Estimate the crop yield using Data Analytics

Project Planning Phase
Spring delivery plan

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	Srisowmiya, Sona
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	1	High	Pranavi, Suriyaraja
Sprint-2		USN-3	As a user, I can register for the application through Google	2	Low	Srisowmiya, Suriyaraja
Sprint-1		USN-4	As a user, I can register for the application through Gmail	2	Low	Sona, Pranavi
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password	1	High	Srisowmiya,Pranavi
Sprint- 3	Dashboard	USN-6	As a user, I can freely use my dashboard and explore the features	2	High	Sona, Pranavi
Sprint- 2		USN-7	As a user, I can use the credentials to access the resources of my application	2	High	Srisowmiya, Sona
Sprint- 3		USN-8	Performance of Data manipulations on the application	1	High	Pranavi, Suriyaraja
Sprint- 3	Visualizations	USN-9	I can create dashboards with particular datasets	2	High	Srisowmiya, Pranavi
Sprint- 4		USN-10	Predictive analysis can be done	1	High	Suriyaraja, Srisowmiya
Sprint- 3		USN-11	I can create stories with particular datasets	2	High	Pranavi, Sona
Sprint- 4		USN-12	I can deliver and export reports according to the dashboards and stories created	2	High	Pranavi, Sona

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)

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

AV = Sprint Duration/Velocity = 20/6 = 3

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 suchas Scrum. However, burn down charts can be applied to any project containing measurable progress over time.