

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

Date	27 October 2022
Team ID	PNT2022TMID29780
Project Name	Retail Store Stock Inventory Analysis
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.	7	High	Gopalakrishnan T, Gokul D, Gokul Raj S, Krishnan V
Sprint-1	Authentication	USN-2	As a user, my session will be monitored throughout.	5	Medium	Gopalakrishnan T, Gokul D, Gokul Raj S
Sprint-1	Login	USN-3	As a user, I can login to the account whenever I need.	7	High	Gopalakrishnan T, Gokul D, Gokul Raj S, Krishnan V
Sprint-2	Dashboard	USN-4	As a user, I can view the dashboard with all contents in a simplified view.	3	Low	Gopalakrishnan T, Gokul Raj S
Sprint-2	Stock View	USN-5	As a user, I can view the list of items in the inventory.	7	Medium	Gopalakrishnan T, Gokul D, Gokul Raj S
Sprint-2	Stock Updation	USN-6	As a user, I can update the stocks every now and then.	8	High	Gopalakrishnan T, Gokul D, Gokul Raj S, Krishnan V

Sprint-3	Orders	USN-7	As a user, I can manage and track my customer's orders.	4	Low	Gokul D, Krishnan V
Sprint-3	Price Management	USN-8	As a user, I can monitor the price of the stock in real time.	5	Medium	Gokul D, Gokul Raj S, Krishnan V
Sprint-3	Products	USN-9	As a user, I can add / remove the products in the inventory.	7	High	Gopalakrishnan T, Gokul D, Gokul Raj S, Krishnan V
Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4	Cart	USN-10	As a user, I can view the contents in the cart.	4	Low	Gopalakrishnan T, Gokul Raj S
Sprint-4	Stock Analysis Prediction	USN-11	As a user, I can analyze and identify the most sold / least sold item in the store.	8	High	Gopalakrishnan T, Gokul D, Gokul Raj S, Krishnan V
Sprint-4	Visualization	USN-12	As a user, I can consume data visually and hence easy to understand.	5	Medium	Gopalakrishnan T, Gokul D, Gokul Raj S

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	13	6 Days	24 Oct 2022	29 Oct 2022	19	29 Oct 2022
Sprint-2	16	6 Days	31 Oct 2022	05 Nov 2022	18	05 Nov 2022
Sprint-3	14	6 Days	07 Nov 2022	12 Nov 2022	16	12 Nov 2022
Sprint-4	16	6 Days	14 Nov 2022	19 Nov 2022	17	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	19	6 Days	3.16
Sprint-2	18	6 Days	3
Sprint-3	16	6 Days	2.66
Sprint-4	17	6 Days	2.83
Total	70	24	2.91

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.

<https://www.visual-paradigm.com/scrum/scrum-burndown-chart/>

<https://www.atlassian.com/agile/tutorials/burndown-charts>

Reference: <https://www.atlassian.com/agile/project-management>
<https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software>
<https://www.atlassian.com/agile/tutorials/epics> <https://www.atlassian.com/agile/tutorials/sprints>
<https://www.atlassian.com/agile/project-management/estimation>
<https://www.atlassian.com/agile/tutorials/burndown-charts>