Sprint Planning – Advancing Nutrition Science through Gemini AI

A Sprint is a fixed period during which the team implements functional modules of the NutriGen AI Streamlit application.

An Epic represents a major functional module from the implemented system:
• Tailored Meal Planning
• Dynamic Nutritional Insights
• Virtual Nutrition Coaching

A Story is a specific implemented feature inside each module.

Story Point Scale (Fibonacci):
1 – Very Easy
2 – Easy
3 – Moderate
5 – Complex

Sprint 1 – Core Application Setup & Meal Planning Module

Epic 1: Application Setup & UI Configuration
    Page Configuration & Layout Setup – 2
    Custom Dark Theme Styling (CSS Integration) – 3
    Sidebar Navigation with Scenario Selection – 2

Epic 2: Tailored Meal Planning Module
    User Input Fields (Restrictions, Health Conditions, Calories) – 3
    Activity Level & Taste Preference Handling – 2
    7-Day Meal Plan Generation Logic – 5
    Expandable Daily Meal Display (Breakfast, Lunch, Dinner, Snack) – 3
    Weekly Grocery List Generation – 2

Total Story Points Sprint 1 =
2 + 3 + 2 + 3 + 2 + 5 + 3 + 2 = 22

Sprint 2 – Nutritional Insights & Coaching Modules

Epic 3: Dynamic Nutritional Insights Module
   Food Input & Barcode Simulation – 2
   Nutritional Data Table using Pandas – 3
   Macronutrient Bar Chart Visualization – 3
   Health Insight Display Logic – 2
   Calorie Progress Tracking Slider – 2

Epic 4: Virtual Nutrition Coaching Module
   Chat Interface using Session State – 3
   AI Response Simulation Logic – 3
   Conversation History Management – 2
   Motivation Tracker & Progress Bar – 2

Total Story Points Sprint 2 =
2 + 3 + 3 + 2 + 2 + 3 + 3 + 2 + 2 = 22

Overall Calculation

Total Story Points = 22 + 22 = 44
Number of Sprints = 2

Velocity = Total Story Points / Number of Sprints
Velocity = 44 / 2 = 22 Story Points per Sprint

Team Velocity = 22 Story Points per Sprint