

Android Ai Diet Consultant

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Abstract -This work proposes an intelligent agent, called the personal dietitian agent, based on the user's characteristics and specification. The agent can create a meal plan according to a person's lifestyle and particular health needs. The experts recommend eating a wide variety of foods, including vegetables, whole grains, fruits, non-fat or low-fat dairy products, beans, lean meats, poultry, and fish. However, each person has a unique dietary pattern and have different health issues so a dietitian creates a meal plan depending on each case. It acts as a diet consultant similar to a real dietitian. This system acts in a similar way as that of a dietitian. A person in order to know their diet plan needs to give some information to the dietitian such as its body type, weight, height and its working hour details. The system asks all this data from the user and processes it to provide the diet plan to the user. Thus the user does not need to visit any dietitian which also saves time and the user can get the required diet plan in just a click.

Key Words:Android, Dietician, Diet Plan, BMI, BMR

1. INTRODUCTION

The project involves the usage of android platform to develop an application that is capable of recommending a suitable diet plan for the individual. The application will make use of an artificially intelligent agent that is trained with the diet inputs from various dieticians so that the accuracy of the diet plan is maximized. The application would be free to use when released. The platform allows users to utilize this application whenever and wherever they want, so no need to go through the hassle of booking appointments and taking time off of the busy schedules. Generally, in order to obtain a diet plan, a person needs to visit a Diet professional, who will assess the individual's physical stats such as body weight, height, age, Body mass Index and other health stats.

2. LITERATURE SURVEY

2.1. Existing System

In the existing Diet Consultant system, you have to hire a dietitian in order to get advice. Hiring a nutrition doctor will not only waste your time, money and efforts for calling them, going to them and so on but also cost you very high as their charges per month are very high.

Searching for eligible diet takes lots of time. And sometimes some users' details may be missed.

One of the other concerns is that the diet plan recommended by one dietician might not be the same as the other one, so there is a concern about accuracy and validity. The patient needs to update his/her plans regularly based on the physical changes and in order to do that they have to book an appointment with the dietician and go through the hassle again.

Disadvantages:

- Time consuming to schedule meets and interact.
- Expensive to exercise.
- Accuracy of diet plan might not be promised.
- Limited options to customize diet plans.

2.2. Proposed System

The System takes into account for user's BMI, Intensity of the exercise one does and their weight goals. It provides a special diet plan according to the weight gain/loss strategies.

Further the application provides option to build a custom diet with the items of their choice while complying to the calorie intake. Figure-1 shows the architecture of the system.



Fig -1. Architecture of the model

In the busy world we live in, it's really hard to find a common time in our busy schedules to meet with the dietician. This application can be used from anywhere and at any time.

The other issue with the existing system is that the Dieticians charge a lot of money to provide their services. This not only makes it difficult for people to afford them but drives others away from the importance of following a diet plan as most of the population feels not to invest their time and money on diet consultancy.

Advantages:

- Free of cost.
- Accuracy of the diet plan is promised.
- Can be used anytime anywhere.
- Ability to customize Diet items while complying to the calorie intake.

3. CONCLUSIONS

Our proposed project looks to lower the need to go to a human dietician as the application is aimed to perform as good as a human dietician. The application can be accessed at any time anywhere which is not possible in the case of a human dietician as an appointment is needed in order to meet and get assessed for a diet plan. Moreover, the application is free. The cost for getting assessed by a human dietician is very high and cannot be afforded by majority of the population..

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