

## Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID30525
Project Name	Fertilizer Recommendation System for Disease Prediction
Maximum Marks	8 Marks

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

Sprint	Functional Requirement (Epic)	User Story Number	User Story/Task	Story Points( Total)	Priority	Team Members
Sprint-1	Collection of Dataset		Collecting all the required dataset that are used to train and test the model	4	High	Akalya.S, Devika.P, Dhivyadharshni.S, Manju.V
	Model Creation and Training(Fruits)		Create a model which can classify diseased fruit plants from healthy plants detected from the images. I also need to test the model and deploy it on IBM Cloud.	4	High	Akalya.S, Devika.P, Dhivyadharshni.S, Manju.V
	Model Creation and Training(Vegetables)		Create a model which can classify diseased vegetable plants from healthy plants detected from the images. I also need to test the model and deploy it on IBM Cloud.	4	High	Akalya.S, Devika.P, Dhivyadharshni.S, Manju.V

<b>Sprint</b>	<b>Functional Requirement (Epic)</b>	<b>User Story Number</b>	<b>User Story/Task</b>	<b>Story Points (Total)</b>	<b>Priority</b>	<b>Team Members</b>
Sprint-2	Model Training and testing in IBM Cloud		Create a model which can classify diseased vegetable plants from given images and train on IBM Cloud	6	High	Akalya.S, Devika.P, Dhivyadharshni.S, Manju.V
	Registration	USN-1	As a user, I can register by entering my email, password, and confirming my password or via Auth API	3	Medium	Akalya.S, Devika.P, Dhivyadharshni.S, Manju.V
	Upload page	USN-2	As a user, I will be redirected to a page where I can select based on my requirement whether to upload my pictures of crops for disease predication or entering my soil details for crop recommendation or fertilizer recommendation.	4	High	Akalya.S, Devika.P, Dhivyadharshni.S, Manju.V
	Suggestion results	USN-3	As a user, I can view the results and then obtain the suggestions provided by the ML model	4	High	Akalya.S, Devika.P, Dhivyadharshni.S, Manju.V
	Base Flask App		A base Flask web app must be created as an interface for the ML model to interact.	2	High	Akalya.S, Devika.P, Dhivyadharshni.S, Manju.V
Sprint-3	Login	USN-4	As a user/admin/shopkeeper, can log into the application by entering email & password	2	High	Akalya.S, Devika.P, Dhivyadharshni.S, Manju.V

	User Dashboard	USN-5	As a user, I can view the previous results and history which saves the user's time.	3	Medium	Akalya.S, Devika.P, Dhivyadharshni.S, Manju.V
	Integration		Integrate Flask, CNN model with Cloud and Database.	5	Medium	Akalya.S, Devika.P, Dhivyadharshni.S, Manju.V
	Containerization		Containerize Flask app using Docker	5	Low	Akalya.S, Devika.P, Dhivyadharshni.S, Manju.V
Sprint-4	Testing and Documentation		Finally the project is tested and further improvements are made based on user feedback. Documentation is also made in order to make better user experience.	4	Medium	Akalya.S, Devika.P, Dhivyadharshni.S, Manju.V
	Dashboard	USN-6	As a shopkeeper, I can enter fertilizer products and then update the details if any	4	Low	Akalya.S, Devika.P, Dhivyadharshni.S, Manju.V
	Containerization		Create and deploy Helm charts using Docker Image made before.	2	Low	Akalya.S, Devika.P, Dhivyadharshni.S, Manju.V

### Project Tracker, Velocity & Burn down Chart:(4Marks)

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	10	6 Days	24 Oct 2022	29 Oct 2022	10	30 Oct 2022
Sprint-2	15	6 Days	31 Oct 2022	05 Nov 2022	15	07 Nov 2022
Sprint-3	15	6 Days	07 Nov 2022	12 Nov 2022	15	13 Nov 2022
Sprint-4	12	6 Days	14 Nov 2022	19 Nov 2022	10	19 Nov 2022

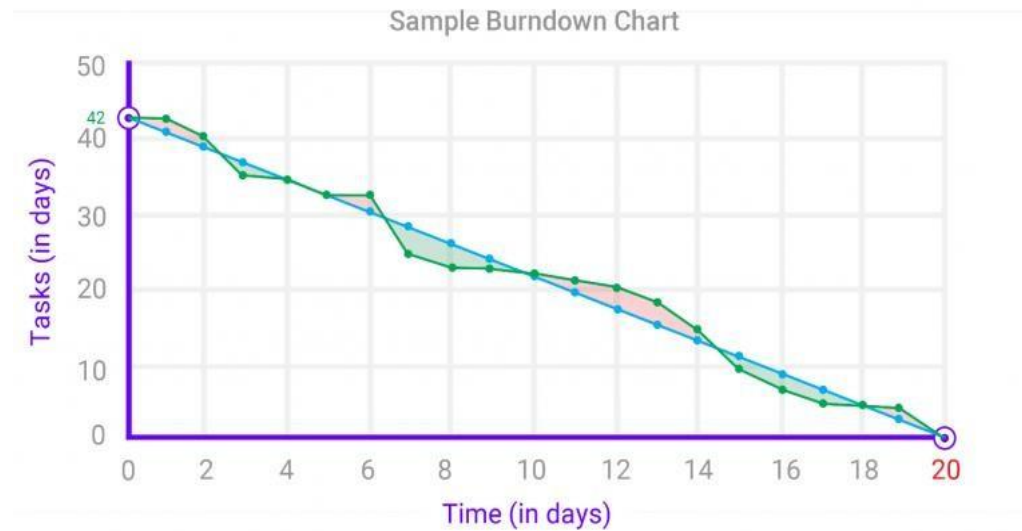
### Velocity:

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).

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

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



## Roadmap:

