

Artificial Intelligence Dietician



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Submitted to –Prof. Moin Hasan

Faculty's sign.

DATE

GitHub Repository

https://github.com/prabureddy/AI_Dietician_Django

🕶 AI_Dietician_Django 🕶

Screenshot

The screenshot shows the 'AI Dietician' web application. The header is blue with 'AI Dietician' and 'Home' links. The main content area is divided into two panels. The left panel, titled 'Fill out this form', has a teal background and contains input fields for Name (Full Name), Gender (dropdown), Weight (Your Weight in kg), Height (Your Height in cms), Age (Your Age), and Activity (dropdown). It also has 'Reset' and 'Submit' buttons. The right panel, titled 'Your Name: Bhargava Prabu Reddy', has a light blue background and displays the user's details: Gender: Male, Height: 180, Weight: 75. Below this, it lists a 5-day meal plan:

- 1: Breakfast: 2 Cooked meat(3 Oz) + Dried Fruits(Handfull) + Cooked Grain(150g)
- 2: Lunch: 1 whole egg + 4 egg whites + Any vegetable(80g) + Leafy GreensWhole Grain Bread(1 slice) + 1 TBSP (20g) jam, jelly, honey, syrup, sugar + Orange
- 3: Snack: Hummus(4 Tbsp) + Any vegetable(80g)
- 4: Dinner: 2 Tofu(5 Oz) + 2 Any vegetable(80g) + Leafy Greens + 2 Half Large Potato(75g) + 2 TSP (10 ml) olive oil
- 5: Snack: Dried Fruits(Handfull)

Example project you can check out our example project by cloning the repo and heading into example/ directory.

How to Run this Code? Follow these steps:

1. Clone this Project https://github.com/prabureddy/AI_Dietician_Django.git
2. Open your terminal in AI_Dietician/ folder which contains requirements.txt file.

3. **Create virtual environment**

Steps to create Virtual Environment

- i. Run this command in your Terminal or CMD:- `conda create --name AI_Dietician`
- ii. It asks [y/n] :- press y on your keyboard
- iii. After Creating Virtual Environment Activate it. To Activate run this command:- `activate AI_Dietician`
- iv. Now Virtual Environment is activated in your terminal

4. After Activating Virtual Environment Install required packages using this command:- `pip install -r requirements.txt`
5. Now open your terminal in AI_Dietician/AI_Dietician which contains manage.py file.
6. ***now run these following command to migrate database***
 - i. `py manage.py migrate`
 - ii. `py manage.py makemigrations`
7. Now atleast create admin to your app using this command:- `py manage.py createsuperuser`
8. It asks some details fill it.
9. Now it's complete Run this app by starting the server using:- `py manage.py runserver`

Now server started Open <http://127.0.0.1:8000/> in your browser to view the app.

To View Admin panel go to <http://127.0.0.1:8000/admin/>

INTRODUCTION

AI_Dietician Application Project is an application that provides users with information on balanced diet tips easily. Health is the main and important part of each and every people. Without proper health, no success is achievable. In order to have good health, it is essential to have a balanced diet. This application will give the instructions or tips relating to the diet that one needs to take care of. This application will have an artificial intelligence dietician who will give tips relating to the balanced diet with great ease. This is an application that will be very interesting to use. The people need not go to the consultants regarding the diet charts. This application can accomplish this task with great ease. Complete synopsis on AI Diet Consultant gives an overview of this application with great ease and without any difficulty. This is an application that is reliable to use by the common man without any problem. The user interface will be simpler. This application will provide a list of human diets with great ease and without any problem. This is an application that is really user-friendly and people will understand with great ease. This is the application that the final year students can work on and implement with great ease. You can download source code on AI Diet Consultant with great ease and without any difficulty.

