## **Project Planning Phase**

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

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	Date	13 NOVEMBER 2022					
	Team ID	PNT2022TMID49986					
	Project Name	Retail Store Stock Inventory Analytics					
	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.	2	High	Akash A, Aswin S, Vijay M.
Sprint-1	Confirmation	USN-2	As a user, I will receive confirmation email once I have registered for the application	1	High	Akash A, vijay M, kothar masthan N
Sprint-2	Registration through Facebook	USN-3	As a user, I can register for the application through Facebook	2	Low	Aswin S, kothar masthanN.
Sprint-1	Registration through Gmail	USN-4	As a user, I can register for the application through Gmail	2	Medium	Akash A, Vijay M.
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password	1	High	Aswin S, kothar masthan N
Sprint-2	Dashboard	USN-6	As a user, I can view my dashboard and can perform stock prediction and analysis	3	High	Vijay M, Akash A.
Sprint-2	View list of stocks	USN-7	As a user I can view the list of categorized products and their details	4	High	Aswin S, kothar Masthan N.

Sprint-2	Search products	USN-8	As a user I can search through the product using barcode	2	Medium	Vijay M, Aswin S
Sprint-3	Report generation	USN-9	As a user I can generate reports based on product sales	5	High	Akash A, Aswin S, Vijay M, kothar masthan N

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Stock Prediction	USN-10	As a user I can predict out of stock and less stock for a product	5	High	Aswin S, Vijay M, kothar masthan N
Sprint-4	Notification system	USN-11	As a user I can view notification for expired and out of stock products	4	High	Aswin S, Kothar mathan N
Sprint-4	Re-Ordering stock	USN-12	As a user I can reorder stocks based on predictions and notification	3	High	Akash A, Vijay M, Kothar masthan N
Sprint-2	Updating stock	USN-13	As a user I can add/delete products	5	High	Akash A Aswin S, Vijay M, kothar masthan N
Sprint-4	Invoice generation	USN-14	As a user I can generate invoice calculating taxes, discount and calculate credits	4	High	Aswin S, Vijay M, Akash A.
Sprint-4	Discount system	USN-15	As a user I can provide discount based on credit points	3	Medium	kothar mastha N, Akash A

### **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	6	3 Days	29 Oct 2022	01 Nov 2022	6	17 Nov 2022
Sprint-2	16	4 Days	02 Nov 2022	05Nov 2022	16	17 Nov 2022
Sprint-3	10	6 Days	06 Nov 2022	12 Nov 2022	10	18 Nov 2022
Sprint-4	14	4 Days	13 Nov 2022	16 Nov 2022	14	19Nov 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)

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

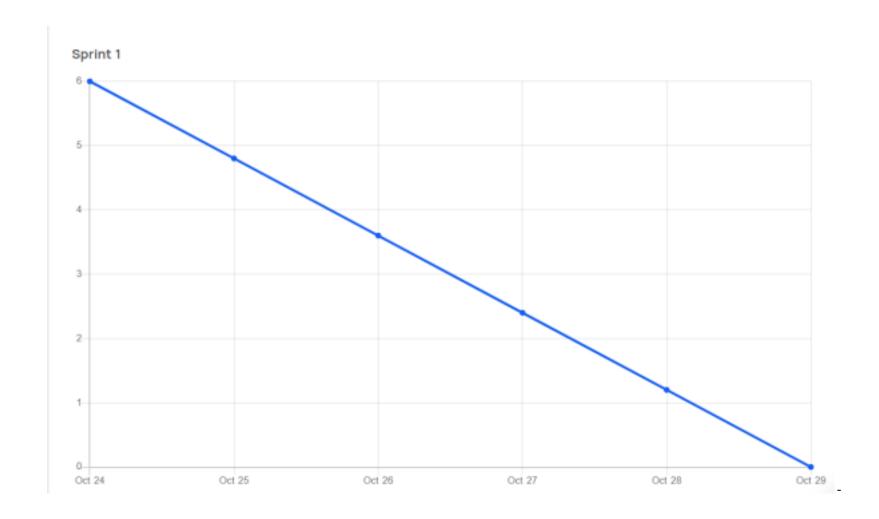
Sprint	Total Story Points	Duration	Average Velocity
Sprint-1	6	6 Days	6/6=1
Sprint-2	16	6 Days	16/6=2.67
Sprint-3	10	6 Days	10/6=1.67
Sprint-4	14	6 Days	14/6=2.33
Total	46	24	46/24=1.91

