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

Date	23 October 2022
Team ID	PNT2022TMID08012
Project Name	Exploratory Analysis of Rainfall Data in India for Agriculture
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	Rainfall Prediction Model	USN-1	Collecting weather dataset, data pre-processing the data and do a data visualization	5	High	Team Lead, Team Member 2
Sprint-1		USN-3	Test the best model and save best model by pickle library	5	High	Team lead
Sprint-1	Crop Recommendation Model	USN-4	Collecting sowing crop dataset, data pre-processing the data and do a data visualization	5	High	Team Member1, Team Member2
Sprint-1		USN-5	Train crop recommendation model using different machine learning algorithms	5	Medium	Team Member2, Team Member3
Sprint-1		USN-6	Test the best model and save best model by pickle library	5	High	Team lead Team Member1, Team Member2

Sprint-2	Registration	USN-7	User can register for the application by entering his or her email, password, and confirming the password.	5	Medium	Team Member1, Team Member2
Sprint-2		USN-8	User will receive confirmation email or message once registered for the application	5	Low	Team Member2, Team Member3
Sprint-2	Login	USN-9	Enter the username and password to login to the application	5	Medium	Team lead
Sprint-2		USN-10	The existing credentials should be used for login on multiple systems	5	Medium	Team lead Team Member3
Sprint-2	Dashboard	USN-11	Forecast the today weather	10	Low	Team Lead, Team Member 2
Sprint-3	Rainfall Prediction	USN-12	User can enter the weather parameters like min temp, max temp, etc.	5	High	Team Member2, Team Member3
Sprint-3		USN-13	Predict the rainfall and display the result	5	High	Team Member2,
Sprint-3		USN-15	Predict the crop to be harvested and display the result	5	High	Team lead Team Member1
Sprint-4	Testing	USN-16	Test the application	10	High	Team lead Team Member3
Sprint-4	Deploy Model	USN-17	deploy the model in IBM cloud to make user friendly application	10	High	Team Member1, Team Member2

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	30	6 Days	24 Oct 2022	29 Oct 2022	30	30 Oct 2022
Sprint-2	30	6 Days	31 Oct 2022	05 Nov 2022	30	06 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	13 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	20 Nov 2022

Velocity:

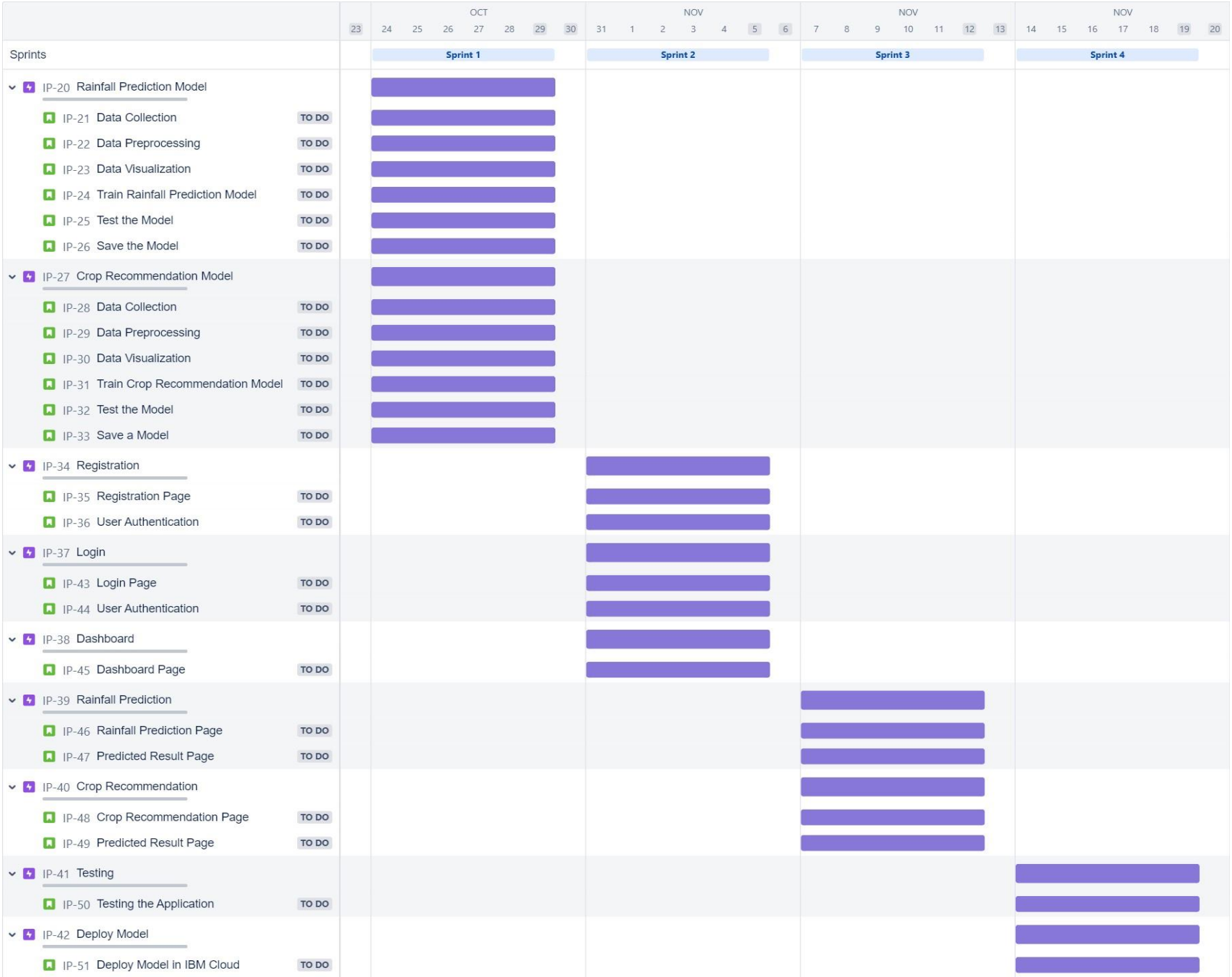
We have a 6-day sprint duration, and the velocity of the team is 20 to 30 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{sprint\ duration}{velocity}$$

