

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

Date	22 October 2022
Team ID	PNT2022TMID39782
Project Name	Fertilizer Recommendation System for Disease Prediction
Maximum Marks	8 Marks

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

<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-1	Data collection	USN-1	As a user, I can collect the datasets from different open sources like Kaggle.com, data.gov. UCI machine learning repository, google, etc. with different plant leaf images.	8	High	R. Charu Latha, V. Swathi, S. Sumithra.

		USN-2	Create a model which can classify diseased vegetable plants from given images	2	High	R. Charu Latha, V. Swathi, S. Sumithra.
<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 Creation and Training (Vegetables)		Create a model which can classify diseased plants from given images and train on IBM Cloud	6	High	R. Charu Latha, V. Swathi, S. Sumithra.
	Registration	USN-1	As a user, I can register by entering my phone number, password, and confirming my password or via OTP.	3	Medium	R. Charu Latha, V. Swathi, S. Sumithra.
	Upload page	USN-2	As a user, I will be redirected to a page where I can upload my pictures of crops or take the picture of the crop using the camera.	4	High	R. Charu Latha, V. Swathi, S. Sumithra.
	Suggestion results	USN-3	As a user, I can view the results and then obtain the suggestions provided by the ML model	4	High	R. Charu Latha, V. Swathi, S. Sumithra.
	Base Flask App		A base Flask web app must be created as an interface for the ML model	2	High	R. Charu Latha, V. Swathi.

Sprint-3	Login	USN-4	As a user/admin/shopkeeper, I can log into the application by entering phone number and password or OTP.	2	High	R. Charu Latha, V. Swathi.
	User Dashboard	USN-5	As a user, I can view the previous results and history.	3	Medium	R. Charu Latha, V. Swathi.
	Integration		Integrate Flask, CNN model with Cloudant DB	5	Medium	R. Charu Latha, V. Swathi.
Sprint-4	Dashboard (Admin)	USN-6	As an admin, I can view other user details and uploads for other purposes	2	Medium	R. Charu Latha, V. Swathi, D. Aparna, S. Sumithra.
	Dashboard (Shopkeeper)	USN-7	As a shopkeeper, I can enter fertilizer products and then update the details if needed	2	Low	R. Charu Latha, V. Swathi, D. Aparna, S. Sumithra.

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

<b>Sprint</b>	<b>Total Story Points</b>	<b>Duration</b>	<b>Sprint Start Date</b>	<b>Sprint End Date (Planned)</b>	<b>Story Points Completed (as on Planned End Date)</b>	<b>Sprint Release Date (Actual)</b>
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	06 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	20 Nov 2022

### **Velocity:**

$$\textit{Average velocity} = \frac{\textit{Sprint duration}}{\textit{Velocity}} = \frac{20}{6} = 3.33$$

### **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

