Project Planning Phase

Sprint Delivery Plan (Product Backlog, Sprint Planning, Stories, Story points)

Date	18 October 2022
Team ID	PNT2022TMID03363
Project Name	Predicting the energy output of wind turbine based on weather condition
Maximum Marks	8 Marks

Product Backlog, Sprint Schedule, and Estimation:

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Application Building	USN-1	As a user to build a responsive web application to provide prediction of wind turbine.	5	High	Saranya V Gokul Prasath R Jawahar Aravind G Prathipa K
Sprint-1		USN-2	As a user I can give the location for getting the weather report..	5	High	Saranya V Gokul Prasath R Jawahar Aravind G Prathipa K
Sprint-1	Design Template	USN-3	As a user to design a template that can be easily understood by everyone.	3	Low	Saranya V Gokul Prasath R Jawahar Aravind G Prathipa K

Sprint-1		USN-4	As a user I want to give the location for predicting the energy output.	2	Medium	Saranya V Gokul Prasath R Jawahar Aravind G Prathipa K

Sprint	**Functional Requirement (Epic)**	**User Story Number**	**User Story / Task**	**Story Points**	**Priority**	**Team Members**
Sprint-1		USN-5	Based on the user preferred location the predicting models are used to calculate the energy output.	5	High	Saranya V Gokul Prasath R Jawahar Aravind G Prathipa K
Sprint-2	Dashboard	USN-6	As a user, I can easily access my dashboard	6	Medium	Saranya V Gokul Prasath R Jawahar Aravind G Prathipa K
Sprint-2	Web Access	USN-7	As a user, I can access the website to predict the turbine power	7	High	Saranya V Gokul Prasath R Jawahar Aravind G Prathipa K
Sprint-2	Prediction	USN-8	As a customer, when I enter the detail the website should predict the approximate turbine power	7	High	Saranya V Gokul Prasath R Jawahar Aravind G Prathipa K

Sprint-3	Analysis	USN-9	As a customer, I wish to store my predictions and make analysis	10	Medium	Saranya V Gokul Prasath R Jawahar Aravind G Prathipa K
Sprint-3	Security	USN-10	As a customer I expect my data to be secured	10	Medium	Saranya V Gokul Prasath R Jawahar Aravind G Prathipa K

Sprint	**Functional Requirement (Epic)**	**User Story Number**	**User Story / Task**	**Story Points**	**Priority**	**Team Members**
Sprint-4	Database Access	USN-11	As an administrator, I should maintain the website and keep updating it regularly	20	Medium	Saranya V Gokul Prasath R Jawahar Aravind G Prathipa K

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	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022

Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	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	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)	Average Velocity (AV)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022	3.333
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022	3.333
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022	3.333
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	19 Nov 2022	3.333

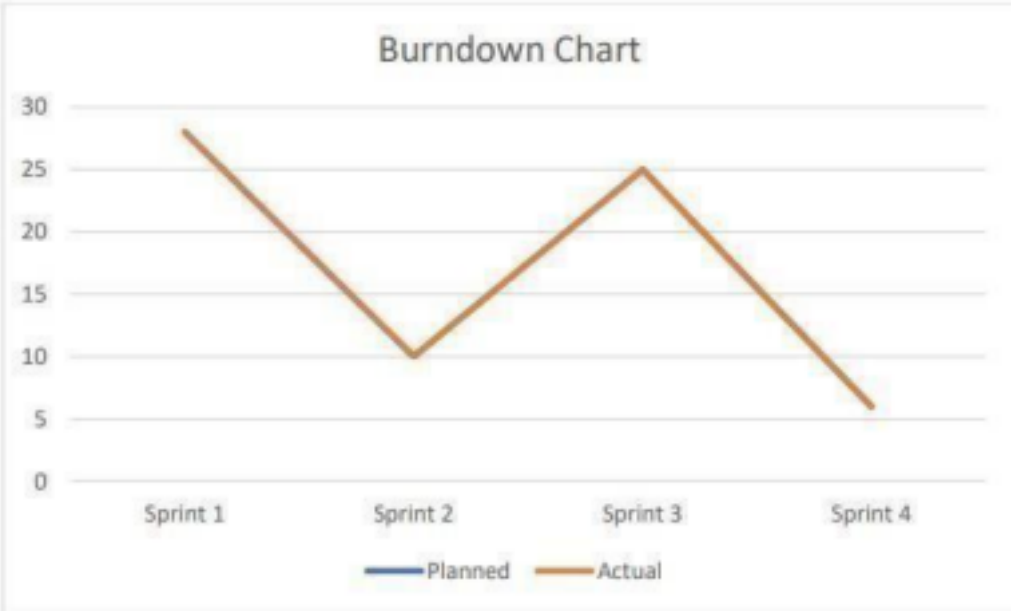
Total No of Days = 6 + 6 + 6 + 6 = 24 Days

Total Story Points = 20 + 20 + 20 + 20 = 80 Points

Average Velocity Per Sprint = 80 / 24 = 3.333

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 suchas 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.tlassian.com/agile/tutorials/how-to-do-scrum-with-jira-softwa

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