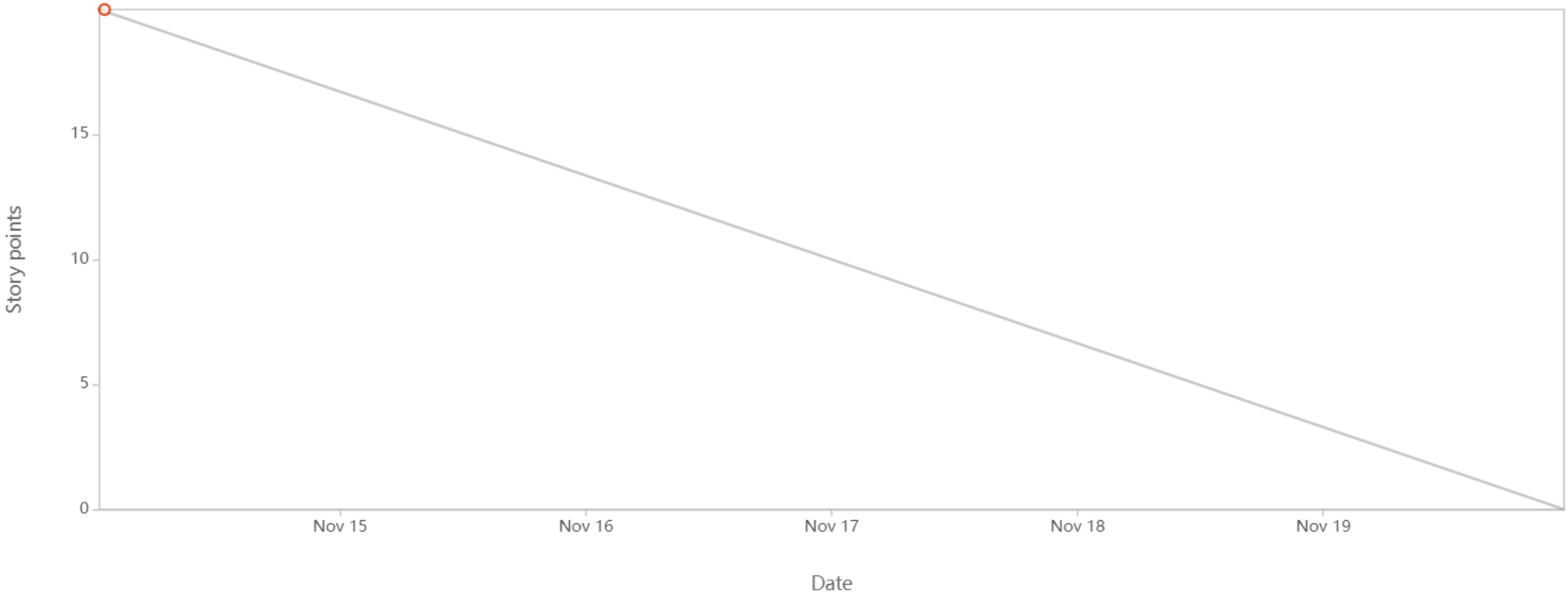
Sprint	Average Velocity
Sprint-1	**5**
Sprint-2	**5**
Sprint-3	**3.33**
Sprint-4	**3.33**

Total Average Velocity = 4.16

RoadMap



Burndown Chart:


Story points
15
10
5
0
Nov 15
Nov 16
Nov 17
Nov 18
Nov 19
Date