LITERATURE SURVEY

Husain et al. [1] cancer is very severe disease. It is occurring frequently now days. Some systems are available in market which suggests diet for cancer but they are not sufficient. These systems only suggest one or two food items which help to secure from disease. This system provides a complete diet plan for cancer .cancer is a disease which is not curable. It needs kemo therapy which has side effects. Therefore the one and only solution to this is to take proper diet to prevent from getting such type of disease. Abbas Lokman and Jasni Zain [2] This work describes the diet plan for diabetic patients. This system is based on a virtual dietician concept. a chat bot is designed which works as a dietician. The history and view of chat bot is provided in this system. Diet plan for diabetic patients is given using this chat bot. this system is the interface between man and machine. chat bot concept provide interface that gives the diet plan for diabetic patients. Barnett et al. [3] This work provides diet plan for obese people. As obesity is a major health problem proper diet is very essential. To lose weight for obese people is a very difficult task. There are certain ranges of BMI which decides normal, underweight or overweight. The BMI above 30 is refer as BMI for overweight people. This paper provides a system which manages weight and provides a good diet to lose weight. There is face to face consultation between dietician and a person. Because of this dieticians get clients automatically and clients get the proper advice without wastage of time for travelling to dietician. Carl J. Brandt et al. [4] Obesity is a major health problem . Each and everyone should take care of his/her health and should maintain a proper health condition. This system provides a diet plan to the user to lose weight.

Proposed Methodology

I. EXISTING SYSTEM :--

In the previous system diet charts are usually generated using conditioning algorithms and data mining which hypes the use of database and purely depending on the database which leads to entering of data again and again and also it doesn't focus on health condition Existing system takes in account the users height weight and gives a diet chart without taking his/her daily routine health conditions types of food they can eat into account which was a serious issue. AI domain gives a edge of generating a proper diet plan which lacks in other system as the domain is not the same Drawbacks- • IT doesn't takes users health condition (like diabetes or cardiac patients) into account.

II. PROPOSED SYSTEM :--

In this site the first landing page incorporates administrations, offices, about us, get in contact, and so on. This serves to client; client can get data of various sort of workouts, for example, Aerobics, Yoga, power yoga, fundamental activity, and so forth from the administration and offices. After that client can specifically login to site. On the off chance that client has officially enrolled generally client needs to make a record utilizing Registration Form. The client can fill data like Name, Address, Email-Id, Password, and so forth. From utilizing Email-Id and Password he can login to site. After effectively login client visits to BMI count structure, client

needs to enter individual data like age, tallness, weight. By, weight the BMI and BMR is acquired. On the premise of BMI result will be as workout proposal and sustenance recommendation will be acquired from BMR. By the most widely recognized individuals with a BMI under 18.5 are considered too thin, BMI more than 25 are overweight, BMI in the middle of 18.5 and 25 are have sound weight and those with a BMI more than 30 are viewed as corpulent . In the event that client's BMI is under 18.5 then he got recommendation about weight pick up and on the off chance that it is more than 25 he got weight reduction proposal generally client got sound proposals. The workout recommendation will be Online Training it gives exercise recordings to put on or misfortune weight of client. After going to the site the client can likewise send his input about site utilizing Feedback frame or can fire an inquiry identified with client's wellbeing or consume less calories utilizing Query Form and step by step it will demonstrate the outcomes as per the eating routine. On the off chance that client wouldn't like to send input can straightforwardly logout from site.

FUTURE SCOPE:--

The future scope in this application are going to be the improved GUI of this application. A proper workout schedule and routine will be provided to the user for a better fit life. Less use of data base and conditioning algorithms and more use of Artificial Intelligence. This is a web base application which can also be developed as a Android and IOS application

Work distribution

1. Arjun → Performed calculations in the program.
2. Sandeep → mainly dealt with some calculation and GUI.
3. Prabu → Implemented Django Framework with Ai_Dietician
4. Abhijeet → NIL

RESULT AND DISCUSSION

By this project we are getting the nutrition from which we can gain maximum healthiness by providing our physical details and our work duration. This project is beneficial for those who can not afford a dietician and this also reduces the travel cost, time consumption of the user.

CONCLUSION

“Artificial Intelligence Dietician” 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 reduces the time span and cost for expert advices for diet. This site is exceptionally valuable to wellbeing cares and dietician. This product diminishes the time compass and cost for master advices for eating routine.