

## 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 confirming my password.	2	High	Prawin Kumar, Hariprasad
Sprint-1	Confirmation	USN-2	As a user, I will receive confirmation email once 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 by entering email & password	1	High	Prawin Kumar, Hariprasad
Sprint-2	Dashboard	USN-6	As a user, I can view my dashboard and can perform 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 categorized products and their details	4	High	Danish Rubhan, Yoga Manikandan
Sprint-2	Search products	USN-8	As a user I can search through the product using barcode	2	Medium	Danish Rubhan, Yoga Manikandan
Sprint-3	Report generation	USN-9	As a user I can generate reports based on product 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 less stock for a product	5	High	Prawin Kumar, Danish Rubhan
Sprint-4	Notification system	USN-11	As a user I can view notification for expired and out of stock products	4	High	Hariprsad, Yoga Manikandan
Sprint-4	Re-Ordering stock	USN-12	As a user I can reorder stocks based on 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 calculate credits	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)

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

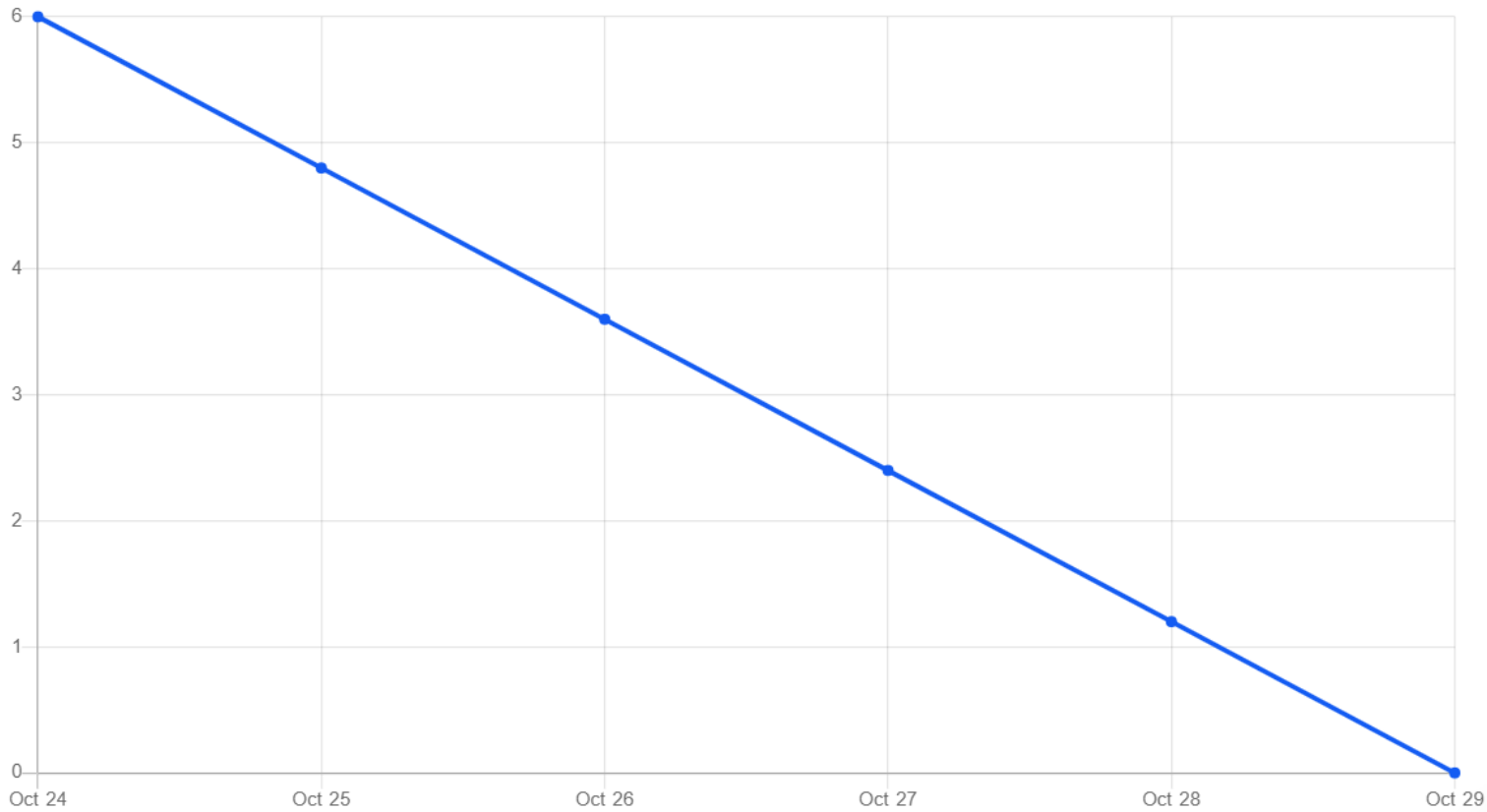
Sprint	Total Story Points	Duration	Average Velocity
Sprint-1	6	6 Days	6/6=1
Sprint-2	16	6 Days	16/6=2.67
Sprint-3	10	6 Days	10/6=1.67
Sprint-4	14	6 Days	14/6=2.33
Total	46	24	46/24=1.91

