**Initial Project Planning Report**

**Product Backlog, Sprint Schedule, and Estimation**

The table below outlines the product backlog and sprint schedule for the Nutrition AI project, detailing functional requirements, user stories, priorities, and the planned timeline for each sprint. The project was completed individually, highlighting the independent effort in executing all tasks.

| **Sprint** | **Functional Requirement (Epic)** | **User Story Number** | **User Story / Task** | **Priority** | **Sprint Start Date** | **Sprint End Date (Planned)** |
| --- | --- | --- | --- | --- | --- | --- |
| Sprint-1 | Data Collection and Preprocessing | NA-1 | Collect and preprocess meal images | High | 2022/08/08 | 2022/08/15 |
| Sprint-1 | Data Collection and Preprocessing | NA-2 | Integrate text input preprocessing | Medium | 2022/08/08 | 2022/08/15 |
| Sprint-1 | Data Collection and Preprocessing | NA-3 | Simulate various dietary scenarios | Low | 2022/08/08 | 2022/08/15 |
| Sprint-2 | Model Development | NA-4 | Integrate Gemini Pro model | High | 2022/08/15 | 2022/08/22 |
| Sprint-2 | Model Development | NA-5 | Fine-tune model for accuracy | Medium | 2022/08/15 | 2022/08/22 |
| Sprint-2 | Model Validation and Evaluation | NA-6 | Validate model with simulated inputs | High | 2022/08/22 | 2022/08/29 |
| Sprint-3 | Web Integration and Deployment | NA-7 | Develop user interface with Streamlit | Medium | 2022/08/29 | 2022/09/05 |
| Sprint-3 | Web Integration and Deployment | NA-8 | Deploy app on local server | Medium | 2022/08/29 | 2022/09/05 |
| Sprint-4 | Project Reporting | NA-9 | Compile final project report | Medium | 2022/09/05 | 2022/09/19 |

This sprint schedule reflects the individual effort put into planning, executing, and completing the Nutrition AI project using Gemini Pro. Each sprint focuses on specific project stages, ensuring a methodical approach to independently achieving the project's objectives.