

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

<b>Date</b>	08 Nov 2022
<b>Team ID</b>	PNT2022TMID00461
<b>Project Name</b>	AI-Powered Nutrition Analyzer For Fitness Enthusiasts
<b>Maximum Marks</b>	8 Marks

**Product Backlog, Sprint Schedule, and Estimation**

<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	USN-1	Dataset - Collecting images of food items apples , banana, orange, pineapple, watermelon for analysis	5	High	JudeRosun JeyastinRaj
Sprint-1	Image Preprocessing	USN-2	Image data augmentation - Increasing the amount of data by generating new data points from existing data	4	Medium	AntonyPretiti MahaDevan
Sprint-1		USN-3	Image Data Generator Class - Used for getting the input of the original data	4	Medium	JudeRosun JeyastinRaj
Sprint-1		USN-4	Applying image data generator functionality to train set and test set	4	Medium	AntonyPretiti MahaDevan

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Sprint-2	Modeling Phase	USN-5	Defining the model architecture - Building the model using deep learning approach and adding CNN layers	4	High	JudeRosun JeyastinRaj
Sprint-2		USN-6	Training , saving, testing and predicting the model	5	High	AntonyPretiti MahaDevan
Sprint-2		USN-7	Database creation for the input classes	4	High	JudeRosun JeyastinRaj
Sprint-2	Development phase	USN-8	User database creation - It contains the details of users	3	Medium	AntonyPretiti MahaDevan
Sprint-2		USN-9	Home page creation - It shows options of the application	2	Low	JudeRosun JeyastinRaj
Sprint-2		USN-10	Login and registration page creation - User can register and login through gmail with Id and password	2	Low	AntonyPretiti MahaDevan
Sprint-3		USN-11	Dashboard creation – Dashboard contains the information of user profile and features of the application	2	Low	JudeRosun JeyastinRaj
Sprint-3		USN-12	User Input Page Creation - It is for the user to feed the input images	4	Medium	AntonyPretiti MahaDevan
Sprint-3		USN-13	Analysis and prediction page creation - It shows the prediction of given user input	4	Medium	JudeRosun JeyastinRaj
Sprint-3		USN-14	Creation of about us , feedback and rating page – It shows application history and feedback page to users	4	Medium	AntonyPretiti MahaDevan

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Sprint-3	Application Phase	USN-15	Building the python code and importing the flask module into the Project	6	High	JudeRosun JeyastinRaj
Sprint-4		USN-16	Create the Flask application and loading the model	5	High	AntonyPretiti MahaDevan
Sprint-4		USN-17	API integration - Connecting front end and back end and perform routing and run the application	5	High	JudeRosun JeyastinRaj
Sprint-4	Deployment phase	USN-18	Cloud deployment – Deployment of application by using IBM cloud	4	High	AntonyPretiti MahaDevan
Sprint-4	Testing phase	USN-19	Functional testing – Checking usability and accessibility	3	Medium	JudeRosun JeyastinRaj
Sprint-4		USN-20	Non Functional testing – Checking scalability and performance of the application	3	Medium	AntonyPretiti MahaDevan

<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	17	6 Days	24 Oct 2022	29 Oct 2022	17	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	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) .

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

$$AV (\text{Sprint 1}) = 7/6 = 1$$

$$AV (\text{Sprint 2}) = 4/6 = 1$$

$$AV (\text{Sprint 3}) = 6/6 = 1$$

$$AV (\text{Sprint 4}) = 2/6 = 1$$

$$AV (\text{Total}) = 21/24 = 1$$

**Burndown Chart:**

A burndown 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