#### **Burndown Chart:**

A burn down chart 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:



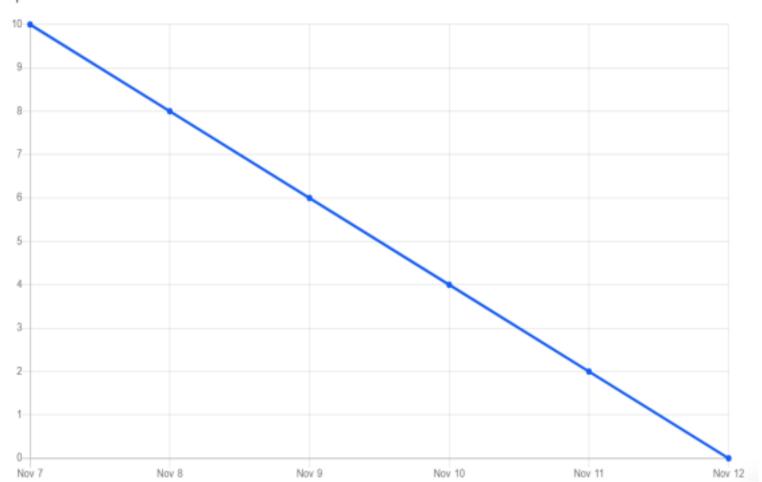
# Sprint - 2:



