NutriSage: Smart Nutrition Assistant for Food Analysis and Personalized Meal Guidance

by

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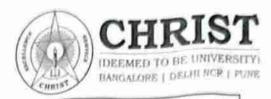
NEELANJAN DUTTA (2448040)

Under the guidance of

Dr. Sathya P



SEPTEMBER - 2025



| Department of Statistics and Data Science PROJECT DIARY - Sep 2025 | |
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| Course : MDS581 - PROJECT - II | |
| Student Reg. No: 2448040 | Name: Neclanjan Dutta |
| Guide Name: Dn. Sathya P | N 1 - 2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2 |

Date: From : 15 |09 | 25

During Week 1, I contributed to the project definition phase by analyzing different problem areas and identifying gaps in existing solutions. After discussions and neview, I supported the decision to move forward with the nutrition-focused project because it is impactful, practical, and has available data sources for development.

To: 20 |09 | 25

Giffhub link page coneated.

I planned to help in finalizing the project scope by suggesting practical features and supporting the datapet search. I also aimed to shortlist data sources from Kaggle and government nutrients detabet in Week 2.



Department of Statistics and Data Science

PROJECT DIARY - Sep 2025

Class: MSc Data Science

Trimester: V

Course: MDS581 - PROJECT - II

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Guide Name: Dr. Sathya P

Date: From : 22 09 25

To: 27 09 25

Task Completed:

My focus in week I was on analyzing the dataset structures and therking their usability four our planned features. I newiewed USDA and open Nutrition data for linking nutrients with food items and serving sizes, and studied Food-101 for image based classification. I also explored suitable models for chatbot and food recognition to ensure feasibility and efficiency.

My task for next week will include supporting dataset integration and starting EDA by creating initial visualizations such as nutrient distributions, food category prequencies, and correlation nutrient distributions. I will also document data quality between major nutrients. I will also document data quality between major nutrients. I will also document model training.

Guide Signature

Meeting with our alumni (Sneha S)

