**Project Planning Phase**

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

|  |  |
| --- | --- |
| Date | 26 March 2025 |
| Team ID | PNT2025TMID06994 |
| Project Name | Global Food Production Trends and Analysis: A Comprehensive Study from 1961 to 2023 Using Power BI |
| Maximum Marks | 5 Marks |

**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 & Preprocessing | USN-1 | Collect food production datasets from 1961-2023 | 2 | High | Aguan |
| Sprint-1 | Data Collection & Preprocessing | USN-2 | Clean and handle missing data values | 3 | High | Aguan |
| Sprint-1 | Data Collection & Preprocessing | USN-3 | Standardize categorical values for analysis | 2 | Medium | Reshma |
| Sprint-2 | Data Modelling & Visualization | USN-4 | Develop predictive models for food production trends | 5 | High | Avinash |
| Sprint-2 | Data Modelling & Visualization | USN-5 | Create Power BI dashboards for data visualization | 4 | High | Avinash |
| Sprint-2 | Data Modelling & Visualization | USN-6 | |  |  | | --- | --- | | Test and validate predictive models |  | | 3 | Medium | Avinash |
| Sprint-3 | Insights & Deployment | USN-7 | Develop insights and recommendations for policymakers | 5 | High | Kalyan |
| Sprint-3 | Insights & Deployment | USN-8 | Deploy interactive dashboards for stakeholders | 5 | High | Kalyan |
| Sprint-3 | Insights & Deployment | USN-9 | Conduct review and refine insights based on feedback | 3 | Medium | Kalyan |

**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 | 7 | 3 Days | 18 March 2025 | 20 March 2025 | 7 | 29 Oct 2022 |
| Sprint-2 | 12 | 3 Days | 20 March 2025 | 23 March 2025 | 12 |  |
| Sprint-3 | 13 | 3 Days | 23 March 2025 | 26 March 2025 | 13 |  |

**Velocity Calculation**

Total Story Points = 7 + 12 + 13 = **32**  
Number of Sprints = **3**  
Velocity = **32 / 3 = 10.67**

**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](https://www.visual-paradigm.com/scrum/what-is-agile-software-development/) methodologies such as [Scrum](https://www.visual-paradigm.com/scrum/scrum-in-3-minutes/). However, burn down charts can be applied to any project containing measurable progress over time.