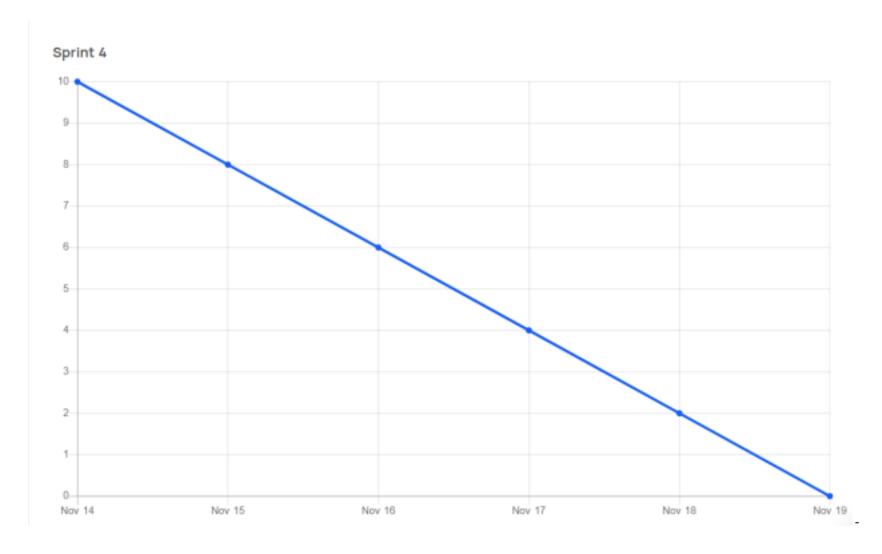


### Sprint - 3:

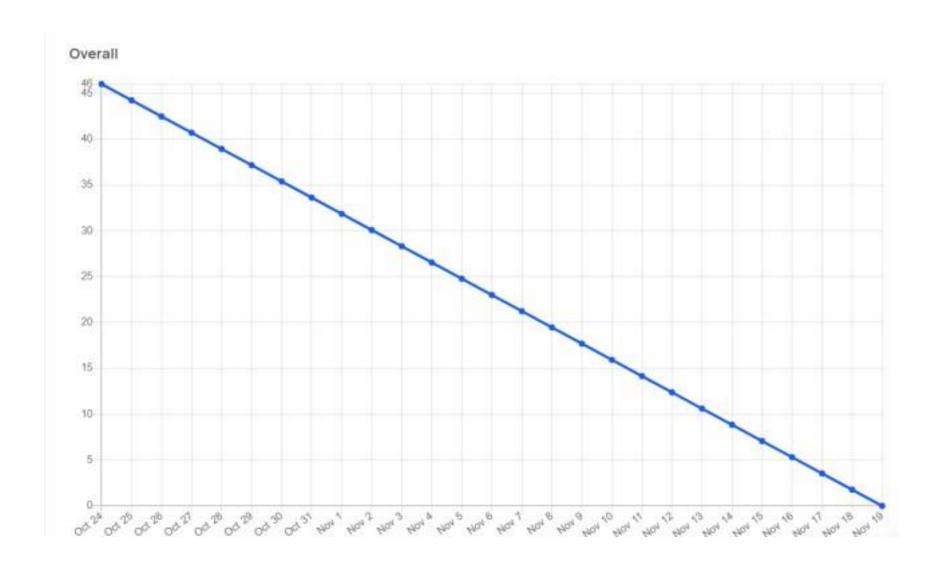




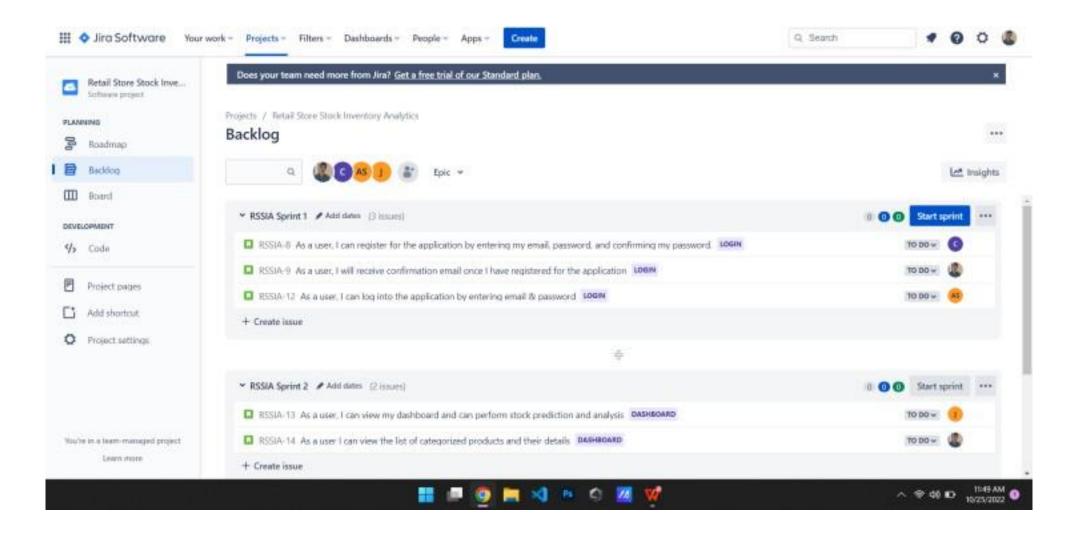
Sprint - 4:

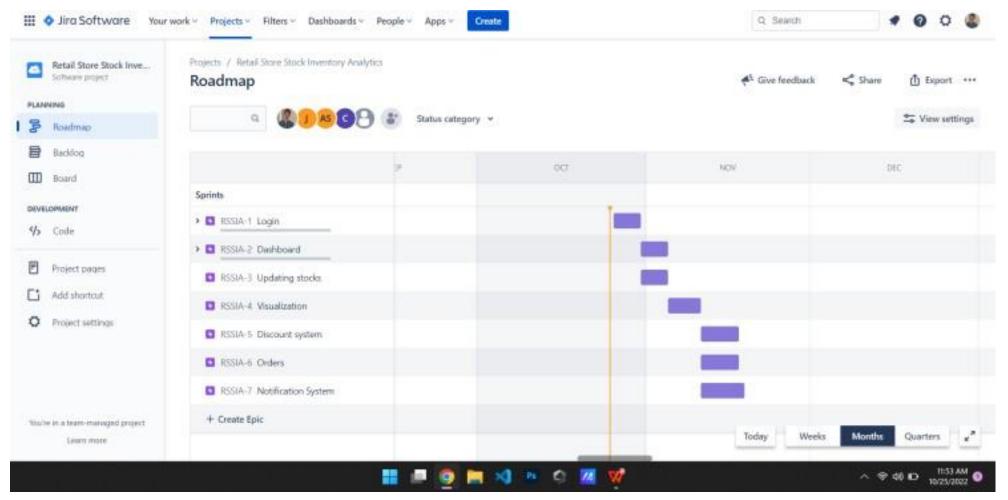


#### Overall burndown chart:



#### **Project Planning Tool:**





#### **Milestones and Activities:**

MILESTONES	ACTIVITIES
Login	Login into Dashboard
Dashboard	View Stocks Perform Predictions Search Products

Updating Stocks	View Products Add Products Delete Products
Visualization	<ul><li>Report generation</li><li>Out of stock prediction</li><li>In stock prediction</li></ul>
Discount system	Discounts based on credits     Invoice generation
Orders	Reorder Stock
Notification system	Notification upon critical stock