



PARSHVANATH CHARITABLE TRUST'S

# **A.P. SHAH INSTITUTE OF TECHNOLOGY**

Department of Computer Science and Engineering

Data Science

## **Nutriplan: Smart Diet and Wellness**

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**Project Guide**  
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# Contents

- Introduction
- Objectives
- Scope
- Features
- Project Outcomes
- Technology Stack
- Block Diagram

# 1. Introduction

- Problem Identified :
  - Users often abandon their diet plans over time due to unsustainable practices, such as extreme calorie restriction, leading to feelings of deprivation.
- Solution Proposed :
  - Incorporate sustainability tips and habit-building strategies within the Nutriplan app to support users in maintaining a successful wellness journey.

## 2. Objectives

1. Tailors recommendations to each person's unique needs and goals.
2. To help users achieve their health and fitness goals, such as weight loss, muscle gain, or improved energy levels.
3. To facilitate easy tracking of calorie intake and nutrient consumption.

### **3. Scope**

1. Can implement a system that crafts personalized plans, factoring in height, weight, and activity level.
2. Can offer a comprehensive database of foods, and nutritional information to support users in making informed choices.
3. Can be easy to use on a daily basis.

## 4. Features

- Feature 1:

Provides meal suggestions to educate users about the importance of diverse nutrient intake and that navigates users towards their goals.

- Feature 2:

Ensures the app is intuitive and easy to navigate for a positive user experience.

- Feature 3:

The web application tailors diet recommendations based on each user's height, weight, and activity level.

## 5. Outcome of Project

1. Users will experience better health outcomes by following personalized diet plans, reducing the risk of diet-related health issues.
2. Users will be more likely to maintain healthy habits over time, promoting long-term wellness and lifestyle changes.
3. The app approach will lead to higher user satisfaction, increased engagement, and achieving their wellness goals.

# 6. Technology Stack

1. Python 3.11.5
2. Google colab 1.1.2
3. Dataset (calories.csv, Size-32.6MB, 68,234 rows, 9 columns)

Front-end:

1. HTML 5.0
2. CSS 3.0

Back-end:

1. SQL Lite 3.3.6
2. Flask

Algorithms

1. KNN



## 7. Block Diagram

User will Register



Login Page



Input Parameters( Height, Weight, Age etc )



Caloric Need Of User



Food Recommendation using KNN

Thank You...!!