#### Burndown Chart:

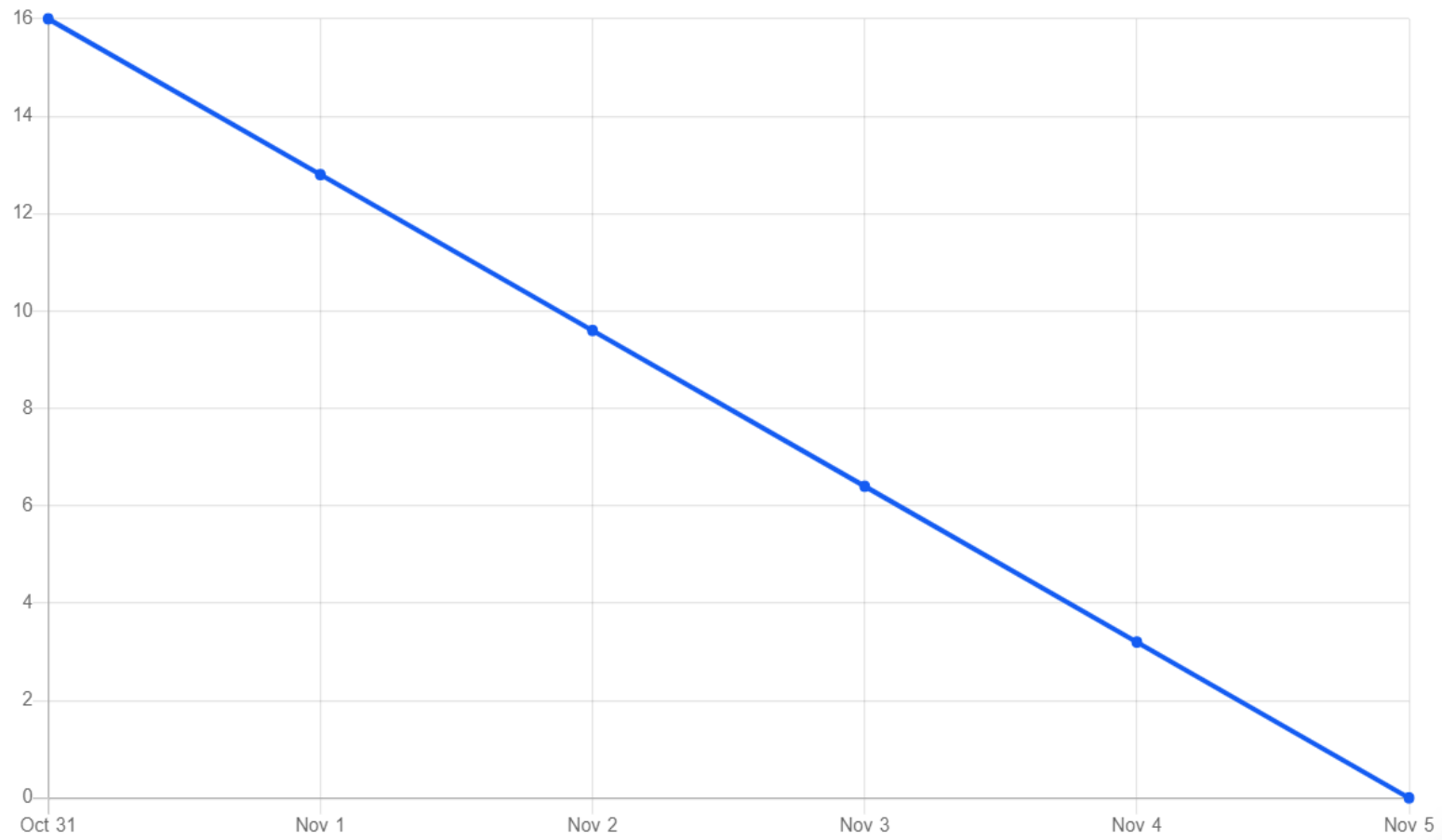
A burndown chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

