

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

Date	08 Nov 2022
Team ID	PNT2022TMID00560
Project Name	AI-Powered Nutrition Analyzer For Fitness Enthusiasts
Maximum Marks	8 Marks

Product Backlog, Sprint Schedule, and Estimation

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Data Collection	USN-1	Dataset - Collecting images of food items apples , banana, orange, pineapple, watermelon for analysis	5	High	Shrinath S, Somnath M
Sprint-1	Image Preprocessing	USN-2	Image data augmentation - Increasing the amount of data by generating new data points from existing data	4	Medium	Shyam Raj K, Sathya S
Sprint-1		USN-3	Image Data Generator Class - Used for getting the input of the original data	4	Medium	Shrinath S, Somnath M
Sprint-1		USN-4	Applying image data generator functionality to train set and test set	4	Medium	Shyam Raj K, Sathya S

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Modeling Phase	USN-5	Defining the model architecture - Building the model using deep learning approach and adding CNN layers	4	High	Shrinath S, Somnath M
Sprint-2		USN-6	Training , saving, testing and predicting the model	5	High	Shrinath S, Somnath M
Sprint-2		USN-7	Database creation for the input classes	4	High	Shrinath S, Somnath M
Sprint-2	Development phase	USN-8	User database creation - It contains the details of users	3	Medium	Shrinath S, Somnath M
Sprint-2		USN-9	Home page creation - It shows options of the application	2	Low	Shyam Raj K, Sathya S
Sprint-2		USN-10	Login and registration page creation - User can register and login through gmail with Id and password	2	Low	Shrinath S, Somnath M
Sprint-3		USN-11	Dashboard creation – Dashboard contains the information of user profile and features of the application	2	Low	Shyam Raj K, Sathya S
Sprint-3		USN-12	User Input Page Creation - It is for the user to feed the input images	4	Medium	Shrinath S, Somnath M
Sprint-3		USN-13	Analysis and prediction page creation - It shows the prediction of given user input	4	Medium	Shyam Raj K, Sathya S
Sprint-3		USN-14	Creation of about us , feedback and rating page – It shows application history and feedback page to users	4	Medium	Shrinath S, Somnath M

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Application Phase	USN-15	Building the python code and importing the flask module into the Project	6	High	Shrinath S, Somnath M
Sprint-4		USN-16	Create the Flask application and loading the model	5	High	Shrinath S, Somnath M
Sprint-4		USN-17	API integration - Connecting front end and back end and perform routing and run the application	5	High	Shrinath S, Somnath M
Sprint-4	Deployment phase	USN-18	Cloud deployment – Deployment of application by using IBM cloud	4	High	Shrinath S, Somnath M
Sprint-4	Testing phase	USN-19	Functional testing – Checking usability and accessibility	3	Medium	Shrinath S, Somnath M
Sprint-4		USN-20	Non Functional testing – Checking scalability and performance of the application	3	Medium	Shyam Raj K, Sathya S

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	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