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

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 confirmingmy password.	2	High	Prawin Kumar, Hariprasad
Sprint-1	Confirmation	USN-2	As a user, I will receive confirmation emailonce I have registered for the application	1	High	Prawin Kumar, Hariprasad
Sprint-1	Registration through Facebook	USN-3	As a user, I can register for the application through Facebook	2	Low	Prawin Kumar, Hariprasad
Sprint-1	Registration through Gmail	USN-4	As a user, I can register for the application through Gmail	2	Medium	Prawin Kumar, Hariprasad
Sprint-1	Login	USN-5	As a user, I can log into the application byentering email & password	1	High	Prawin Kumar, Hariprasad
Sprint-2	Dashboard	USN-6	As a user, I can view my dashboard and canperform stock prediction and analysis	3	High	Prawin Kumar, Hariprasad, Danish Rubhan
Sprint-2	View list of stocks	USN-7	As a user I can view the list of categorizedproducts and their details	4	High	Danish Rubhan, Yoga Manikandan
Sprint-2	Search products	USN-8	As a user I can search through the productusing barcode	2	Medium	Danish Rubhan, Yoga Manikandan
Sprint-3	Report generation	USN-9	As a user I can generate reports based onproduct sales	5	High	Danish Rubhan, Yoga Manikandan

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 lessstock for a product	5	High	Prawin Kumar, Danish Rubhan
Sprint-4	Notification system	USN-11	As a user I can view notification for expiredand out of stock products	4	High	Hariprsad, Yoga Manikandan
Sprint-4	Re-Ordering stock	USN-12	As a user I can reorder stocks basedon predictions and notification	3	High	Danish Rubhan, Yoga Manikandan
Sprint-2	Updating stock	USN-13	As a user I can add/delete products	5	High	Danish Rubhan, Yoga Manikandan, Prawin Kumar, Hariprasad
Sprint-4	Invoice generation	USN-14	As a user I can generate invoice calculating taxes, discount and calculatecredits	4	High	Prawin Kumar, Hariprasad
Sprint-4	Discount system	USN-15	As a user I can provide discount based on credit points	3	Medium	Danish Rubhan, Yoga Manikandan

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)

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

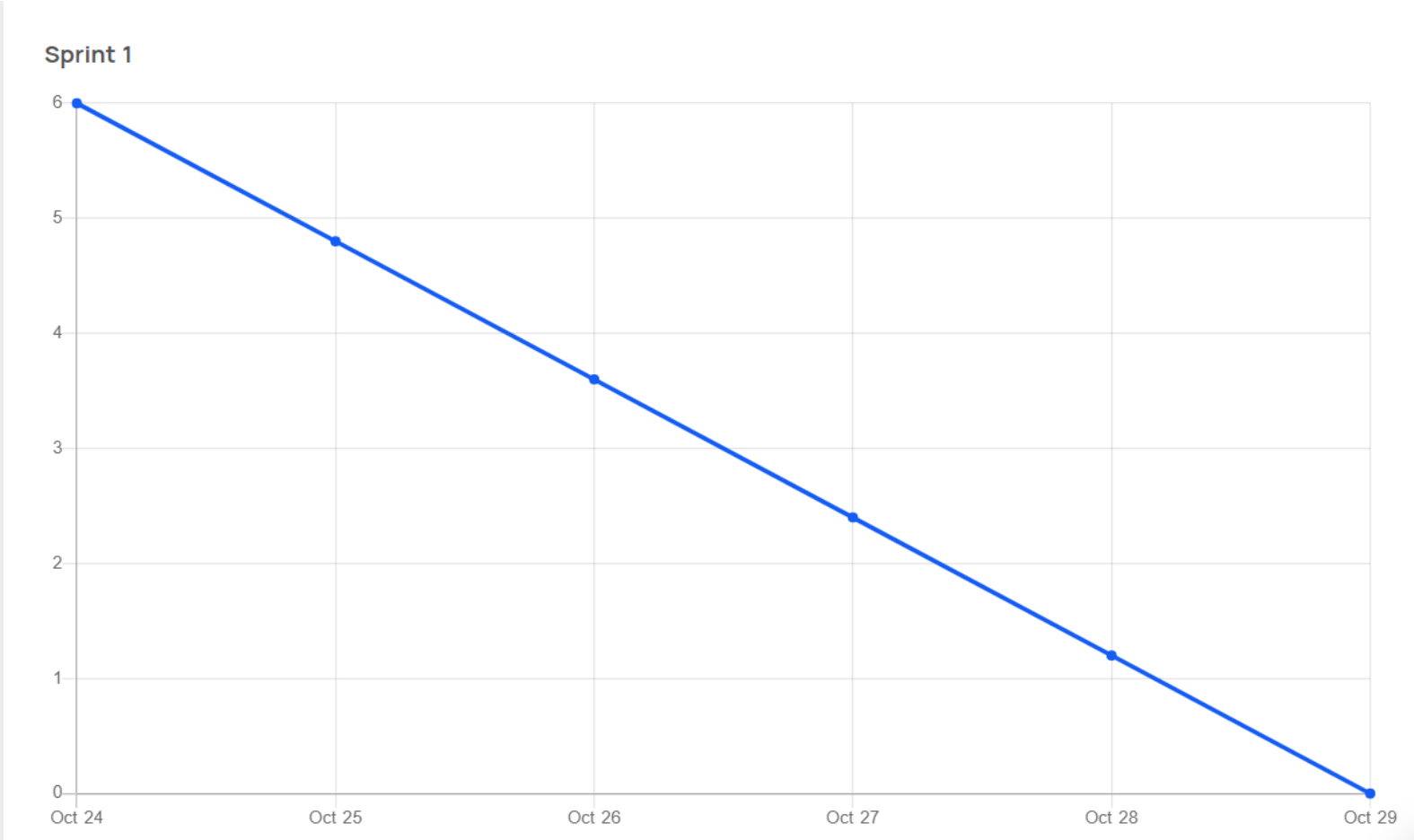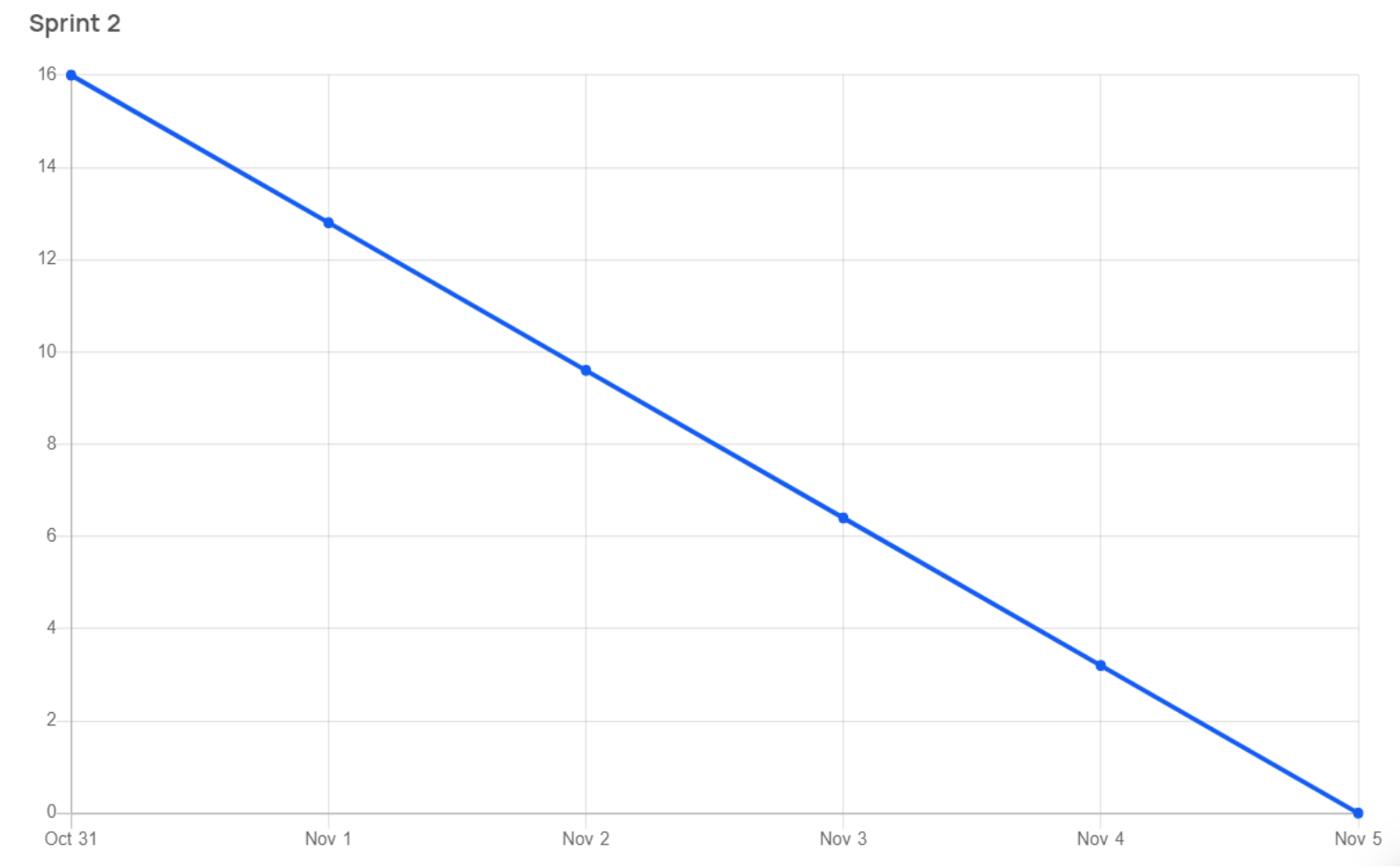| Sprint	Total Story Points	Duration	Average Velocity
Sprint-1	6	6 Days	6/6=1
Sprint-2	16	6 Days	16/6=2.67
Sprint-3	10	6 Days	10/6=1.67
Sprint-4	14	6 Days	14/6=2.33
Total	46	24	46/24=1.91