Estimated Effort:

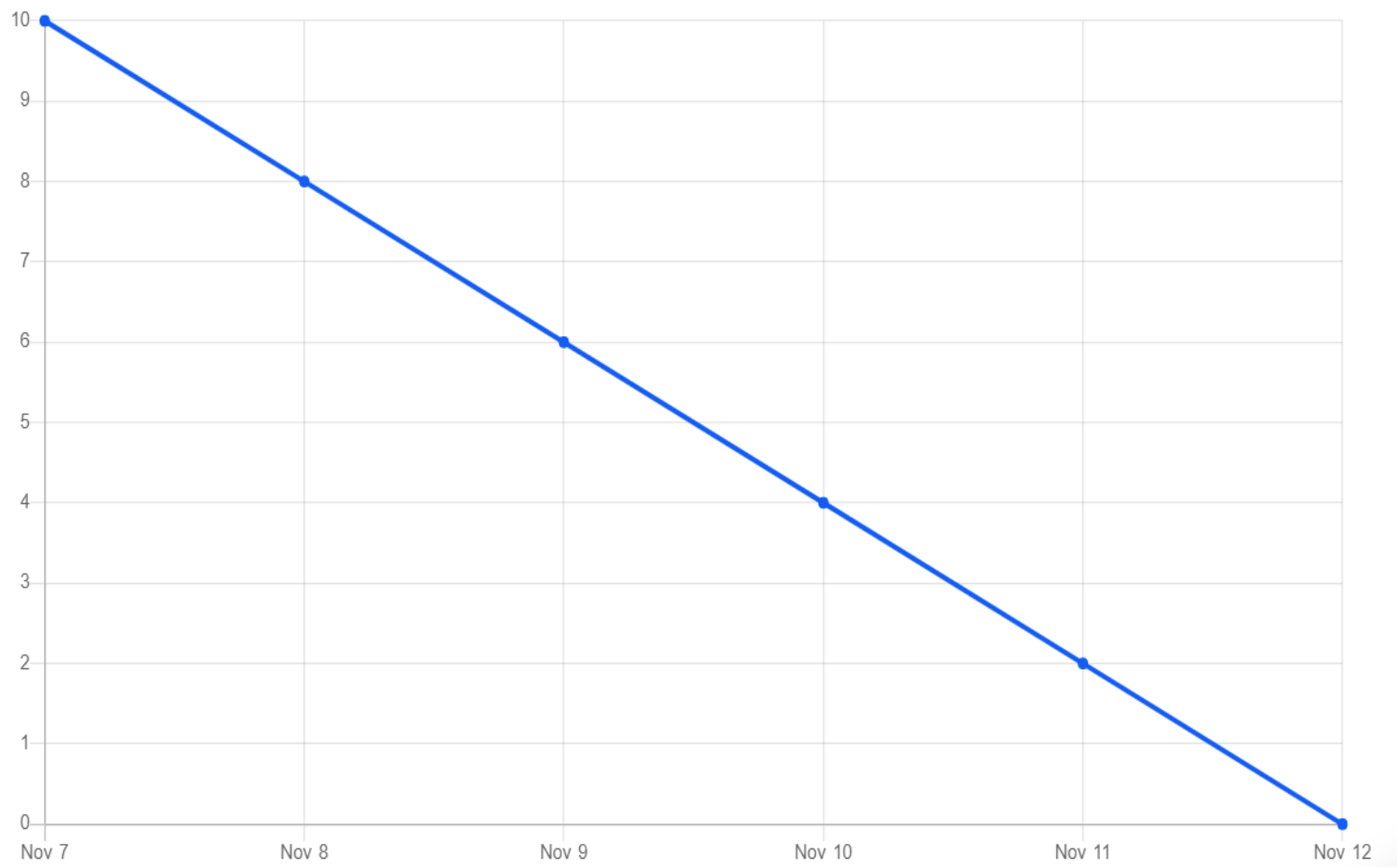
Sprint 1



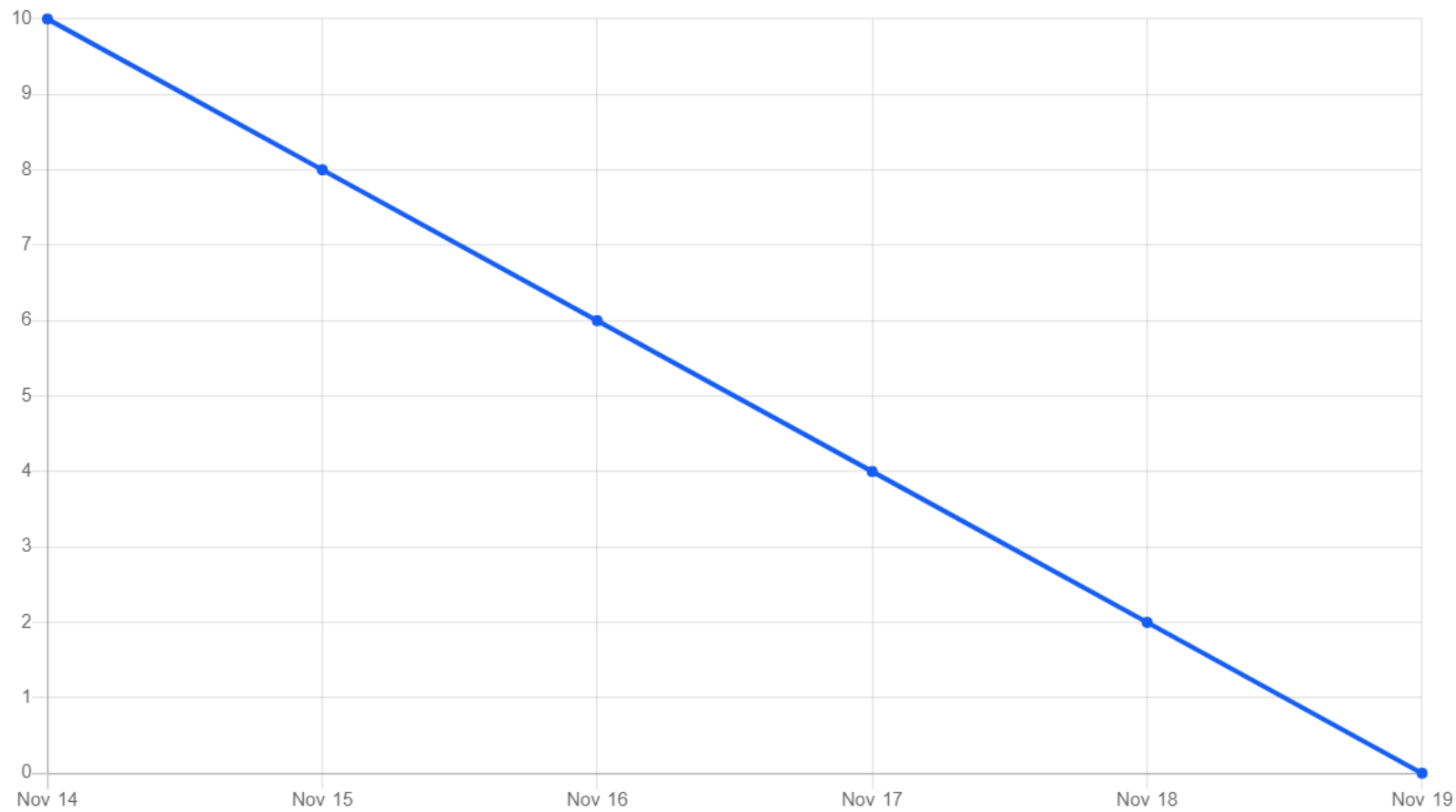
## Sprint 2



Sprint 3

