Product Backlog, Sprint Schedule, and Estimation (4 Marks) project planning phase

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	Harish Indhumati Balamani
Sprint-1	Confirmation	USN-2	As a user, I will receive confirmation email once I have registered for the application	1	High	Dinesh Harish
Sprint-1	Registration through Facebook	USN-3	As a user, I can register for the application through Facebook	2	Low	Indhumathi Balamani
Sprint-1	Registration through Gmail	USN-4	As a user, I can register for the application through Gmail	2	Medium	Dinesh harish Balamani
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password	1	High	Indhumathi Balamani Dinesh
Sprint-2	Dashboard	USN-6	As a user, I can view my dashboard and can perform stock prediction and analysis	3	High	Dinesh Harish Balamani Harish
Sprint-2	View list of stocks	USN-7	As a user I can view the list of categorized products and their details	4	High	Harish Dinesh
Sprint-2	Search products	USN-8	As a user I can search through the product using barcode	2	Medium	Dinesh Harish
Sprint-3	Report generation	USN-9	As a user I can generate reports based on product sales	5	High	Harish Dinesh

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	Dinesh Indhumati Harish
Sprint-4	Notification system	USN-11	As a user I can view notification for expired and out of stock products	4	High	Dinesh Harish
Sprint-4	Re-Ordering stock	USN-12	As a user I can reorder stocks based on predictions and notification	3	High	Indhumathi Balamani Harish
Sprint-2	Updating stock	USN-13	As a user I can add/delete products	5	High	Dinesh Harish Balamani indhumati
Sprint-4	Invoice generation	USN-14	As a user I can generate invoice calculating taxes, discount and calculate credits	4	High	Harish Dinesh
Sprint-4	Discount system	USN-15	As a user I can provide discount based on credit points	3	Medium	Harish Dinesh Balamani

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	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:

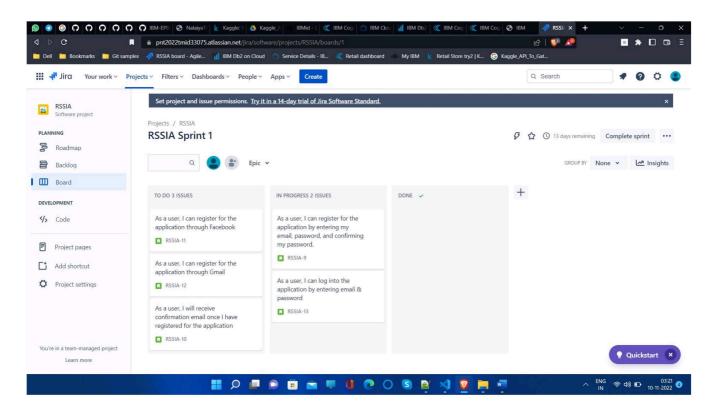
Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

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

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:

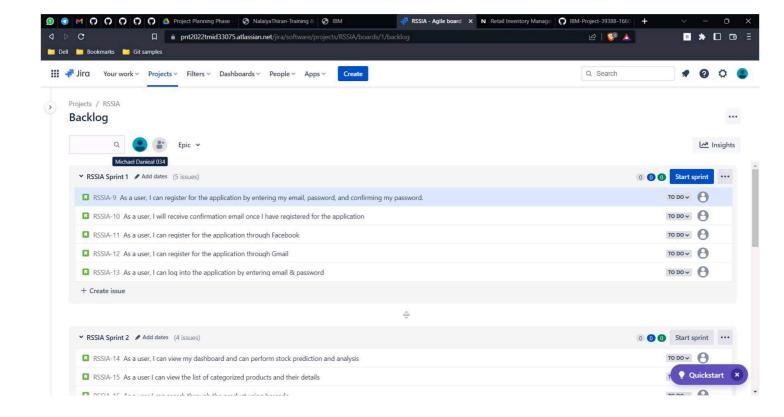
A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

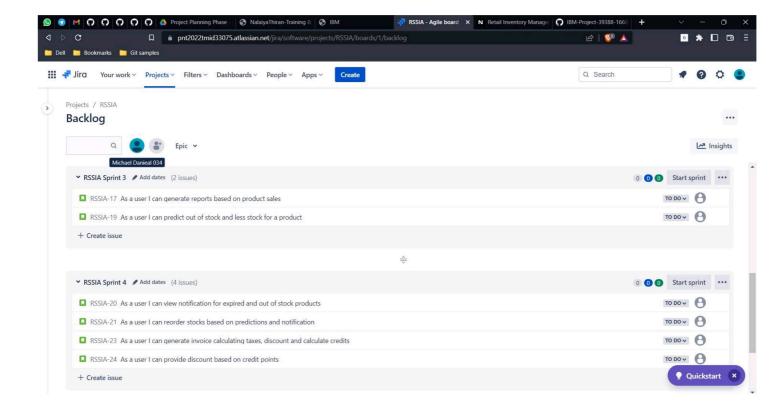


Project Planning Tool:

