

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

Team ID	PNT2022TMID24842
Project Name	AI-Powered Nutrition Analyzer For Fitness Enthusiasts
Maximum Marks	8 Marks

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

The below templateshows the 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	Upload Images	USN-1	Dataset - Collecting images of food items apples , banana, orange, pineapple, watermelon for analysis	2	High	1. Sowmiya P 2. Shalini S 3. Dheebika B 4. Ranjini N
Sprint-1	Image Preprocessing	USN-2	Image data augmentation - Increasing the amount of data by generating new data points from existing data.	3	High	1. Sowmiya P 2. Shalini S 3. Dheebika B 4. Ranjini N

<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	Image Preprocessing	USN-3	Image Data Generator Class - Used for getting the input of the original data	2	Low	1. Sowmiya P 2. Shalini S 3. Dheebika B 4. Ranjini N
Sprint-1	Image Preprocessing	USN-4	Applying image data generator functionality to train set and test set	2	High	1. Sowmiya P 2. Shalini S 3. Dheebika B 4. Ranjini N
Sprint-2	Model Building	USN-5	Defining the model architecture - Building the model using deep learning approach and adding CNN layers	2	High	1. Sowmiya P 2. Shalini S 3. Dheebika B 4. Ranjini N
Sprint-2	Model Building	USN-6	Training , saving, testing and predicting the model	3	High	1. Sowmiya P 2. Shalini S 3. Dheebika B 4. Ranjini N
Sprint-3	Application Building	USN-7	Home page creation - It shows options of the application Login and registration page creation - User can register and	2	Medium	1. Sowmiya P 2. Shalini S 3. Dheebika B 4. Ranjini N

<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>
			login through gmail with Id and password Login and registration page creation - User can register and login through gmail with Id and password			
Sprint-3	Application Building	USN-8	Analysis and prediction page creation - It shows the prediction of given user input Creation of about us , feedback and rating page – It shows application history and feedback page to users	2	High	1. Sowmiya P 2. Shalini S 3. Dheebika B 4. Ranjini N
Sprint-4	Train the Model	USN-9	Cloud deployment – Deployment of application by using IBM cloud server. Functional testing – Checking usability and accessibility	3	High	1. Sowmiya P 2. Shalini S 3. Dheebika B 4. Ranjini N

**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	20	6 Days	24 Oct 2022	29 Oct 2022	20	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	14 Nov 2022

**Velocity:**

For example, 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)

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

In our project, we have a 6-days 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)

$$AV = \frac{\text{Sprint Duration}}{\text{Velocity}} = \frac{20}{6} = 3.3 \text{ (approx.)}$$

### 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.

A burndown chart is almost a “must” have tool for a Scrum Team for the following main reasons:

- monitoring the project scope creep
- Keeping the team running on schedule

- Comparing the planned work against the team progression

Burndown Chart