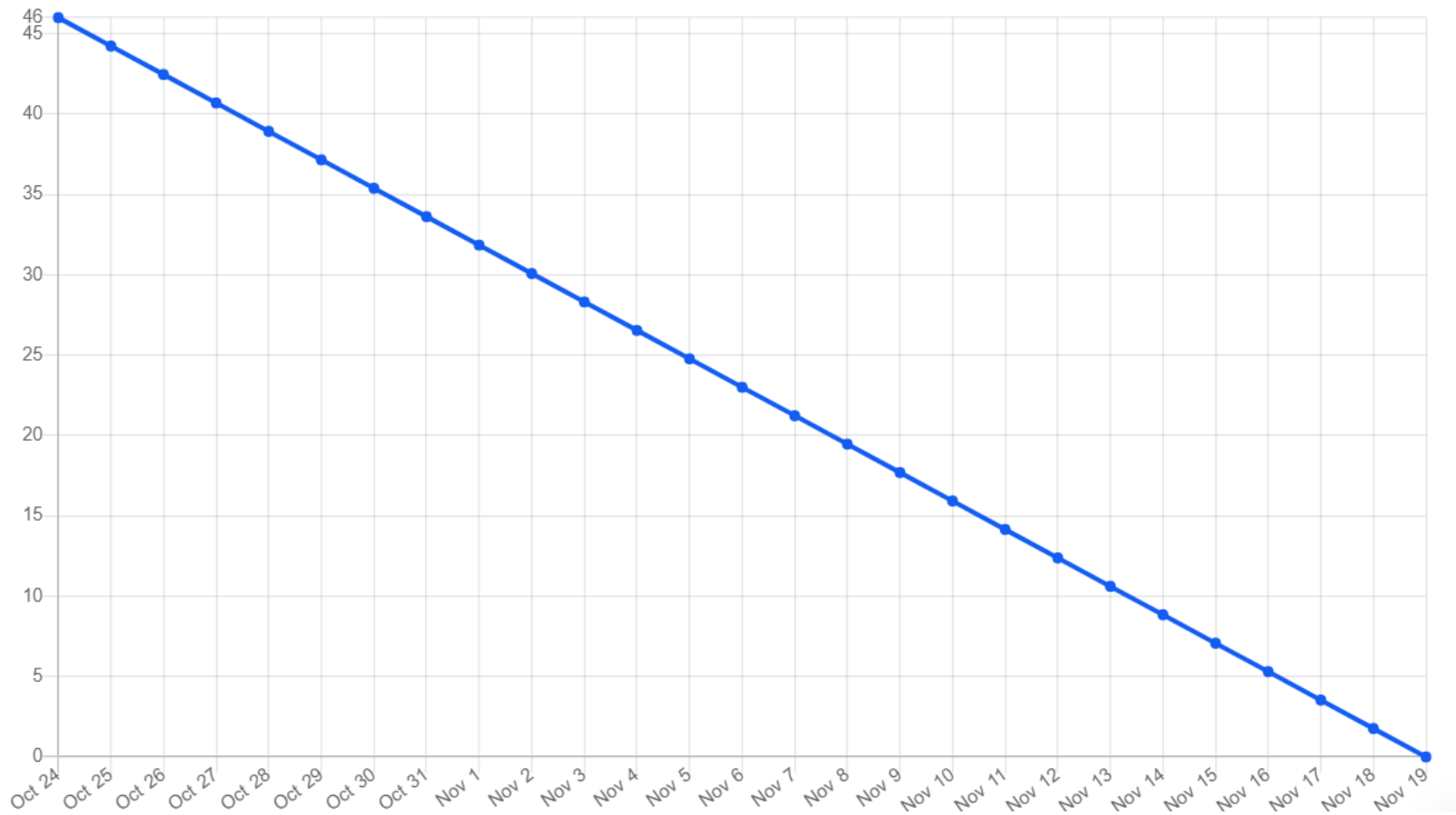


Sprint 4



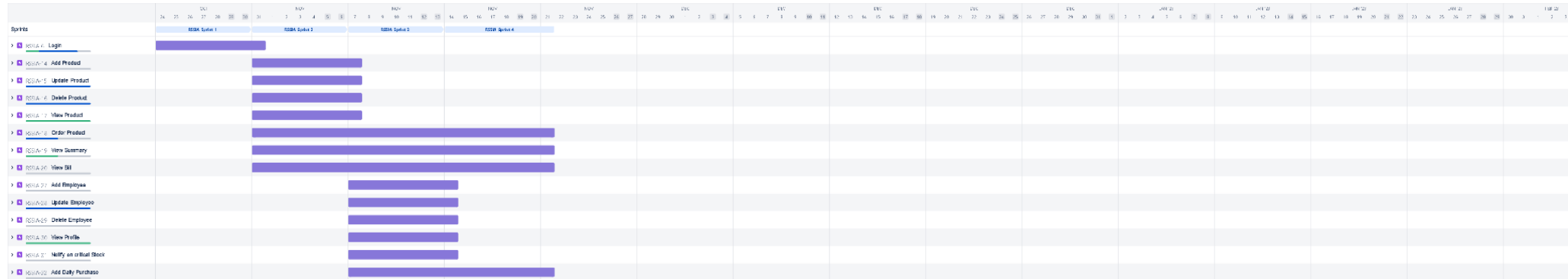
Overall burndown chart:

Overall





## Project Planning Tool:



**Milestones and Activities:**

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>