

Project Design Phase-II
Data Flow Diagram & User Stories

Date	1 8 October 2022
Team ID	PNT2022TMID00278
Project Name	Inventory Management System for Retailers
Maximum Marks	8 Marks

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

Release	Functional Requirement	User Story Number	User Story / Task	Acceptance criteria	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.	I can access my account / dashboard	High	Jason Rajkumar. A Abhish Kumar. P Abishek Jarvis. D Jaiganesh. M
Sprint-1	Verification	USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Jason Rajkumar. A Abhish Kumar. P Abishek Jarvis. D Jaiganesh. M
Sprint-1		USN-3	As a user, I can register for the application through Facebook	I can register & access the dashboard with Facebook Login	Low	Jason Rajkumar. A Abhish Kumar. P Abishek Jarvis. D Jaiganesh. M
Sprint-1		USN-4	As a user, I can register for the application through Gmail	I can login with registered email and password	Medium	Jason Rajkumar. A Abhish Kumar. P Abishek Jarvis. D Jaiganesh. M
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password	Inventory can be viewed once logged in.	High	Jason Rajkumar. A Abhish Kumar. P Abishek Jarvis. D Jaiganesh. M
Sprint-2	Dashboard	USN-6	As a user, I can view the products that are available currently.	Inventory can be viewed once logged in	High	Jason Rajkumar. A Abhish Kumar. P Abishek Jarvis. D Jaiganesh. M

Release	Functional Requirement	User Story Number	User Story / Task	Acceptance criteria	Priority	Team members
Sprint-2	Stocks update	USN-7	As a user, I can add products which are not available in the inventory and restock the products.	When the products are not available, retailers can restock and update their inventory.	Medium	Jason Rajkumar. A Abhish Kumar. P Abishek Jarvis. D Jaiganesh. M
Sprint-2	Sales prediction	USN-8	As a user, I can get access to sales prediction tool which can help me to predict better restock management of product.	The sales prediction tool should forecast the sales so that the users can order properly and retailers can predict the order to sell.	High	Jason Rajkumar. A Abhish Kumar. P Abishek Jarvis. D Jaiganesh. M
Sprint-3	Request for customer care	USN-9	As a user, I am able to request customer care to get in touch with the administrators and clarify my doubts and problems.	Users can contact customer support and get help and service from administrators.	Low	Jason Rajkumar. A Abhish Kumar. P Abishek Jarvis. D Jaiganesh. M
Sprint-3	Giving feedback	USN-10	As a user, I can suggest any new features that can be added.	Users get the option to give feedback for the app.	Low	Jason Rajkumar. A Abhish Kumar. P Abishek Jarvis. D Jaiganesh. M

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	11	6 Days	24 Oct 2022	29 Oct 2022	11	29 Oct 2022
Sprint-2	7	6 Days	31 Oct 2022	05 Nov 2022	7	05 Nov 2022
Sprint-3	6	6 Days	07 Nov 2022	12 Nov 2022	6	12 Nov 2022
Sprint-4	7	6 Days	14 Nov 2022	19 Nov 2022	7	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)

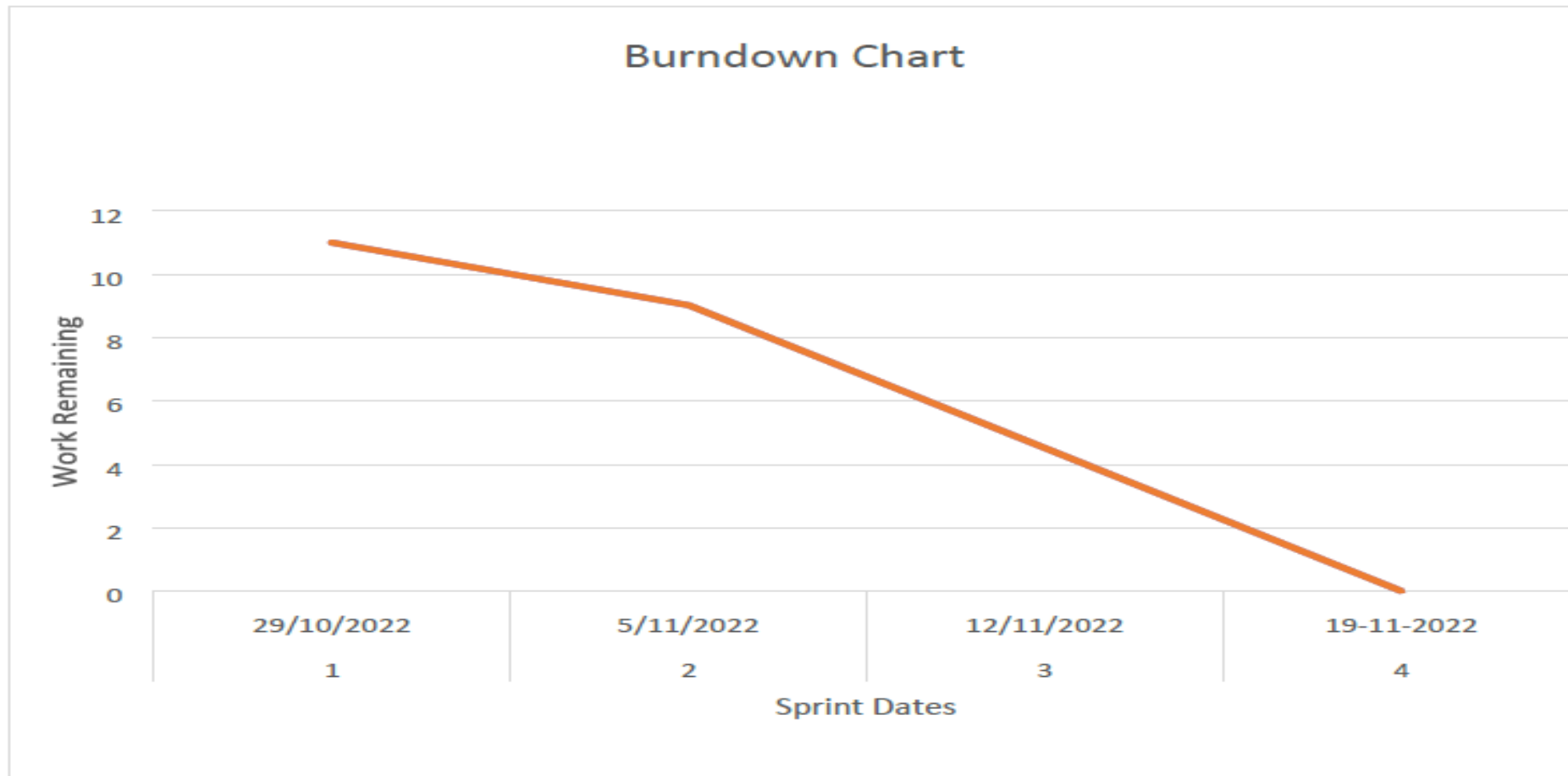
$$AV = \frac{\text{sprint duration}}{\text{velocity}} = \frac{20}{10} = 2$$

Our velocity should be:

$$AV = \frac{(11+7+6+7)}{24} = \frac{31}{24} = 1.29$$

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/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>