

Project Planning Phase

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

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 | USN-1 | Download Food Nutrition Dataset | 2 | Medium | Sai kumar |
| Sprint-1 | Data Preprocessing | USN-2 | Importing The Dataset into Workspace | 1 | Low | Vinodh kumar |
| Sprint-1 | | USN-3 | Handling Missing Data | 3 | Medium | priyalatha |
| Sprint-1 | | USN-4 | Feature Scaling | 3 | Low | Naveen reddy |
| Sprint-1 | | USN-5 | Data Visualization | 3 | Medium | Naveen reddy |
| Sprint-1 | | USN-6 | Splitting Data into Train and Test | 4 | High | Vinodh kumar |
| Sprint-1 | | USN-7 | Creating A Dataset with Sliding Windows | 4 | High | Priyalatha |
| Sprint-2 | Model Building | USN-8 | Importing The Model Building Libraries | 1 | Medium | Naveen reddy |
| Sprint-2 | | USN-9 | Initializing The Model | 1 | Medium | Sai kumar |
| Sprint-2 | | USN-10 | Adding LSTM Layers | 2 | High | Vinodh |

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|---------------|--------------------------------------|--------------------------|--|---------------------|-----------------|---------------------|
| Sprint-2 | | USN-11 | Adding Output Layers | 3 | Medium | Priyalatha |
| Sprint-2 | | USN-12 | Configure The Learning Process | 4 | High | Sai kumar |
| Sprint | Functional Requirement (Epic) | User Story Number | User Story / Task | Story Points | Priority | Team Members |
| Sprint-2 | | USN-13 | Train The Model | 2 | Medium | Sai kumar |
| Sprint-2 | | USN-14 | Model Evaluation | 1 | Medium | Vinodh |
| Sprint-2 | | USN-15 | Save The Model | 2 | Medium | Priyalatha |
| Sprint-2 | | USN-16 | Test The Model | 3 | High | Naveen reddy |
| Sprint-3 | Application Building | USN-17 | Create An HTML File | 4 | Medium | Sai kumar |
| Sprint-3 | | USN-18 | Build Python Code | 4 | High | Vinodh |
| Sprint-3 | | USN-19 | Run The App in Local Browser | 4 | Medium | Priyalatha |
| Sprint-3 | | USN-20 | Showcasing Prediction On UI | 4 | High | Naveen reddy |
| Sprint-4 | Train The Model On IBM | USN-21 | Register For IBM Cloud | 4 | Medium | Sai kumar |
| Sprint-4 | | USN-22 | Train The ML Model On IBM | 8 | High | Vinodh |
| Sprint-4 | | USN-23 | Integrate Flask with Scoring End Point | 8 | High | Naveen reddy |

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 | 4 Days | 27 Oct 2022 | 31 Oct 2022 | 20 | 31 Oct 2022 |
| Sprint-2 | 20 | 5 Days | 01 Nov 2022 | 06 Nov 2022 | 20 | 05 Nov 2022 |
| Sprint-3 | 20 | 6 Days | 08 Nov 2022 | 13 Nov 2022 | 20 | 10 Nov 2022 |
| Sprint-4 | 20 | 6 Days | 14 Nov 2022 | 19 Nov 2022 | 20 | 17 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)

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



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.