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.

Estimated Effort:

Sprint - 1:

Sprint 1

Sprint - 2:

Sprint 2

Sprint - 3:

Sprint 3
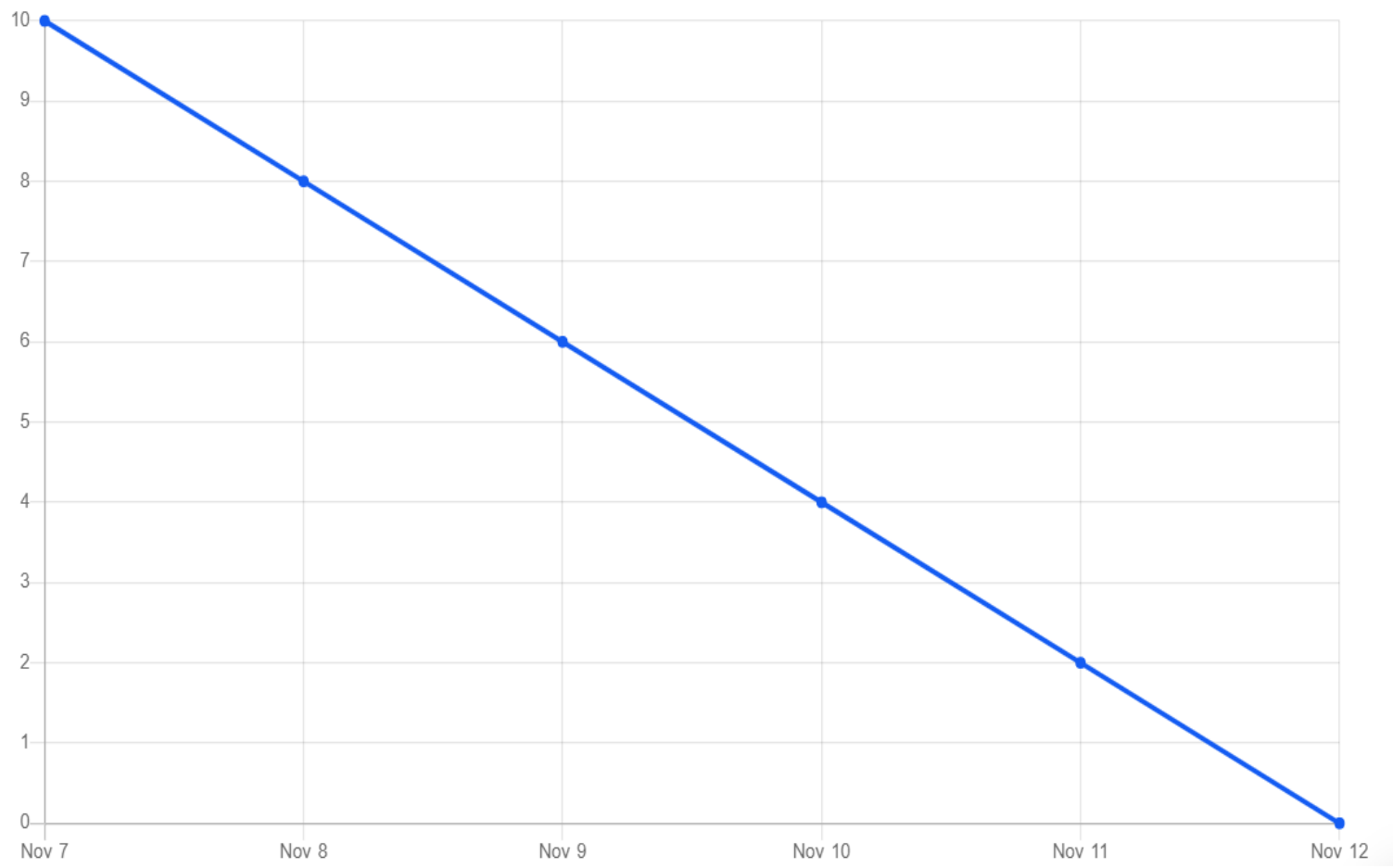
Sprint - 4:

Sprint 4
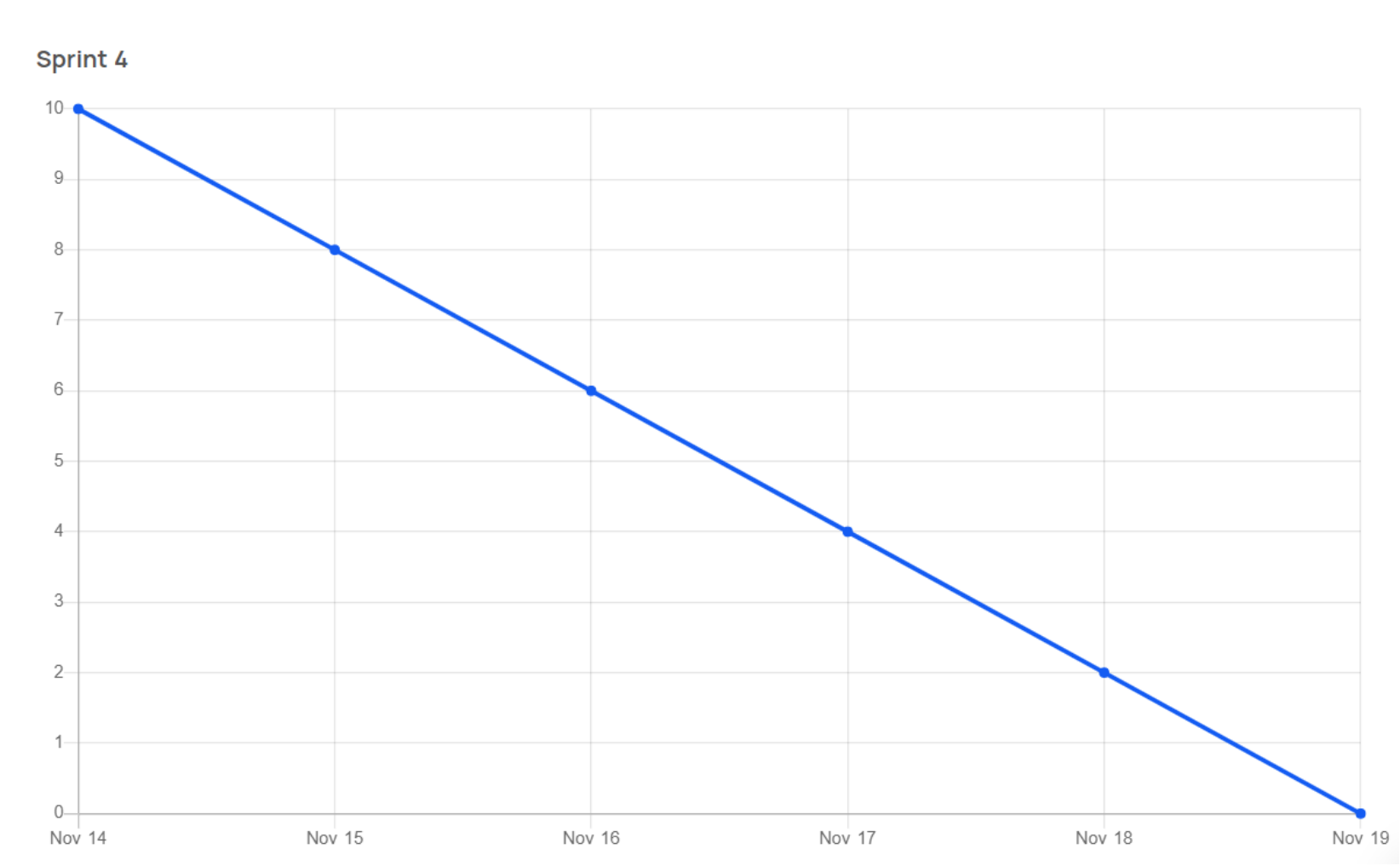
Overall burndown chart:

Overall

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	• 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