DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

IBM NALAIYA THIRAN PROJECT

Project Planning Phase

Date	21 October 2022
Team ID	PNT2022TMID30928
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 (40)	Priority (Low to High)	Team Members
Sprint-1	Registration	USN-1	As a user, I can register for the required dataset by entering my email, password, and confirming my password.	3	High	S.Sowndarya
Sprint-1		USN-2	As a user, I will receive confirmation email and the SMS once I have registered for the application	2	High	D.Nandhini
Sprint-2	Cloud services	USN-3	As a user, I can register for the application through Facebook or any social media	1	Low	H.Sneka
Sprint-4		USN-4	As a user, I can register for the application through Gmail/web service	2	Medium	A.Sowmya
Sprint-3	Login	USN-5	As a user, I can log into the application network by entering email & password	4	High	S.Sowndarya
Sprint-2	Pre processing	USN-6	As a farmer, the user must be able to find the system easy to access so pre-processes and other task must be perfect.	3	High	D.Nandhini
Sprint-1	Collecting Dataset	USN-7	To collect various sources of animal threats and keep developing a dataset.	3	Medium	A.Sowmya
Sprint-4	Integrating	USN-8	To integrate the available dataset and keep improving the accuracy of finding animals	2	High	D.Nandhini
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	H.Sneka
Sprint-2		USN-10	Request Saveetha Engineering College to deploy the project in our campus and test	1	Low	A.Sowmya
Sprint-1	Training	USN-11	As programmer, we need to train our data perfectly so that the program runs smoothly	3	High	D.Nandhini
Sprint-3		USN-12	Train the data using out available services and IBM dataset from server and improve that	2	Medium	S.Sowndarya
Sprint-4	Coding	USN-13	To modify the code according to our program and improve the efficiency of that code	4	High	D.Nandhini
Sprint-2		USN-13	To improve performance	1	Low	S.Sowndarya
Sprint-2	Record	USN-5	To record the data and plot the graph to show the characteristics officially	4	High	S.Sowndarya
Sprint-1	Planning	USN-4	Plan the programming language and feasibility	3	Medium	D.Nandhini
Sprint-4		USN-14	Demonstrate the working and improve accuracy overall	2	Low	S.Sowndarya

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	5 Days	20 Oct 2022	24 Oct 2022	20	21 Oct 2022
Sprint-2	20	5 Days	25 Oct 2022	29 Oct 2022	20	27 Oct 2022
Sprint-3	20	5 Days	31 Oct 2022	4 Nov 2022	20	2 Nov 2022
Sprint-4	20	7 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).

<u>To Find</u>: Calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{sprint\ duration}{velocity} = \frac{23}{20} = 1.\hat{1}5$$

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.

<u>Project:</u> IoT Based Smart Crop Protection System for Agriculture