Roadmap:

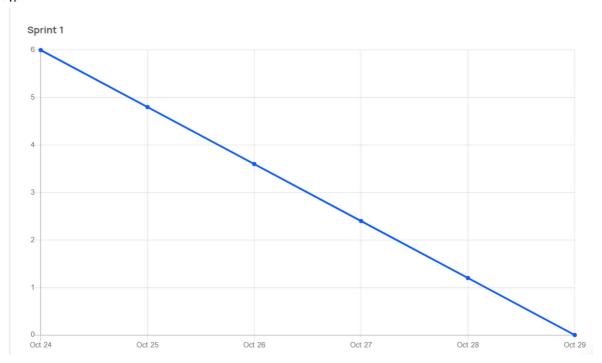
	ΞP	ОСТ	NOV	DEC
Sprints				
RSSIA-2 login				
RSSIA-3 Dashboard				
RSSIA-4 Updating stocks				
RSSIA-5 Visualization				
RSSIA-6 Discount system				
RSSIA-7 Orders				
RSSIA-8 Notification system				



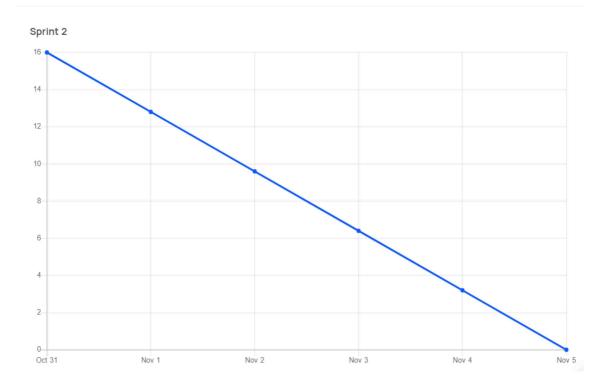


Estimated Effort:

Sprint - 1:



Sprint - 2:

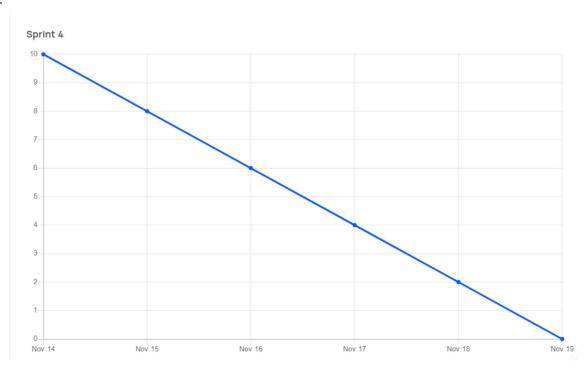


Sprint - 3:

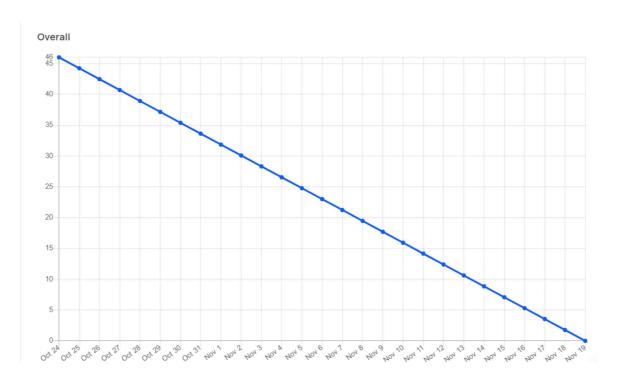




Sprint - 4:



Overall burndown chart:



Milestones and Activities of Sprint:

MILESTONES	ACTIVITIES
Login	Login into Dashboard
Dashboard	View StocksPerform PredictionsSearch Products
Updating Stocks	View ProductsAdd ProductsDelete Products
Visualization	Report generation Out of stock prediction In stock prediction
Discount system	Discounts based on credits Invoice generation
Orders	Reorder Stock
Notification system	Notification upon critical stock