

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

<b>Date</b>	<b>18 October 2022</b>
<b>Team ID</b>	<b>PNT2022TMID35899</b>
<b>Project Name</b>	<b>Digital Naturalist - AI Enabled Tool For Biodiversity Researchers</b>
<b>Maximum Marks</b>	<b>8 Marks</b>

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

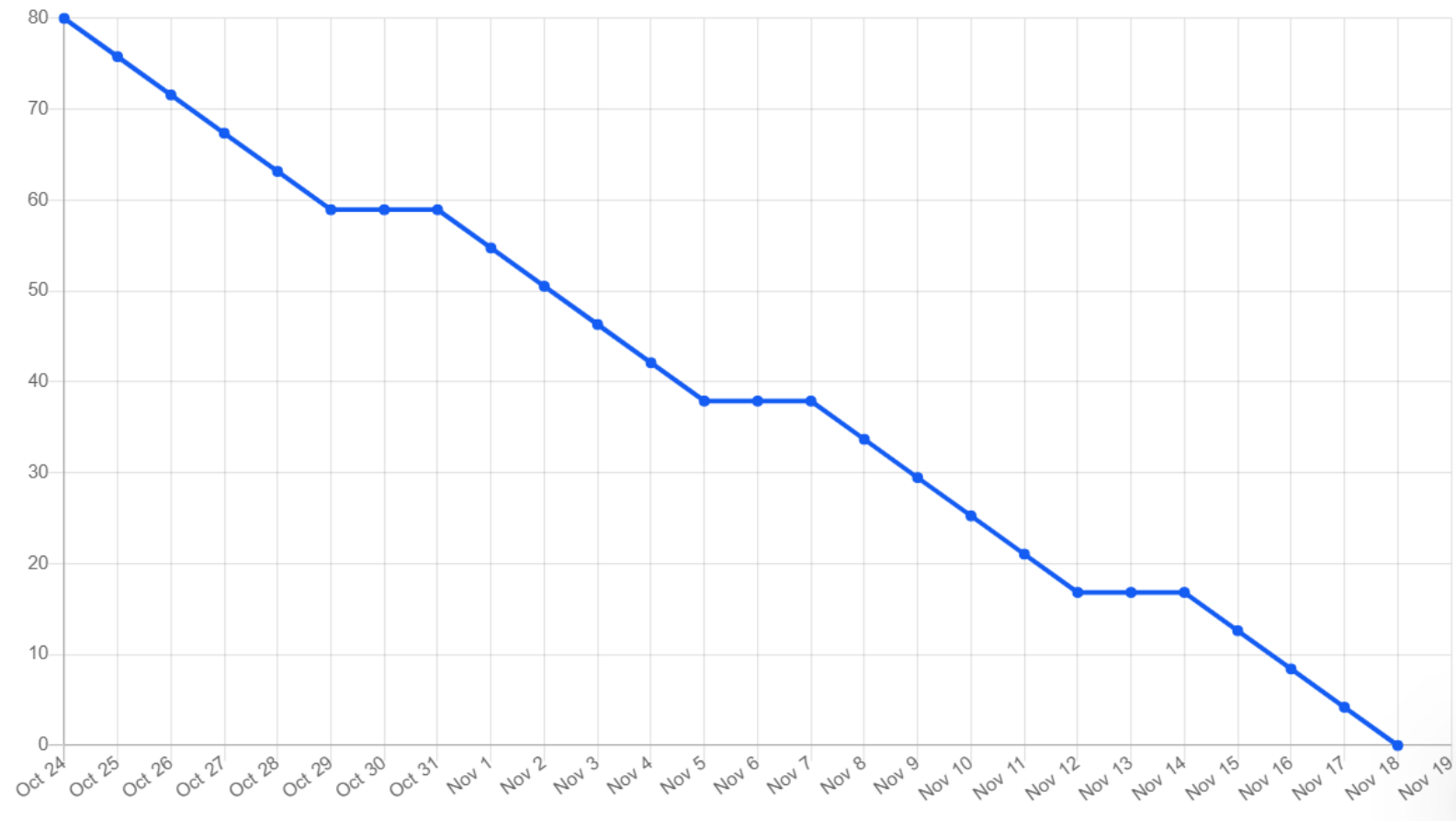
Use the below template to create product backlog and sprint schedule

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Getting Hands on with IBM Watson Assistant	USN-1	Setting Up IBM Cloud and Watson Assistant	5	High	PRIYADHARSHAN S VAROON K NAVEEN KUMAR S NARESH GUPTHA G
Sprint-1	Dataset Gathering	USN-2	Acquire the Datasets for the Species Classification and do the required preprocessing. Upload those datasets to IBM Cloud	15	High	PRIYADHARSHAN S VAROON K NAVEEN KUMAR S NARESH GUPTHA G
Sprint-2	Building the CNN Model and Splitting the dataset	USN-3	Build a CNN model using the appropriate layers for the Species Classification. Split the preprocessed dataset to train, test and validation data	4	High	PRIYADHARSHAN S VAROON K NAVEEN KUMAR S NARESH GUPTHA G
Sprint-2	Train, Test, and Validate	USN-4	Train the model using the Training datasets and Validate it with the validation dataset. Test the Model using the testing dataset and analyze the Performance Metrics	8	High	PRIYADHARSHAN S VAROON K NAVEEN KUMAR S NARESH GUPTHA G
Sprint-2	Optimization and Species Classification	USN-5	Improve the Accuracy and Time Complexity of the model	8	High	PRIYADHARSHAN S VAROON K NAVEEN KUMAR S NARESH GUPTHA G
Sprint-3	User Interface Dashboard	USN-6	As an User I should be able to capture and upload the image in this Web App	10	Medium	PRIYADHARSHAN S VAROON K NAVEEN KUMAR S NARESH GUPTHA G
Sprint-3	Description of the collected datasets	USN-7	Store the Description of the collected dataset classes in the Backend for output purposes	10	High	PRIYADHARSHAN S VAROON K NAVEEN KUMAR S NARESH GUPTHA G
Sprint-3	Output Page of the App	USN-8	As an User I should be able to interpret the information of the unknown species in a crisp manner using the Web App	10	High	PRIYADHARSHAN S VAROON K NAVEEN KUMAR S NARESH GUPTHA G
Sprint-4	Integrating our model in cloud	USN-9	Bridging the CNN model for classification with the IBM Cloud to display the identification and description of the species.	15	High	PRIYADHARSHAN S VAROON K NAVEEN KUMAR S NARESH GUPTHA G
Sprint-4	Web Page Optimization and customer support	USN-10	As an User I need a smooth user experience. The site should withstand a heavy load and traffic. There should be no failures and all my queries should be handled	5	Medium	PRIYADHARSHAN S VAROON K NAVEEN KUMAR S NARESH GUPTHA G

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

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**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 6-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)

$$AV = \frac{\text{sprint duration}}{\text{velocity}} = \frac{20}{6} = 3.33$$

