**Project Development Phase – Model Performance Test**

|  |  |
| --- | --- |
| **Date** | 01 July 2025 |
| **Team ID** | **LTVIP2025TMID48379** |
| **Project Name** | **Student Health and Lifestyle Analysis** |

**Model Performance Testing:**

| **S.No** | **Parameter** | **Screenshot / Values** |
| --- | --- | --- |
| 1 | **Data Rendered** | **Dataset Name:** food\_coded This dataset contains student information on demographics (gender, marital status), dietary habits (calorie consumption, diet status), exercise patterns, academic performance (GPA), and lifestyle factors (cooking frequency, parental influence, eating out habits). |
| 2 | **Data Preprocessing** | - Removed null and inconsistent values. - Converted categorical responses into user-friendly labels. - Derived additional calculated metrics like BMI estimation, average calorie intake, and meal skipping frequency. - Grouped continuous variables (like GPA, weight) into meaningful ranges for filters. |
| 3 | **Utilization of Filters** | Filters were applied across dashboards to enable dynamic analysis based on: - **Gender** - **Diet Status** - **Exercise Frequency** - **Marital Status** - **GPA Range** - **Cooking Frequency** These filters enhance interactivity and personalized insights for users. |
| 4 | **Calculation Fields Used** | Custom calculated fields include: - **Calorie Consumption per Day Category** - **BMI Estimate (approx)** - **Breakfast Regularity Score** - **Exercise Consistency Index** - Aggregated count and percentage metrics for survey-based responses (like comfort food reasons, dietary habits). |
| 5 | **Dashboard Design** | **Number of Visualizations / Graphs:** 24 The dashboards are organized into four thematic groups: 1. **Lifestyle Overview** 2. **Dietary Habits and Preferences** 3. **Health and Nutrition** 4. **Parental Influence and Eating Out** |
| 6 | **Story Design** | **Number of Visualizations / Graphs:** 5 Story titled **"Story 1"** summarizes key findings from dashboards focusing on students' dietary habits, physical activity, and their correlation with health and academic performance. |