

AI Based Diet Planning

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Abstract— Now a days, a human being suffering from many health problems such as fitness problem, maintaining proper diet problem etc. Therefore we will develop this website for providing special dietician information knowledge for normal persons and for diseased persons also. The effective personal dietary guidelines are very essential for managing our health, preventing health issues and the interactive diet planning helps a user to adjust the plan in an easier way. The website is to be produced on AI based diet planning. Here there are two persons, the admin and user. The user fills the registration form and then login to the website. After login users have to fill personal information including age, weight, height, gender. For calculating BMI age, weight, height, gender are necessary. On the basis of calculated BMI (Body Mass Index) Artificial Dietician will display the proper dietician for logged user.

Keywords: BMI (Body Mass Index), AI (Artificial Dietician), Meal planning

I. INTRODUCTION

A. Motivation

In this fast and schedule life, people are not giving importance to the quality of food they are eating. They tend to neglect their eating patterns and habits. Hence human being suffering from many health problems such as fitness problem, not maintain proper diet plan. Therefore we are developing this web-based application for providing special dietician information and proper exercise knowledge for normal person and also provide diet plan for who are suffering from disease.

B. Problem Statement

In previous system, system was able to calculate only BMI (Body Mass Index) i.e. height and weight and we are getting common diet plan form it. That was useful only for normal people and not for those people who are suffering from any health issues. In our system we consider all parameters which are not consider in previous system and also consider common health issues and will provide the proper diet plan.

II. EXISTING SYSTEM

- Display diet chart without taking daily routine and health conditions.
- Previous System doesn't focus on health condition.
- AI domain gives an edge of generating a proper diet plan which lacks in other system as the domain is not the same.
- It doesn't take users health condition (like diabetes or cardiac patients) into account.
- It does not ask user about his daily routine and food choices.

A. Proposed System

The proposed system is a responsive website which contains the knowledge and data regarding the fitness of a person. This website consists the user interface which will be publicly displayed on the website i.e. the basic information regarding the fitness. Such as how to maintain good health by doing some workouts and by eating some food products. Which includes calories, proteins and carbohydrates etc. This Website provides AI based diet plan. Here there are two persons, the admin and user. The user fills the registration form and then login to the website. After login users have to fill personal information including age, weight, height, gender. For calculating BMI age, weight, height, gender and exercise level are necessary. On the basis of calculated BMI (Body Mass Index) Artificial Dietician will display the proper dietician for logged user.

III. SYSTEM ARCHITECTURE

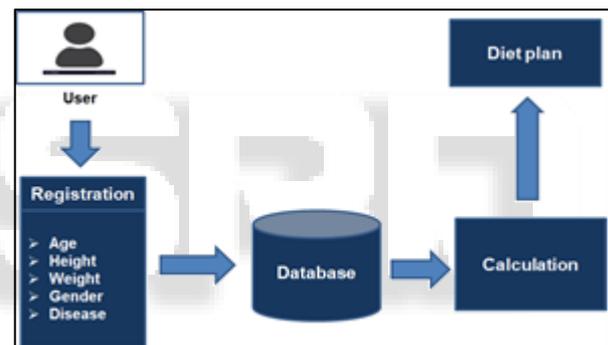


Fig. 1: System Architecture

A. Flow of the System

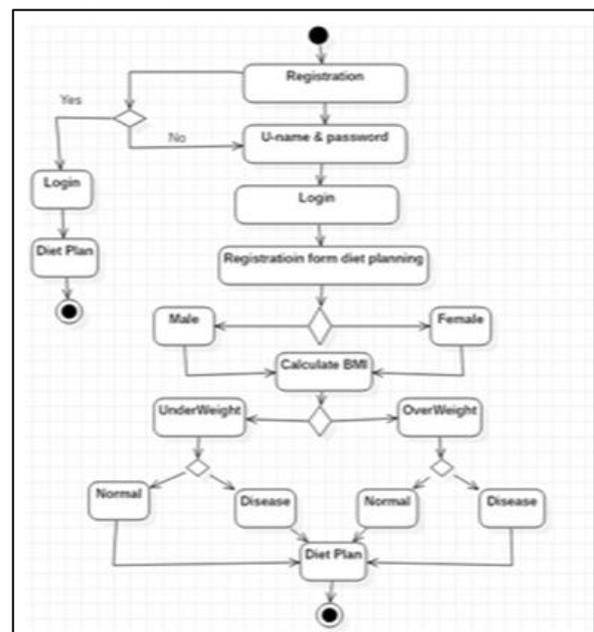


Fig. 2: Representation of System.

IV. IMPLEMENTATION

Implementation steps of our work as follows:

- Enter height of the user.
- Enter weight of the user.
- We should enter height in meter and weight in kg to calculate BMI.
- BMI is calculated as follows
BMI= Formula: weight (kg) / [height (m)]²
- Enter Age and then Gender of User.
- Enter the Disease if any.
- Display Diet plan using AI.

A. Applications

- 1) This system can be very well used in medical colleges for teaching and practicing purposes so that student can learn from it.
- 2) This can be used by any common people.
- 3) Can be use in gym for calculating calories and provide diet plan.

B. Advantages

- 1) Eliminates the travelling cost in visiting dietician.
- 2) Reduces the time required to get a best plan.
- 3) The use of this system greatly reduces the time required to get the best diet plan.

V. CONCLUSION

"AI Based Diet Planning" allow the user to know about his/her actual diet information i.e. how much user had calories in their body on this basis system displays workout and food suggestions. This software package is a strong enough to withstand regressive facility for the diseased Peoples. This website reduces the time span and cost for expert advices for diet. This site is exceptionally valuable to wellbeing cares and dietician. This Website diminishes the time compass and cost for master advices for eating routine.

VI. FUTURE WORK

In future work, we plan to focus on improving the overall performance of the system. Also, interaction between guider and dietitian through video calling and secure prescription will be focused upon. Some more ways to achieve dietitian will be focused.

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