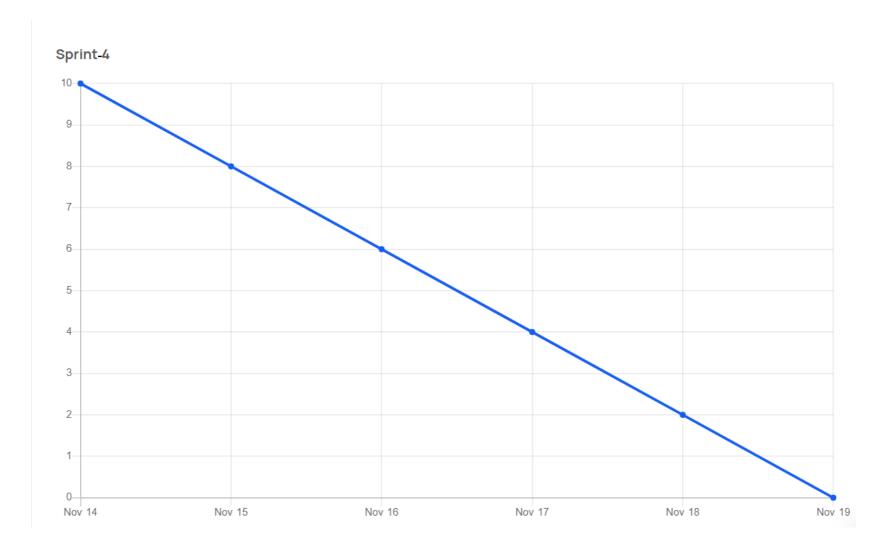


### Sprint - 3:

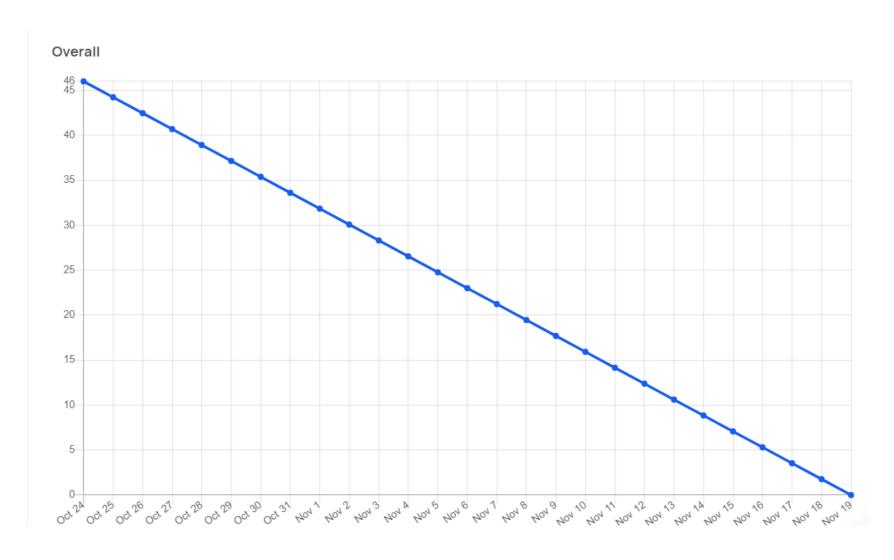




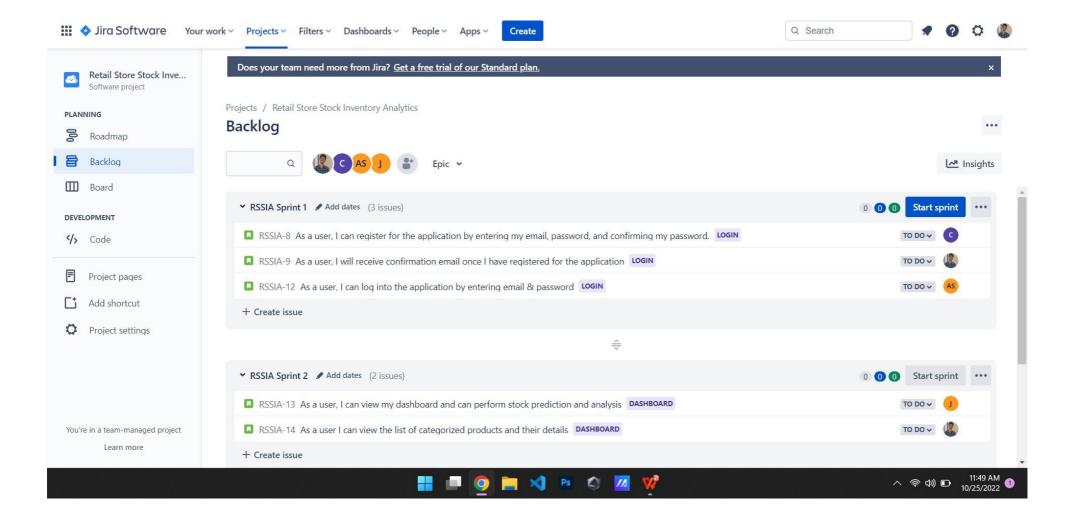
Sprint - 4:

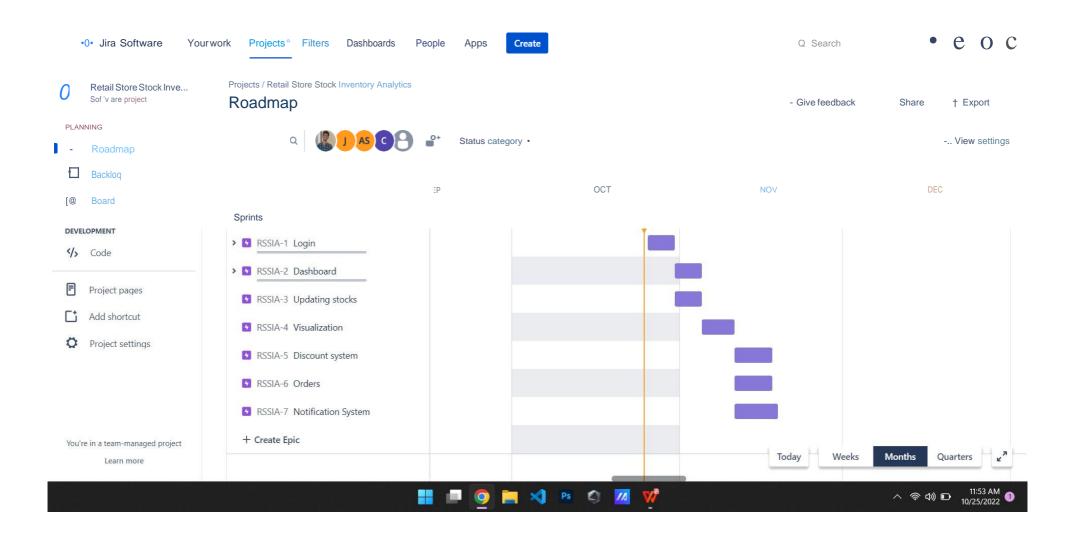


### Overall burndown chart:



### **Project Planning Tool:**





### **Milestones and Activities:**

| MILESTONES          | ACTIVITIES  |
|---------------------|---|
| Login               | Login into Dashboard  |
| Dashboard           | <ul><li>View Stocks</li><li>Perform Predictions</li><li>Search Products</li></ul>                   |
| Updating Stocks     | <ul><li>View Products</li><li>Add Products</li><li>Delete Products</li></ul>                        |
| Visualization       | <ul> <li>Report generation</li> <li>Out of stock prediction</li> <li>In stock prediction</li> </ul> |
| Discount system     | <ul><li>Discounts based on credits</li><li>Invoice generation</li></ul>                             |
| Orders              | Reorder Stock   |
| Notification system | Notification upon critical stock  |