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

Date	23 October 2022
Team ID	PNT2022TMID10058
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 preprocessing the data and do a data visualization	5	High	Suresh, Thavaprakash
Sprint-1		USN-2	Train rainfall Prediction model using different machine learning algorithms	5	Medium	Sriraja, Surendra
Sprint-1		USN-3	Test the best model and save best model by pickle library	5	High	Sriraja, Surendra
Sprint-1	Crop Recommendation Model	USN-4	Collecting sowing crop dataset, data preprocessing the data and do a data visualization	5	High	Suresh, Thavaprakash
Sprint-1		USN-5	Train crop recommendation model using different machine learning algorithms	5	Medium	Sriraja, Surendra
Sprint-1		USN-6	Test the best model and save best model by pickle library	5	High	Sriraja, Surendra

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Registration	USN-7	User can register for the application by entering his or her email, password, and confirming the password.	5	Medium	Suresh, Thavaprakash
Sprint-2		USN-8	User will receive confirmation email or message once registered for the application	5	Low	Suresh, Thavaprakash
Sprint-2	Login	USN-9	Enter the username and password to login to the application	5	Medium	Suresh, Thavaprakash
Sprint-2		USN-10	The existing credentials should be used for login on multiple systems	5	Medium	Suresh, Thavaprakash
Sprint-2	Dashboard	USN-11	Forecast the today weather	10	Low	Sriraja, Surendra
Sprint-3	Rainfall Prediction	USN-12	User can enter the weather parameters like min temp, max temp, etc	5	High	Surendra, Thavaprakash
Sprint-3		USN-13	Predict the rainfall and display the result	5	High	Sriraja, Suresh
Sprint-3	Crop Recommendation	USN-14	User can enter the soil parameters like nitrogen, ph. value, etc	5	High	Surendra, Thavaprakash
Sprint-3		USN-15	Predict the sowing crop and display the result	5	High	Sriraja, Suresh
Sprint-4	Testing	USN-16	Test the application	10	High	Surendra, Thavaprakash
Sprint-4	Deploy Model	USN-17	deploy the model in IBM cloud to make user friendly application	10	High	Sriraja, Suresh

