## **Project Planning Phase**

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

| Date          | 24 October 2022                       |
|---------------|---------------------------------------|
| Team ID       | PNT2022TMID21204                      |
| Project Name  | Retail Store Stock Inventory Analysis |
| 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<br>Requirement (Epic) | User Story<br>Number | User Story / Task   | Story Points | Priority | Team<br>Members              |
|----------|----------------------------------|----------------------|---|--------------|----------|------------------------------|
| Sprint-1 | Registration                     | USN-1                | As a user, I can register for the application by entering my email, password, and confirming my password. | 2            | High     | Aishwarya,<br>Shalini Priya  |
| Sprint-1 | Confirmation                     | USN-2                | As a user, I will receive confirmation email once I have registered for the application                   | 1            | High     | Aishwarya,<br>Shalini Priya  |
| Sprint-2 | Registartion through Facebook    | USN-3                | As a user, I can register for the application through Facebook  | 2            | Low      | Aishwarya,<br>Shalini Priya  |
| Sprint-1 | Registartion through gmail       | USN-4                | As a user, I can register for the application through Gmail   | 2            | Medium   | Aishwarya,<br>Shalini Priya  |
| Sprint-1 | Login                            | USN-5                | As a user, I can log into the application by entering email & password                                    | 1            | High     | Aishwarya,<br>Shalini Priya  |
| Sprint-2 | Dashboard                        | USN-6                | As a user, I can view the stocks in the dashboard.  | 5            | High     | Amudha,<br>Ragavi<br>Preethi |
| Sprint-2 | View the statictics              | USN-7                | As a user, I must be able to view the statistics suggestion.  | 3            | High     | Amudha,<br>Ragavi<br>Preethi |
| Sprint-3 | Viewing the information          | USN-8                | As a user, A simple diagram consisting of all the information must be visible.                            | 2            | Low      | Amudha,<br>Ragavi<br>Preethi |
| Sprint-2 | Updating stock                   | USN-9                | As a user, I must be able to edit the number of stocks.   | 2            | Low      | Amudha,                      |

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|----------|----------------------------------|----------------------|--|--------------|----------|--|
|          |                                  |                      |  |              |          | Ragavi<br>Preethi                            |
| Sprint-3 | Confirmation befire deleting     | USN-10               | As a user, I must have double confirmation before deleting all the data.             | 3            | Medium   | Amudha,<br>Ragavi<br>Preethi                 |
| Sprint-4 | Notifications                    | USN-11               | As a user, I must get notification about the stock that is rapidly depleting.        | 5            | High     | Amudha,<br>Ragavi<br>Preethi                 |
| Sprint-3 | Stock Prediction                 | USN-12               | As a user, I can predict out of stock and less stock for a product.                  | 5            | Medium   | Aishwarya,<br>Ragavi<br>Preethi              |
| Sprint-4 | Invoice generation               | USN-13               | As a user, I can generate invoice calculating taxes. discount and calculate credits. | 5            | High     | Shalini Priya,<br>Amudha                     |
| Sprint-4 | Discount System                  | USN-14               | As u user, I can provide discount based on the credit points.                        | 3            | Medium   | Amudha,<br>Ragvi<br>Preethi,Shalini<br>Priya |
| Sprint-3 | Report generation                | USN-15               | As a user, I can generate reports based on the product sales.                        | 5            | High     | Aishwarya,<br>Amudha,<br>Ragavi<br>Preethi   |

## 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<br>(Actual) |
|----------|-----------------------|----------|-------------------|------------------------------|---|---------------------------------|
| Sprint-1 | 6                     | 6 Days   | 24 Oct 2022       | 29 Oct 2022                  | 6   | 29 Oct 2022                     |
| Sprint-2 | 12                    | 6 Days   | 31 Oct 2022       | 05 Nov 2022                  | 12  | 05 Nov 2022                     |
| Sprint-3 | 15                    | 6 Days   | 07 Nov 2022       | 12 Nov 2022                  | 15  | 12 Nov 2022                     |
| Sprint-4 | 13                    | 6 Days   | 14 Nov 2022       | 19 Nov 2022                  | 13  | 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)

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

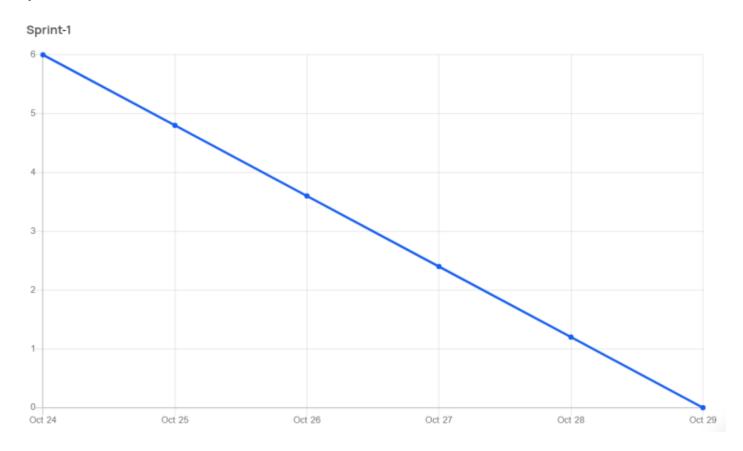
| Sprint   | Total Story Points | Duration | Average velocity |  |
|----------|--------------------|----------|------------------|--|
| Sprint-1 | 6                  | 6 Days   | 6/6 = 1          |  |
| Sprint-2 | 12                 | 6 Days   | 12/6 = 2         |  |
| Sprint-3 | 15                 | 6 Days   | 15/6 = 2.5       |  |
| Sprint-4 | 13                 | 6 Days   | 13/6 = 2.167     |  |
| Total    | Total 46           |          | 46/24 = 1.92     |  |

### **Burndown Chart:**

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

### **Estimated Effort:**

### Sprint 1:



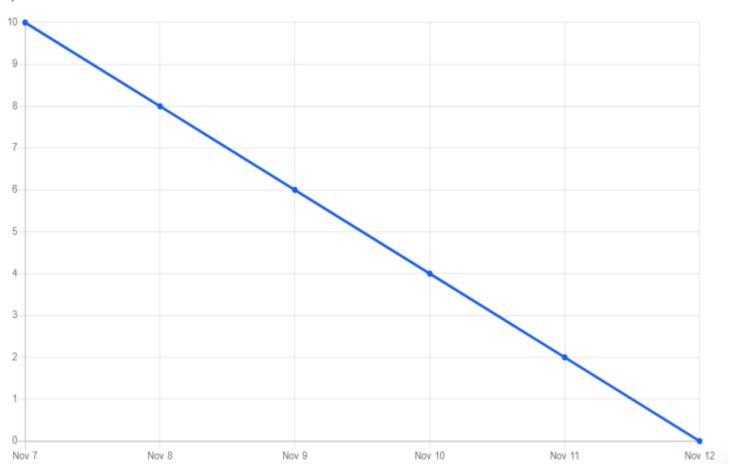
# Sprint 2:





# Sprint 3:

Sprint-3



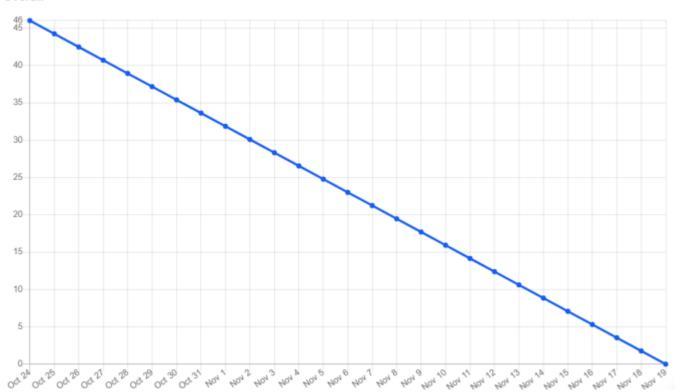
# Sprint 4:

## Sprint-4

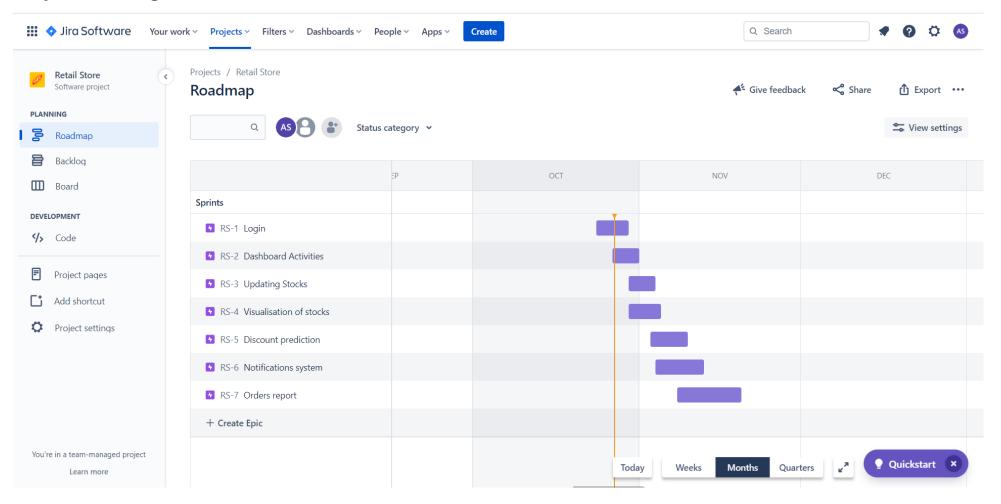


#### Overall burndown chart:

#### Overall



## **Project Planning Tool:**



## **Milestones and Activities:**

| MILESTONES           | ACTIVITES  |
|----------------------|--|
| Login                | Login into Dashboard   |
| Dashboard Activties  | <ul> <li>View Stocks</li> <li>Perform Predictions</li> <li>Search Products</li> <li>View simplified information</li> </ul> |
| Updating stocks      | Add Products     Delete Products   |
| Visualisation stocks | <ul> <li>Report generation</li> <li>Out of stock prediction</li> <li>In stock prediction</li> </ul>                        |
| Discount prediction  | Discounts based on credits   |
| Notifications System | <ul><li>Notification upon rapid depletion</li><li>Notification upon login</li></ul>  |
| Orders report        | <ul><li>Reorder Stock</li><li>Invoice generation</li></ul>   |