

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

Use the below template to create product backlog and sprint schedule

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	Anisha Ramesh, Jivitha K R, Evans Ezhilarasan J, Farrel Deva Asir J
Sprint-1	Login	USN-2	As a user, I need valid credentials to log in to my application.	1	High	Anisha Ramesh, Jivitha K R, Evans Ezhilarasan J, Farrel Deva Asir J
Sprint-1	Data Collection	USN-3	As a user, I need to gather the data in the form of CSV/XLS and clean the data	2	High	Anisha Ramesh, Jivitha K R, Evans Ezhilarasan J, Farrel Deva Asir J
Sprint-2	Upload dataset	USN-4	As a user, I can view the data of the products	1	Low	Anisha Ramesh, Jivitha K R, Evans Ezhilarasan J, Farrel Deva Asir J
Sprint-2	Data Preparation	USN-5	As a user, I need to filter it for Data visualization.	3	High	Anisha Ramesh, Jivitha K R, Evans Ezhilarasan J, Farrel Deva Asir J

Sprint-2	Data visualization	USN-6	As a user, I can easily visualize the data in the form of charts.	4	Medium	Anisha Ramesh, Jivitha K R, Evans Ezhilarasan J, Farrel Deva Asir J
Sprint-3	Dashboard	USN-7	As a user, I can view the summary of the product sales by the help dashboard.	2	Medium	Anisha Ramesh, Jivitha K R, Evans Ezhilarasan J, Farrel Deva Asir J
Sprint-3	Dashboard	USN-8	As a user, I must plan visualizations in a way that I'm able to gain insights regarding the sales based upon the category of sales and the respective region	4	High	Anisha Ramesh, Jivitha K R, Evans Ezhilarasan J, Farrel Deva Asir J

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Dashboard	USN-9	As a user, I must be able to gain insights from the charts/graphs through a variety of relationships established in the dashboard.	4	Medium	Anisha Ramesh, Jivitha K R, Evans Ezhilarasan J, Farrel Deva Asir J
Sprint- 4	Prediction	USN-10	As a user, I see the prediction of the specific product's future sales expectation.	4	Medium	Anisha Ramesh, Jivitha K R, Evans Ezhilarasan J, Farrel Deva Asir J

Sprint- 4	Report	USN-11	As a user, I can view the list of categorized products and their details as a report.	5	High	Anisha Ramesh, Jivitha K R, Evans Ezhilarasan J,Farrel Deva Asir J
Sprint-4	Story	USN-12	As a user, I can view the product and customer description and more additional information as a story.	5	High	Anisha Ramesh, Jivitha K R, Evans Ezhilarasan J,Farrel Deva Asir J

Project Tracker, Velocity &Burndown Chart: (4 Marks)

Sprints	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	20	6 Days	24 Oct 2022	29 Oct 2022	5	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	8	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	10	12 Nov 2022
Sprint-4	20	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)

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

iteration unit (story points per day)

SPRINT	TOTAL STORY POINTS	DURATION	AVERAGE VELOCITY
SPRINT-1	5	6 Days	$5/6 = 0.833$
SPRINT-2	8	6 Days	$8/6 = 1.33$
SPRINT-3	10	6 Days	$10/6 = 1.66$
SPRINT-4	14	6 Days	$14/6 = 2.33$

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.

Overall Burndown Chart:



