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## AI Based Diet Consultant System

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### ABSTRACT

“AI based Diet Consultant App” project is an application with artificial intelligence about human diets. It acts as a diet consultant similar to a real dietician. This system demonstrates correspondingly as that of a dietician. A person in order to know his/her diet plan needs to give some data to the dietician, for example, its body type, weight, height and working hour details. . The system stores and processes this data and then calculates the nutrient B.M.I value needed to fill up user's needs. The system then shows an appropriate diet to the users and asks if user is ok with it, else it shows other alternate diets to fill up user's needs. In this way, the user does not have to visit any dietician which additionally spares time and the user can get the required diet plan in only a click. The system will give more exact outcomes as it acknowledges the information entered by the user and procedures it relying upon a few measurements definitely known to the application based on which a diet plan is produced and inquire as to whether the user acknowledges the eating regiment design. If not acknowledged the framework may likewise give and alternative diet plan.

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Keywords: BMI, Height , weight.

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### 1.INTRODUCTION

Just similar to a human dietician, this system will also act like your dietician. When you go to a doctor of nutrition, then they will ask you about your personal details related to body and health such as your age, your height, your weight and how much water do you consumed in a day and how much walk to do take regularly and how much work do you do regularly. Just similar to this doctor, this artificial intelligent dietitian also asks you similar questions in your device and you have to answer all those questions and then this AI consultant will also advice you about what should you intake in your diet and what should you ignore in order to keep yourself healthy via your diet

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### 2.PRICE PREDICTION SYSTEM

Effective software project estimation is one of the challenging and important activities in software development. Proper project planning and control is not possible without sound and reliable estimate. The Five basic steps in software project estimation are:

1. Estimate the size of development product. The units of measure are lines of code (LOC) and function point (FP).
2. Estimate the effort in person-months or person-hours.
3. Estimate the schedule in calendar months
4. Estimate the project cost in rupees.
5. Estimate Cost For DevelopmentFirst point

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### 3.RELATED WORK

It acts as a diet consultant similar to a real dietician. This system acts in a similar way as that of a dietician. A person in order to know his/her diet plan needs to give some information to the dietician such as its body type, weight, height and working hour details. User's BMI will be calculated and based BMI result, the diet plan will be generated. Similar way this system also provides the diet plan according to the information entered by the user. The system asks all his data from the user and processes it to provide the diet plan to the user. Thus, the user does not need to visit any dietician which also saves time and the user can get the required diet plan in just a click.

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### 4.METHODOLOGY

#### Clean and prepare data as per the requirements.

Input details from the user: Age (in years), Weights (in pounds) , Heights(in Feet and inches) and daily exercise level. Calculate Body Mass Index(BMI) where  $BMI = \text{Weight(kg)}/\text{Height}^2(\text{m})$ .

#### Steps followed in the Algorithm –Admin Part:

Step 1: Start

Step 2: Input details from the admin (Email and Pass).

Step 3: Add Food (fruits , can be consumed by , can be consumed for). Step 4 : Custom Request.

Step 5: if click on==request Change

diet plan. Step 6: Else

Step 7 : Stop.

#### User Part:

Step 1 :Start

Step 2: Input details from the user: Age (in years), Weights (in pounds) , Heights(in Feet and inches) and daily exercise level. Step 3: Calculate (BMI).

Step 4: Calculate the calorie intake: Exercise level daily calories required (Kcal/day) Little to no exercise daily kilocalories needed =  $BMI * 1.2$  Step 5: Recommend a diet plan based on the above steps.

Step 6: Stop.

