

# Project Planning Phase:

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

Sprint	Functional Requirements	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 conform the password	2	High	Prasanah Kumar Nehru Prasanth Praveen Kumar
Sprint-1	Confirmation	USN-2	As a user, I will receive confirmation email once I have registered for the application	1	High	Kishore Prasanah Kumar
Sprint-1	Registration through Facebook	USN-3	As a user, I can register for the application through Facebook	2	Low	Nehru Prasanth Praveen Kumar
Sprint-1	Registration through Gmail	USN-4	As a user, I can register for the application through Gmail	2	Medium	Kishore Prasanah Kumar Praveen Kumar
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email and password	1	High	Nehru Prasanth Praveen Kumar Kishore
Sprint-2	Dashboard	USN-6	As a user, I can view my dashboard and can perform stock prediction and analysis	3	High	Prasanah Kumar Nehru Prasanth Praveen Kumar Kishore
Sprint-2	View lists of stocks	USN-7	As a user, I can view the list of categorized products and their details	4	High	Prasanah Kumar Kishore
Sprint-2	Search products	USN-8	As a user I can search through the product using barcode	2	Medium	Kishore Prasanah Kumar
Sprint-3	Report generation	USN-9	As a user, I can generate reports based on product sales	5	High	Prasanah Kumar Kishore
Sprint-3	Stock Prediction	USN-10	As a user, I can predict out of stock and less stock for a product	5	High	Kishore Nehru Prasanth Prasanah Kumar
Sprint-4	Notification system	USN-11	As a user, I can view notification for expired and out of stock products	4	High	Kishore Prasanah Kumar
Sprint-4	Re-Ordering stock	USN-12	As a user, I can reorder stocks based on predictions and notification	3	High	Nehru Prasanth Praveen Kumar Prasanah Kumar
Sprint-2	Updating stock	USN-13	As a user, I can add/delete products	5	High	Prasanah Kumar Nehru Prasanth Praveen Kumar Kishore
Sprint-4	Invoice Generation	USN-14	As a user, I can generate invoice calculating taxes, discount and calculate credits	4	High	Prasanah Kumar Kishore
Sprint-4	Discount system	USN-15	I can provide discount based on credit points	3	Medium	Prasanah Kumar Kishore Praveen Kumar

Project Tracker, Velocity & Burndown Chart(4 Marks)

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date	Story Points Completed	Sprint Release Date
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:

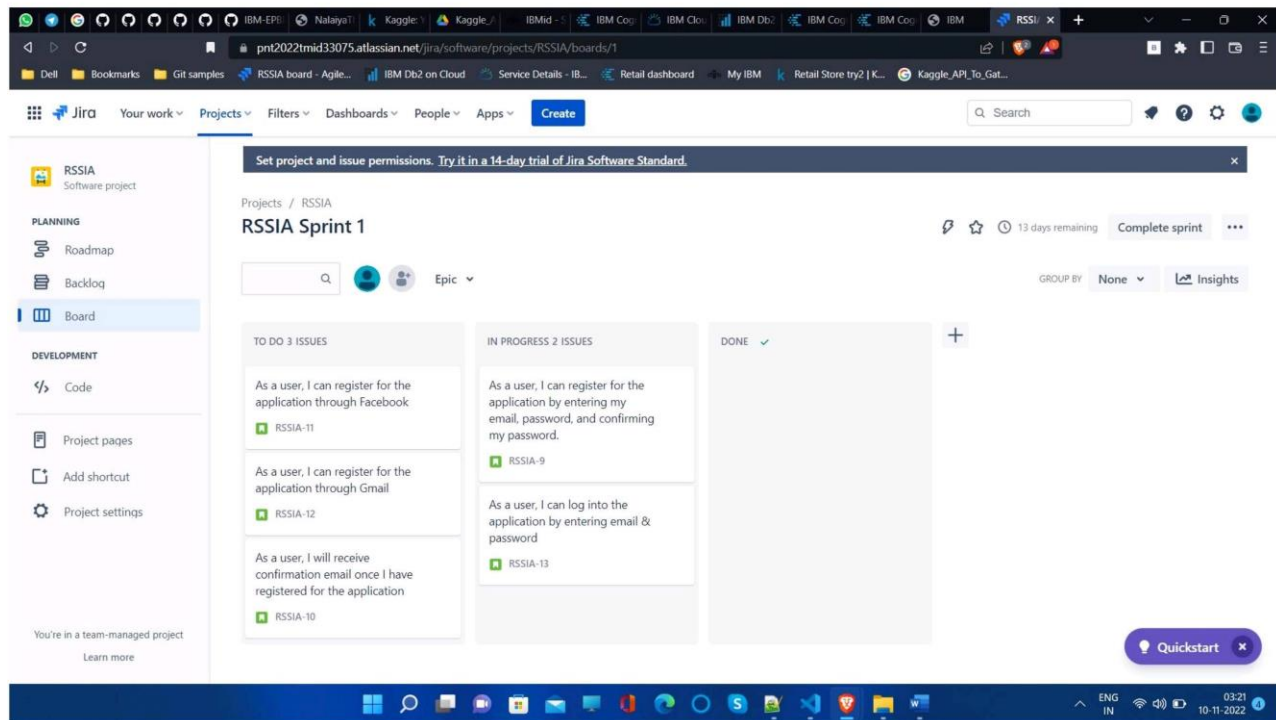
Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

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

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.



Project Planning Tool:

Roadmap:

	SEP	OCT	NOV	DEC	
Sprints					
 RSSIA-2 login					
 RSSIA-3 Dashboard					
 RSSIA-4 Updating stocks					
 RSSIA-5 Visualization					
 RSSIA-6 Discount system					
 RSSIA-7 Orders					
 RSSIA-8 Notification system					

The screenshot displays the Jira backlog for the 'RSSIA' project. The interface includes a top navigation bar with the Jira logo, project name, and various filters. The main content area shows the 'Backlog' view for the 'RSSIA' project. It features a search bar, a filter dropdown set to 'Epic', and a 'Start sprint' button. The backlog is organized into two sprints: 'RSSIA Sprint 1' (5 issues) and 'RSSIA Sprint 2' (4 issues). Each issue is a user story with a green status icon and a 'TO DO' label. The issues are as follows:

- RSSIA-9:** As a user, I can register for the application by entering my email, password, and confirming my password.
- RSSIA-10:** As a user, I will receive confirmation email once I have registered for the application.
- RSSIA-11:** As a user, I can register for the application through Facebook.
- RSSIA-12:** As a user, I can register for the application through Gmail.
- RSSIA-13:** As a user, I can log into the application by entering email & password.
- RSSIA-14:** As a user, I can view my dashboard and can perform stock prediction and analysis.
- RSSIA-15:** As a user I can view the list of categorized products and their details.

At the bottom right, there is a 'Quickstart' button.

Projects / RSSIA

## Backlog

Search Epic ▾

**Michael Daniel 034**

▼ RSSIA Sprint 3 Add dates (2 issues) 0 0 0 Start sprint

	RSSIA-17 As a user I can generate reports based on product sales	TO DO ▾	
	RSSIA-19 As a user I can predict out of stock and less stock for a product	TO DO ▾	

+ Create issue

≡

▼ RSSIA Sprint 4 Add dates (4 issues) 0 0 0 Start sprint

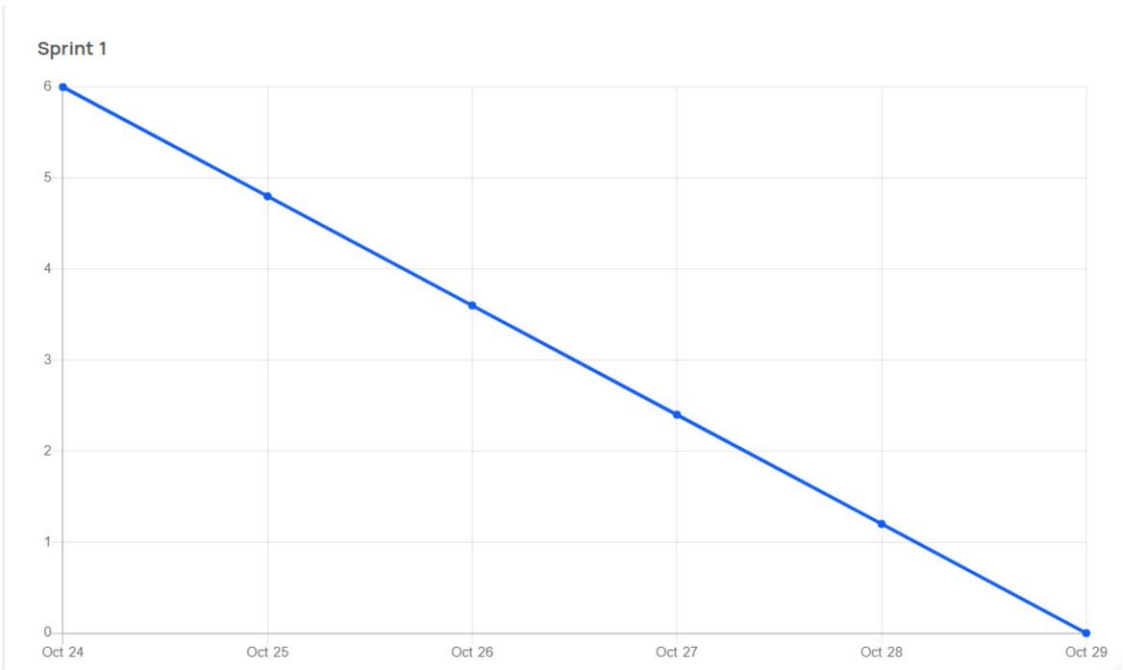
	RSSIA-20 As a user I can view notification for expired and out of stock products	TO DO ▾	
	RSSIA-21 As a user I can reorder stocks based on predictions and notification	TO DO ▾	
	RSSIA-23 As a user I can generate invoice calculating taxes, discount and calculate credits	TO DO ▾	
	RSSIA-24 As a user I can provide discount based on credit points	TO DO ▾	

+ Create issue

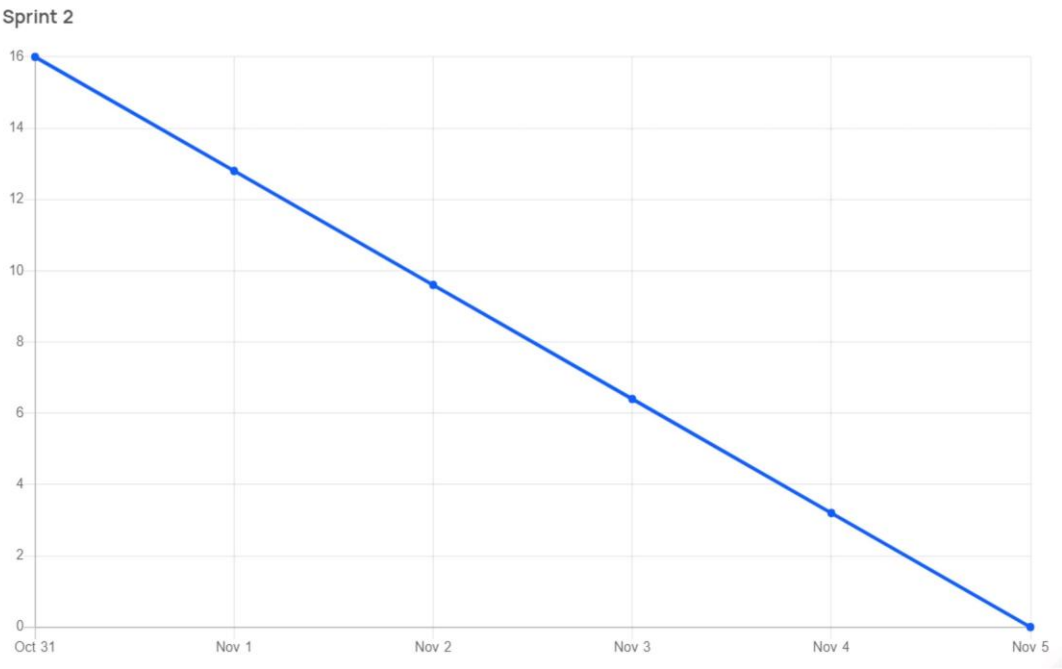
Quickstart

Estimated Effort:

Sprint - 1:

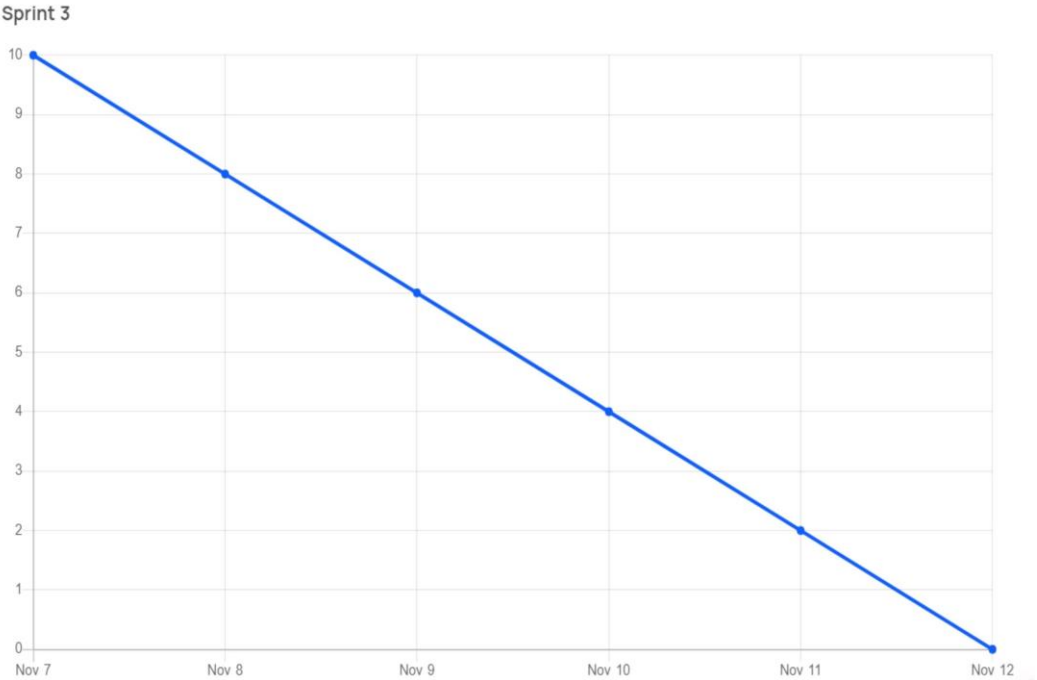


Sprint - 2:

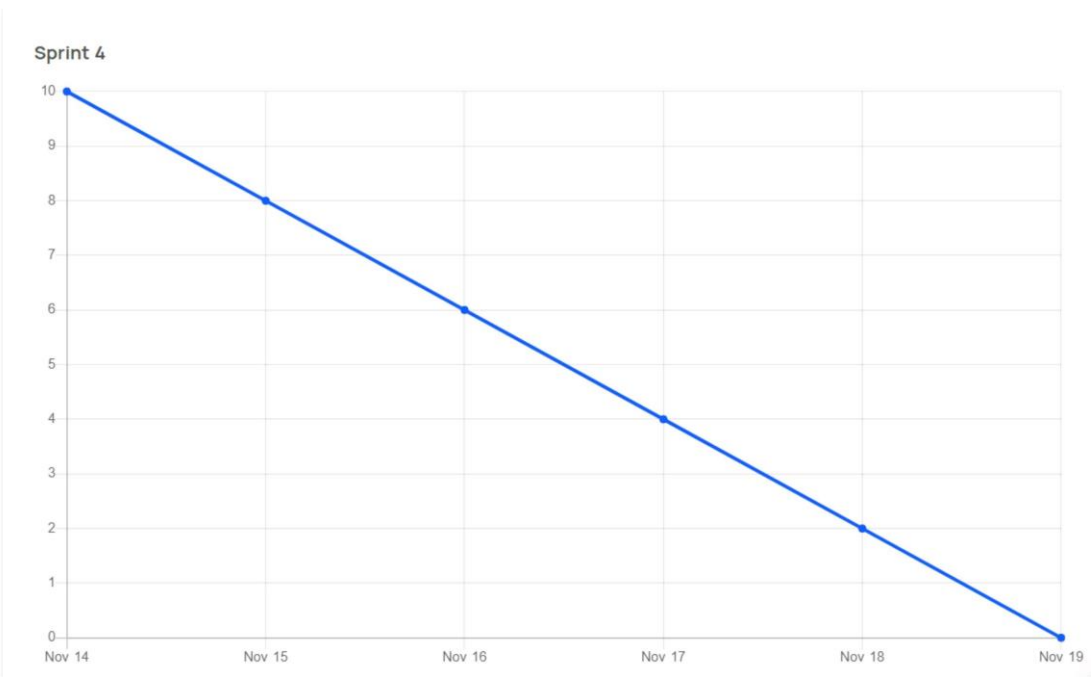




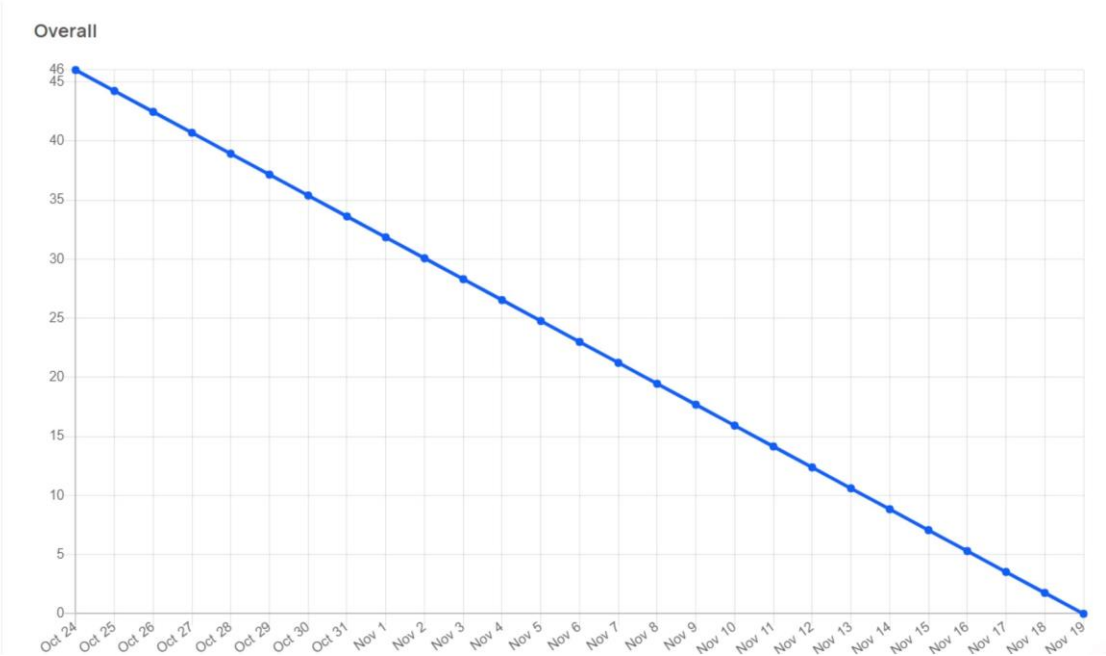
Sprint - 3:



Sprint - 4:



Overall burndown chart:



**Milestones and Activities of Sprint:**

MILESTONES	ACTIVITIES
Login	<ul style="list-style-type: none"><li>• Login into Dashboard</li></ul>
Dashboard	<ul style="list-style-type: none"><li>• View Stocks</li><li>• Perform Predictions</li><li>• Search Products</li></ul>
Updating Stocks	<ul style="list-style-type: none"><li>• View Products</li><li>• Add Products</li><li>• Delete Products</li></ul>
Visualization	<ul style="list-style-type: none"><li>• Report generation</li><li>• Out of stock prediction</li><li>• In stock prediction</li></ul>
Discount system	<ul style="list-style-type: none"><li>• Discounts based on credits</li><li>• Invoice generation</li></ul>
Orders	<ul style="list-style-type: none"><li>• Reorder Stock</li></ul>
Notification system	<ul style="list-style-type: none"><li>• Notification upon critical stock</li></ul>