

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

Team ID	PNT2022TMID45737
Project Name	Project - AI-powered Nutrition Analyzer for Fitness Enthusiasts

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

Use the below template to create product backlog and sprint schedule

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Data Collection & Image Processing					
Sprint-1		USN-1	Collect images of different food items organized into subdirectories based on their respective names	3	Medium	Ramji
Sprint-1		USN-2	Import and configure the Image data generator library from Keras	3	Medium	Krishnakumar
Sprint-1		USN-3	Apply Image data generator functionality to training set and testing set	5	High	Kathiresan
Sprint-1		USN-4	Improving the image data that suppresses unwilling distortions or enhances some image features important for further processing	3	Medium	Rammohan

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Model Building & Testing					
Sprint-2		USN-5	Importing the model building libraries and Initializing the model	5	High	Rammohan
Sprint-2		USN-6	Adding CNN layers, Dense layers & other necessary layers and Compile the model	5	High	Kathiresan
Sprint-2		USN-7	Train & Test the model based on the image dataset	3	Medium	Ramji
Sprint-3	Application building					
Sprint-3		USN-8	Create HTML pages to design the front-end part of the web page	5	High	Kathiresan
Sprint-3		USN-9	Create the flask application and loading the model file	5	High	Rammohan
Sprint-3		USN-10	Routing to the HTML page and Running the application	5	High	Krishnakumar
Sprint-4	Cloud integration					
Sprint-4		USN-11	Train the model on Cloud	5		Kathiresan, Rammohan

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	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	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)

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