

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

Date	22 October 2022
Team ID	PNT2022TMID21664
Project Name	FERTILIZERS RECOMMENDATION SYSTEM FOR DISEASE PREDICTION
Maximum Marks	8 Marks

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

Use the below template to create product backlog and sprint schedule

<b>Sprint</b>	<b>Functional Requirement (Epic)</b>	<b>User Story Number</b>	<b>User Story / Task</b>	<b>Story Points</b>	<b>Priority</b>	<b>Team Members</b>
Sprint-1	Data collection and preprocessing	USN-1	Collecting plant disease dataset	2	Low	Mummaneni Sravani
Sprint-1		USN-2	Labelling the dataset according to class	3	Medium	Nalina.V
Sprint-1		USN-3	38 types of plant diseases is labeled accordingly	2	Medium	Mummaneni Sravani
Sprint-1		USN-4	Data set Will contain both healthy and diseased data	1	Low	Nandhini.M
Sprint-1	Preprocessing	USN-5	To prepare raw data in a format that the network can accept	2	High	Nalina.V

Sprint-1		USN-6	Scaling is used for making data points generalized	1	Low	Konduru Theja sree
Sprint-1		USN-7	Shear range image will be distorted along an axis, mostly to create or rectify the perception angle	3	High	Nalina.V, Nandhini .M
Sprint-1		USN-8	Zoom Augmentation will randomly zoom the image and adds new pixels for the image	3	High	Konduru Theja sree
Sprint-1		USN-9	Flipping the entire pixels of an image horizontally	3	High	Nalina . V
Sprint-2	Training , Testing and Creating a model	USN-10	Start initiating the model	3	Medium	Mummaneni Sravani
Sprint-2		USN-11	Adding different layers of cnn( convolution, pooling dense , flatten )	2	Medium	Nalina.V
Sprint-2		USN-12	Creating/compiling with adam optimizer	1	Medium	Nandhini.M
Sprint-2		USN-13	Keras - Categorical Cross Entropy Loss Function for multi-class classification	2	Medium	Konduru Theja sree
Sprint-2		USN-14	creating metrics	2	Medium	Nandhini .M
Sprint-2		USN-15	train the data with 20 epoch	3	High	Konduru Theja sree

Sprint-2		USN-16	testing the model	5	High	Mummaneni Sravani Konduru Theja sree
Sprint-2		USN-17	save the model	2	Medium	Nalina .V
Sprint-3	Flask and Frame workdesign	USN-18	Creating backend framework with flask	8	High	Konduru Theja sree , Nandhini.M
Sprint-3		USN-19	importing the model file	3	Medium	Nandhini.M
Sprint-3		USN-20	Create route to link htmlRoutes and View Functions in Flask Framework index file	5	High	Mummaneni Sravani
Sprint-3		USN-21	Server Startup, requests and services in a loop	4	Medium	Konduru Theja sree ,
Sprint-4	Front end web application development	USN-22	creating a html template with css file	8	High	Mummaneni Sravani, , Nalina.V
Sprint-4		USN-23	user can import diseased plant leaf in web page	2	Medium	Mummaneni Sravani , Konduru Theja sree
Sprint-4		USN-24	predicting what is the type of disease occurred for the given input	2	Medium	Nalina.V , Nandhini.M
Sprint-4		USN-25	User can classify as healthy or diseased	2	Medium	Mummaneni Sravani

Sprint-4		USN-26	if plant has disease then suggest fertilizer and pesticides	3	Medium	Mummaneni Sravani
Sprint-4		USN-27	alert the admin about the prediction with the gmail	3	Medium	Nalina.V

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

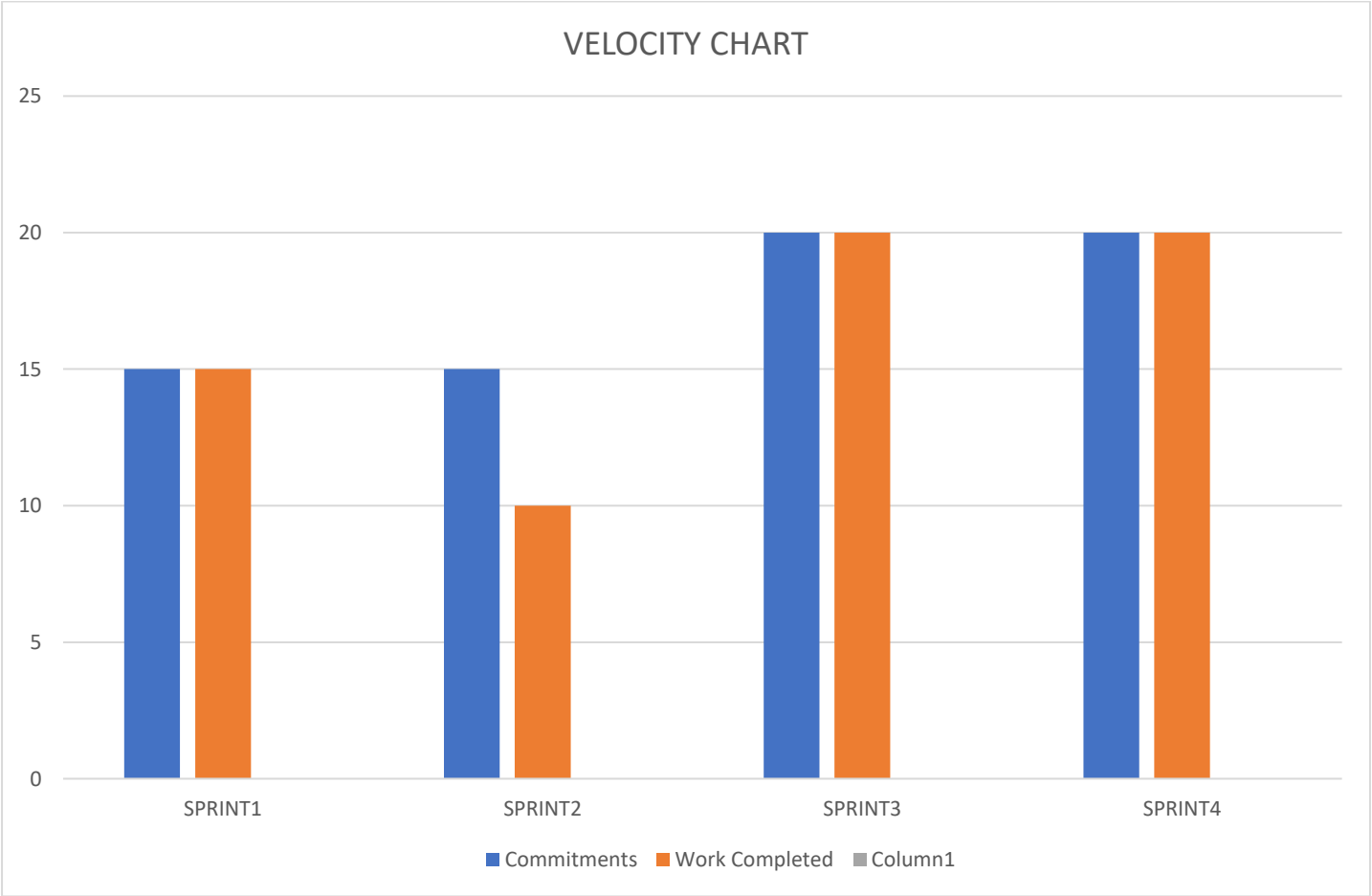
Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	20	27 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	3 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	10 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	17 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)

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

VELOCITY CHART:



**BURNDOWN CHART:**