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

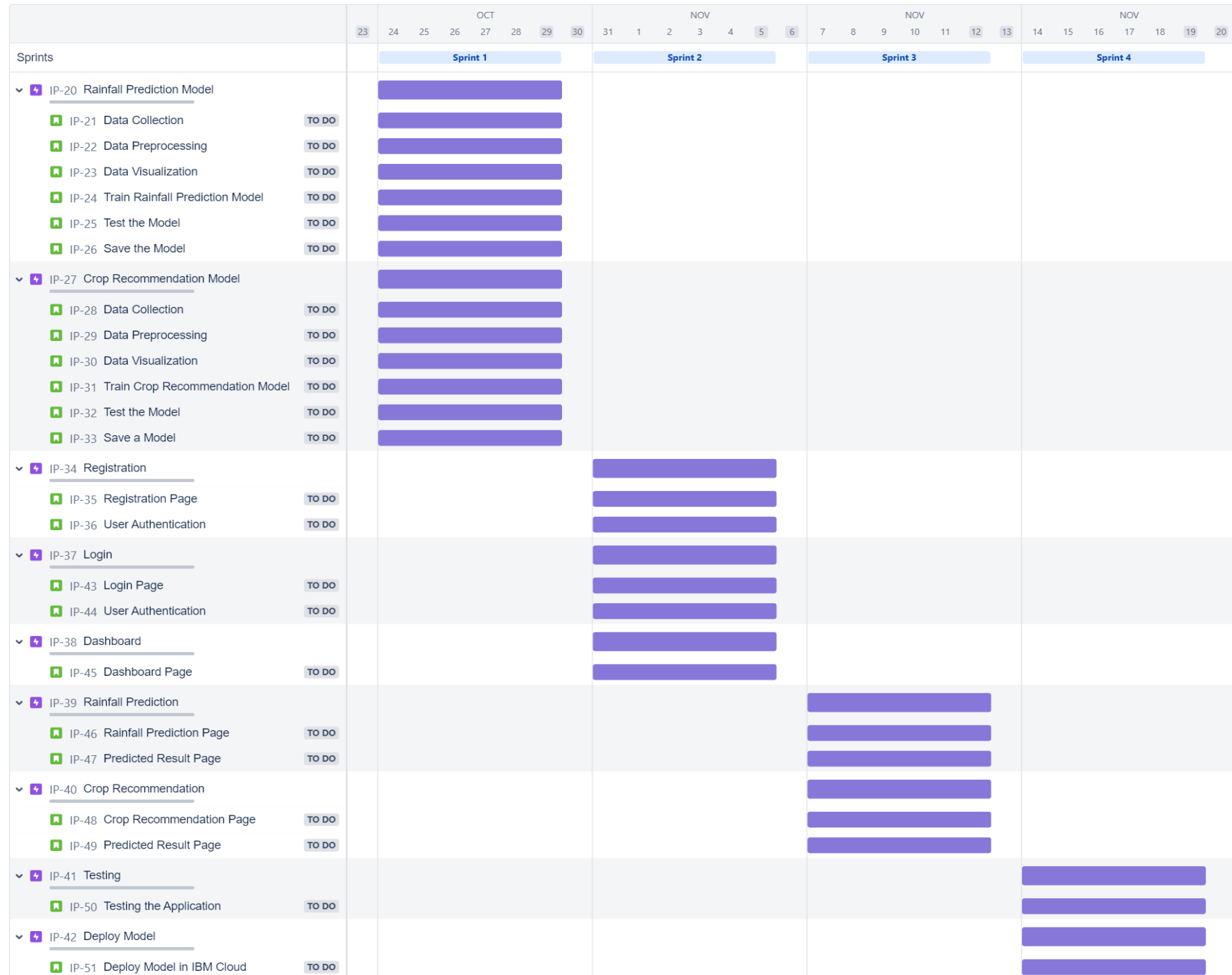| Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	30	6 Days	24 Oct 2022	29 Oct 2022	30	30 Oct 2022
Sprint-2	30	6 Days	31 Oct 2022	05 Nov 2022	30	06 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	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)
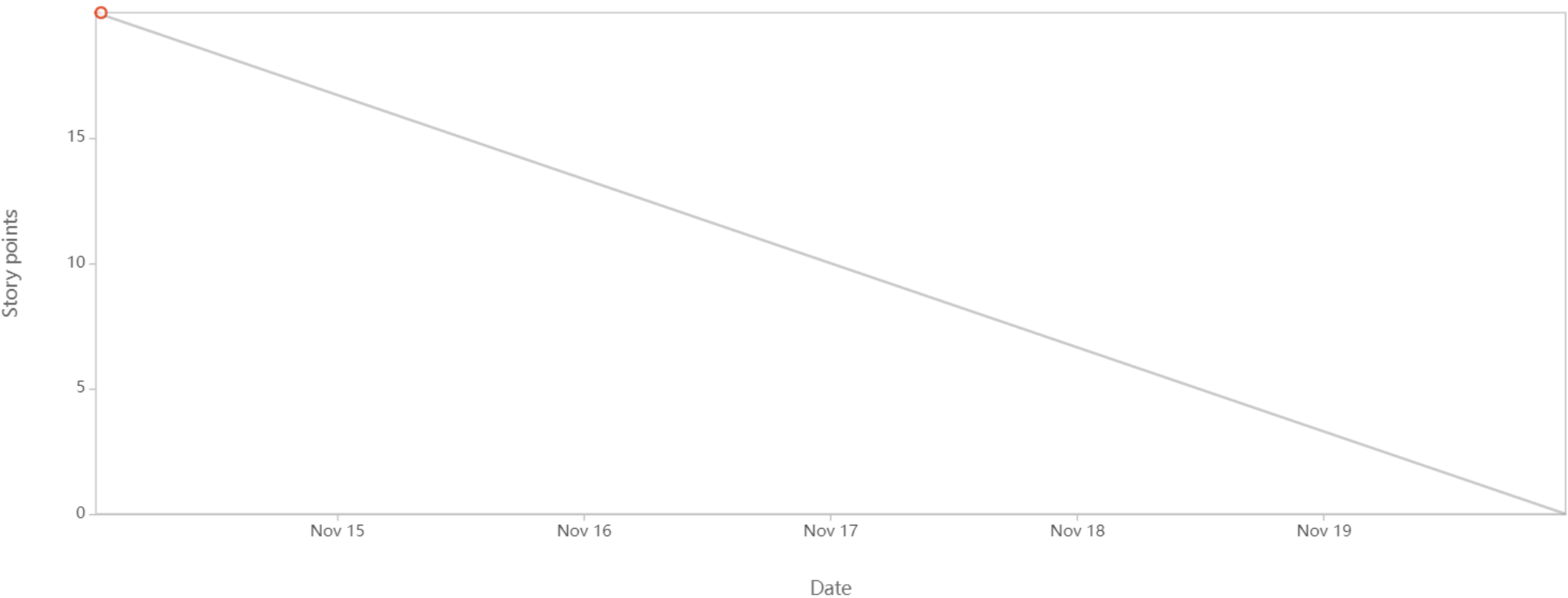
$$AV = \frac{sprint\ duration}{velocity}$$

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

Total Average Velocity = 4.16

RoadMap

Sprints		OCT						NOV						NOV						NOV					
	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
		Sprint 1				**Sprint 2**				**Sprint 3**				**Sprint 4**		

∨ ⚡ IP-20 Rainfall Prediction Model	
⬜ IP-21 Data Collection	TO DO
⬜ IP-22 Data Preprocessing	TO DO
⬜ IP-23 Data Visualization	TO DO
⬜ IP-24 Train Rainfall Prediction Model	TO DO
⬜ IP-25 Test the Model	TO DO
⬜ IP-26 Save the Model	TO DO
∨ ⚡ IP-27 Crop Recommendation Model	
⬜ IP-28 Data Collection	TO DO
⬜ IP-29 Data Preprocessing	TO DO
⬜ IP-30 Data Visualization	TO DO
⬜ IP-31 Train Crop Recommendation Model	TO DO
⬜ IP-32 Test the Model	TO DO
⬜ IP-33 Save a Model	TO DO
∨ ⚡ IP-34 Registration	
⬜ IP-35 Registration Page	TO DO
⬜ IP-36 User Authentication	TO DO
∨ ⚡ IP-37 Login	
⬜ IP-43 Login Page	TO DO
⬜ IP-44 User Authentication	TO DO
∨ ⚡ IP-38 Dashboard	
⬜ IP-45 Dashboard Page	TO DO
∨ ⚡ IP-39 Rainfall Prediction	
⬜ IP-46 Rainfall Prediction Page	TO DO
⬜ IP-47 Predicted Result Page	TO DO
∨ ⚡ IP-40 Crop Recommendation	
⬜ IP-48 Crop Recommendation Page	TO DO
⬜ IP-49 Predicted Result Page	TO DO
∨ ⚡ IP-41 Testing	
⬜ IP-50 Testing the Application	TO DO
∨ ⚡ IP-42 Deploy Model	
⬜ IP-51 Deploy Model in IBM Cloud	TO DO

Burndown Chart:

Atlassian link:

https://srirajab.atlassian.net/jira/software/projects/IP/boards/1/roadmap?shared=&atlOrigin=eyJpIjoiNGM3MGMxY2QxZGQyNDRlZjkyMzQ1NTg2NDllY2JiN2IiLCJwIjoiaiJ9