

## Project Planning Phase

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

Date	22 October 2022
Team ID	PNT2022TMID44577
Project Name	IoT Based Smart Crop Protection System for Agriculture
Maximum Marks	8 Marks

#### Project Planning (Product Backlog, Sprint Planning, Stories, Story Points)

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	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	3	High	C.Ramanathan
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	2	High	C.Ramanathan
Sprint-2	Cloud Service	USN-3	As a user, I can register for the application through Facebook or any social media	1	Low	S Janarthanan
Sprint-4		USN-4	As a user, I can register for the application through Gmail / web service	2	Medium	P Bavatharani
Sprint-3	Login	USN-5	As a user, I can log into the application by entering email & password	4	High	C.Sithan
Sprint-2	Pre processing	USN-6	As a farmer, the user must be able to find the system easy to access so the Prep-processes and other task must be perfect	3	High	S Janarthanan
Sprint-1	Collecting Dataset	USN-7	To collect various sources of animal threats and keep developing a dataset using Clarifai.	3	Medium	C Ramanathan
Sprint-4	Integrating	USN-8	To integrate the available dataset and keep improving the accuracy of finding animals	2	Medium	P Bavatharani.
Sprint-3		USN-9	To find and use appropriate compiler to run and test the data so that we can implement our program	1	Low	C.Sithan
Sprint-2		USN-10	Request AVS Engineering College to deploy the project in our campus and test	1	Low	S Janarthanan

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Training	USN-11	As programmer, we need to train our data perfectly so that the program runs smoothly	3	High	C Ramanathan
Sprint-3		USN-12	Train the data using out available service and IBM dataset from server and improve that	2	Medium	C.Sithan
Sprint-4	Coding	USN-13	To modify the code according to our program and improve the efficiency of that code	4	High	P Bavatharani.
Sprint-2		USN-13	To improve performance	1	Low	S Janarthanan
Sprint-2	Record	USN-5	To record the data and plot the graph to show the characteristics officially	4	Medium	S Janarthanan
Sprint-1	Planning	USN-4	Plan the programming language and feasibility	3	High	C Ramanathan
Sprint-4		USN-14	Demonstrate the working and improve accuracy overall	2	Low	S Janarthanan

#### 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	20Oct 2022	24 Oct 2022	20	21 Oct 2022
Sprint-2	20	6 Days	25 Oct 2022	29 Oct 2022	20	27 Oct 2022
Sprint-3	20	6 Days	31 Oct 2022	4 Nov 2022	20	2 Nov 2022
Sprint-4	20	6 Days	5 Nov 2022	11 Nov 2022	20	8 Nov 2022

#### Velocity:

We have a 23-day sprint duration and the velocity of the team is 20(points per sprint).

TO FIND: Calculate the team's average velocity (AV) per iteration unit (Story points per day).

$$AV = \frac{\text{sprint duration}}{\text{velocity}} = \frac{23}{20} = 1.15$$

### 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

Project: IoT Based Smart Crop Protection System for Agriculture