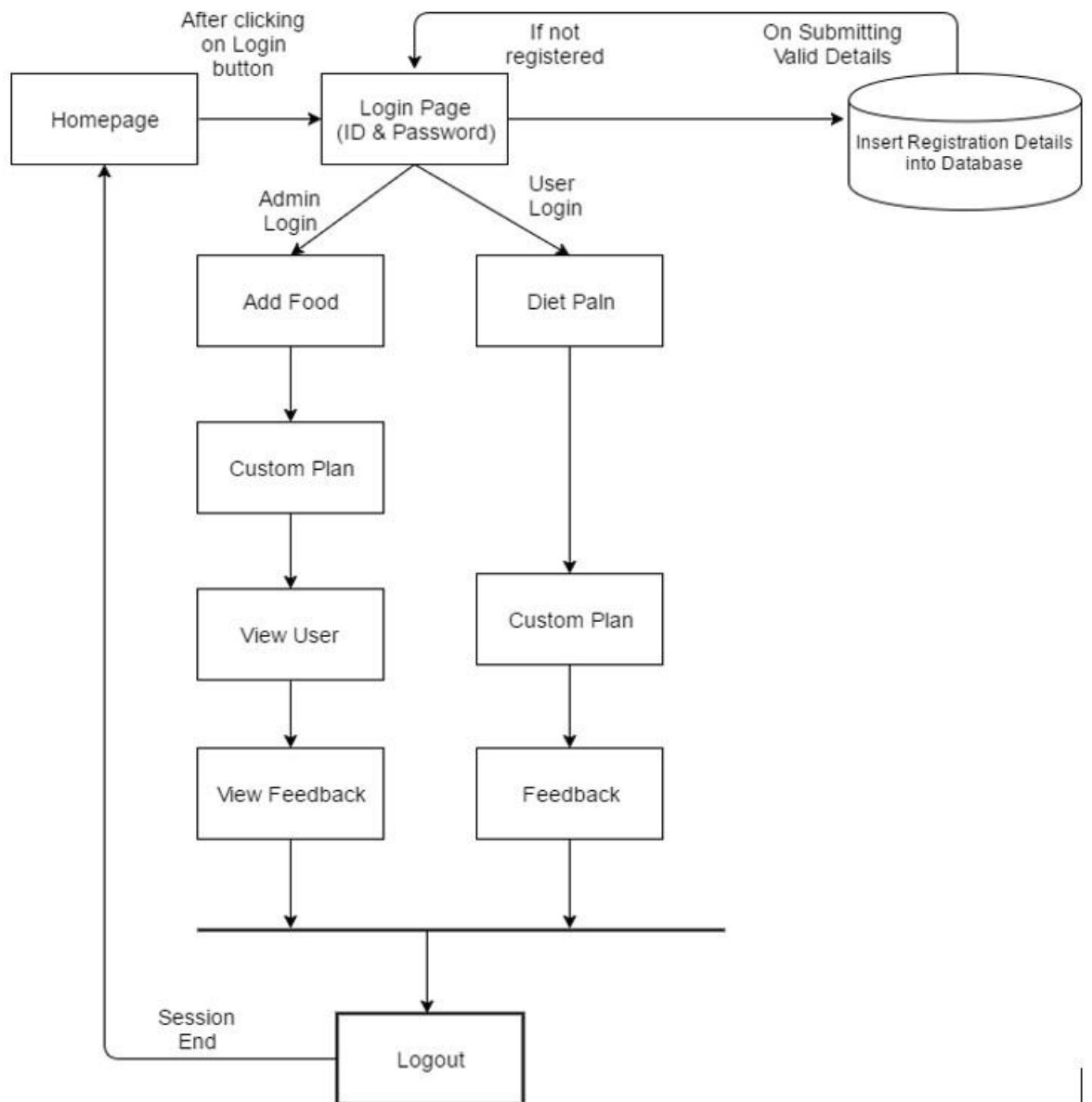


Figure 4.1: System Architecture

## 5. RESULT AND DISCUSSION

The results of this project indicate the overall sequence of the actions by a user while using the system.

Name	Weight	Height	BMI Status	Consumed By
Mansi	58	159	23.49	Healthy
Priyanka	42	160	16.80	Under Weight
Pratibha	60	162	23.41	Healthy
Ruchita	58	159	23.49	Healthy