

Project Planning Phase-2

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

Date	19 November 2023
Team ID	Team - 592200
Project Name	Fruits and Vegetables Classification with nutrition analysis using InceptionV3
Maximum Marks	8 Marks

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

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Image Upload and Processing	USN-1	As a user, I want to upload a fruit/vegetable image.	5	High	
Sprint-1	Image Upload and Processing	USN-2	As a user, I want the system to identify the object in the image.	8	High	
Sprint-1	Image Upload and Processing	USN-3	As a user, I want the details about the nutrients, vitamins, calories, and fiber for the identified object.	13	High	
Sprint-1	Integration with IBM Watson	USN-4	As a user, I want integration with IBM Watson STT for voice queries.	8	Medium	
Sprint-1	Integration with IBM Watson	USN-5	As a user, I want integration with IBM Watson Assistant for natural language interaction.	5	Medium	
Sprint-1	Database Setup	USN-6	As a developer, I want to set up MySQL for structured data storage.	5	Medium	
Sprint-1	Database Setup	USN-7	As a developer, I want to set up NoSQL for unstructured data storage.	5	Medium	
Sprint-1	Cloud Integration	USN-8	As a developer, I want to integrate with IBM Cloud services for scalability.	8	High	
Sprint-2	User Authentication	USN-9	As a user, I want to authenticate using Aadhar API for security.	5	High	
Sprint-2	Frontend Development	USN-10	As a developer, I want to create a responsive and user-friendly UI.	8	Medium	
Sprint-2	Machine Learning Enhancement	USN-11	As a developer, I want to fine-tune the InceptionV3 model for better accuracy.	13	High	
Sprint-2	External API Integration	USN-12	As a developer, I want to integrate with external APIs (e.g., Weather) for additional information.	5	Medium	
Sprint-2	Performance Optimization	USN-13	As a developer, I want to optimize the application for better performance.	8	High	
Sprint-3	User Feedback Implementation	USN-14	As a user, I want to provide feedback on nutrient details for improvement.	5	Medium	

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	26	5 Days	24 Oct 2022	29 Oct 2022	20	28 Oct 2022
Sprint-2	34	5 Days	31 Oct 2022	05 Nov 2022	30	04 Nov 2022
Sprint-3	25	5 Days	07 Nov 2022	12 Nov 2022	25	11 Nov 2022
Sprint-4	28	2 Days	14 Nov 2022	16 Nov 2022	28	16 Nov 2022
Sprint-5	30	3 Days	16 Nov 2022	19 Nov 2022	28	18 Nov 2022

Velocity:

Average Velocity (AV) = Total Story Points / Total Sprint Duration

$$\begin{aligned}\text{Average Velocity} &= 26+34+25+28+30 / 5+5+5+2+3 \\ &= 143 / 20 = 7.15\end{aligned}$$

- The average velocity is approximately 7.15 story points per week.

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.

