# CHAPTER I INTRODUCTION

## **Introduction**

This section is the introduction of a report for the development of a system. It will provide a general overview of the entire system and discuss its Project Background, Problem Statement, Objectives of the Project, Significance of the Project, Scope of the Project, along with the Assumptions and Limitations. The available information regarding the system will be stated in the background section of the report.

## **Project Background**

These days everyone are increasingly in control over the decisions that influence their health and wellness, and the behaviors they learn throughout childhood and young adulthood can carry on into their adult lives. With this to present a system that allows the user to know and stay informed about the foods that the user eats throughout the day and help the user to filter the user’s fat, carbohydrate and protein intake for the same. When the user goes to the nutritionist, the application will ask the user’s personal details related to the user’s body and health such as the user’s age, the user’s height, the user’s weight, the system here acts as a nutritionist. The system calculates user’s calories and diet, also generates BMI based on given details and consultant will also inform user about what user should consume in user’s diet and what user should ignore to keep user’s self healthy through diet.

The system shows the diet the user is consuming with a graphical representation of the total calories and the total amount consumed. Users are allowed to check previous dietary habits by selecting the desired date. The most important module which has AI working in the background directs the user what food he should consume to maintain his BMI and the items already consumed, providing highly accurate and reliable results.

Just similar to a human dietitian, whis web system will also act like user dietitian. When user go to a doctor of nutrition, then will ask user personal details related to body and health such as user age,user height, user weight and how much water do user consumer in a day and how much work do user do reguraly. Just similar to this doctor, this calorie calculator and diet check also generates BMI based on provided details and then the AI (Artificial Intelligence) consultant will also advice user about what should user intake in user diet and what should user ignore in order to keep user healty via user diet.

## **Problem Statement**

The problem identification that can be highlighted throughout this research are :

* + 1. Most people will do a diet program 30% in achieving a successful diet. Many people will be less familiar with the correct diet method in calculating the stored and outgoing calories. This factor makes people lazy to be disciplined in carrying out diet activities that are being carried out.
		2. Lack of productive life habits on health. The lack of a productive life is a factor that prevents oneself from encouraging a healthy and fit life in carrying out daily activities.
		3. The lack of calories for diet for users who will run the program. By doing it manually, people don’t know that there are motivating factors to make people excited about going on a diet without having to estimate the calories that will come out.

Therefore, the application program on the calculation of calories in and out is a driving factor to help people to create a healthy and fit life besides helping to create a healthy life and avoid any kind of disease.

## **Objectives**

The aims of this project are:

1. Introducing the program on how to manage health through a calorie calculation application, by making calorie calculations that user have done in creating a healthy body and spirit.
2. The purpose of a calorie calculator is to provide an estimate of the number of calories needed by a person based on their age, gender, height, weight, and level of physical activity.

Knowing how many calories user need can help user reach user health and fitness goals, whether that's losing weight, gaining muscle, or maintaining user current weight. By tracking user calorie intake, user can make informed decisions about what foods to eat and how much to eat to achieve the results user want.

Overall, the calorie calculator's purpose is to give you a better understanding of your daily caloric needs and help user make healthier choices for user lifestyle.

1. Evaluate the use of calorie calculators in clinical settings and their impact on weight loss success or the management of certain health conditions.

## **Significance**

In this part of the application can help users in working with the maximum. The first is that the user can adjust the calories that have been entered and left. Making it easy for users to carry out their daily activities by measuring the calories in needed and calories in that must be expended, with this, it can encourage users to do it routinely every day. The second helps users who have unhealthy habits in their daily activities. With this application, it can encourage people to be able to exercise without being directly involved. The third helps users to stay consistent by maintaining healthy and maintained habits.

## **Scope of Project**

A scope of work is a list of tasks that must be completed in order for the project to be completed within its specified boundaries. The work scope is important for ensuring that the project is on track to meet its objectives. The goals of this project are to build calorie calculator App via Android.

### Admin

Admin has complete access to all data, including the ability to create, update, delete, and read data

### User

User have access to information on their own diet program and can also follow predetermined diet program from the application.

## **Assumptions and Limitations**

### Assumptions

Contribute to the improvement of registration data processing quality so that the resulting information is more effective and efficient. To make it easier for users, to run the diet program so that it is more maximal.

### Limitations

This application is limited to providing calories needed and calories that must be spent. The calorie calculator uses general formulas and assumptions based on population averages. However, individuals can vary widely in terms of metabolism, body composition, and other factors that affect caloric needs. Therefore, the accuracy of the calorie calculator may vary from person to person.