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Artificial Intelligence based Nutritionist Chatbot System

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ABSTRACT: Artificial Intelligence based online nutritionist is a way of interaction between user and machine. Our website ask the user about their personal information like height, weight, age, food, choices etc. After collecting required information the chatbot will suggests the user about the essential food items and exercise. User can also query to the chatbot about the nutrition plan. Many people have a hectic schedule and often lack time to plan a proper diet. So, our website is useful for these people. Thus, it saves money and time of the user.

KEYWORDS: Machine learning, Chatbot, text-to-text diagnosis, pattern matching, natural language processing (NLP)

I. INTRODUCTION

Nowadays, the people across the globe are becoming more concern about their health. So, they are trying to avoid unhealthy food and moving towards the healthy food. But, due to hectic schedule, lack of knowledge and improper guidance some people are unable to maintain balanced nutrition. Thus, our chatbot is helping user to make healthy food choices, improve energy and alertness, reduce disease and illness risks and gaining knowledge of nutrients. Our major learning are entered around nutrition, menu planning, preparation and food safety.

Also, it helps the user to solve their queries. If someone is facing any difficulty while operating our website then, user can directly contact us by using various modes given on the website.

II. SCOPE

- The future scope in this website are going to be the improved GUI of this website.
- A proper workout schedule and routine will be provided to the user for a better fit life.
- For more convenience of the user, we can create android application.

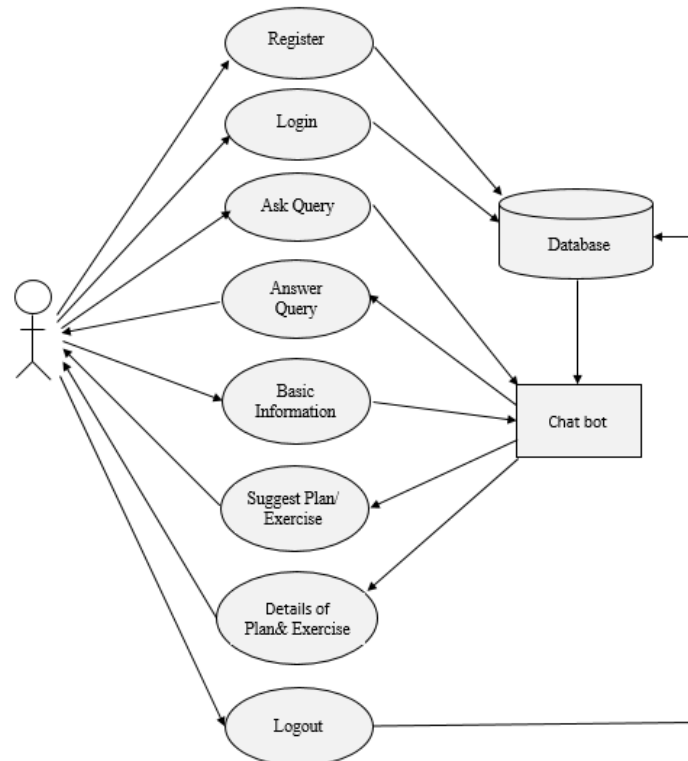


Fig1: Use-Case diagram

III. EXISTING SYSTEM

In the previous system nutrition 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 user's height, weight and gives a diet chart without understanding user's daily routine, health condition and food choices which was a serious issue. A webpage can generate only nutrition plan for specific user or it can only track the user' health by considering more information like height, weight etc.

IV. PROPOSED METHOD

The proposed system is a responsive website which contains the knowledge and data regarding the fitness of a person. In a website the chatbot will generate the nutrition plan and also can answer the queries fired by user. This chatbot consist the interface. User can directly contact us through various mode given on the website. Also, if user identifies any loophole in the system then they can give suggestion or feedback to us so that we can improve our website.

The working of the system is as follows-

- **Home Page:**

Home page consists of name and icon of our system.

It also contains links to visit the following pages:

- 1. Registration Page:**

User need to first register on he system for getting access of website.



2. About Us:

About Us page consists of brief information about our system.

3. Contact Us:

User can give any suggestion or feedback to us.

User can also contact us using the information provided on this page.

- **Login Page:**

After registering user will get permanent login to the website.

The website provides detailed information about the exercises and recipes.

- **Nutrition Plan:**

The user has to give basic information about themselves, their food choices and current health condition; and according to that the chatbot will suggest appropriate nutrition plan and exercises to the user.

- **Query Satisfaction:**

User can also ask any query related to nutrition. And according to that the chatbot will answer the questions.

The satisfaction of the customer is the major concern of our system. The actual welfare of the chatbot is to facilitate the people by giving proper guidance regarding the good health and healthy living.

Advantage of the system will be proper and healthy nutrition plan.

- No need of consulting doctor for nutrition plans.
- It saves money and time of the user.
- User can select nutrition plan and exercises according to his/her choices.
- This system provides detailed information about the food items and exercises.

V. RESULTS

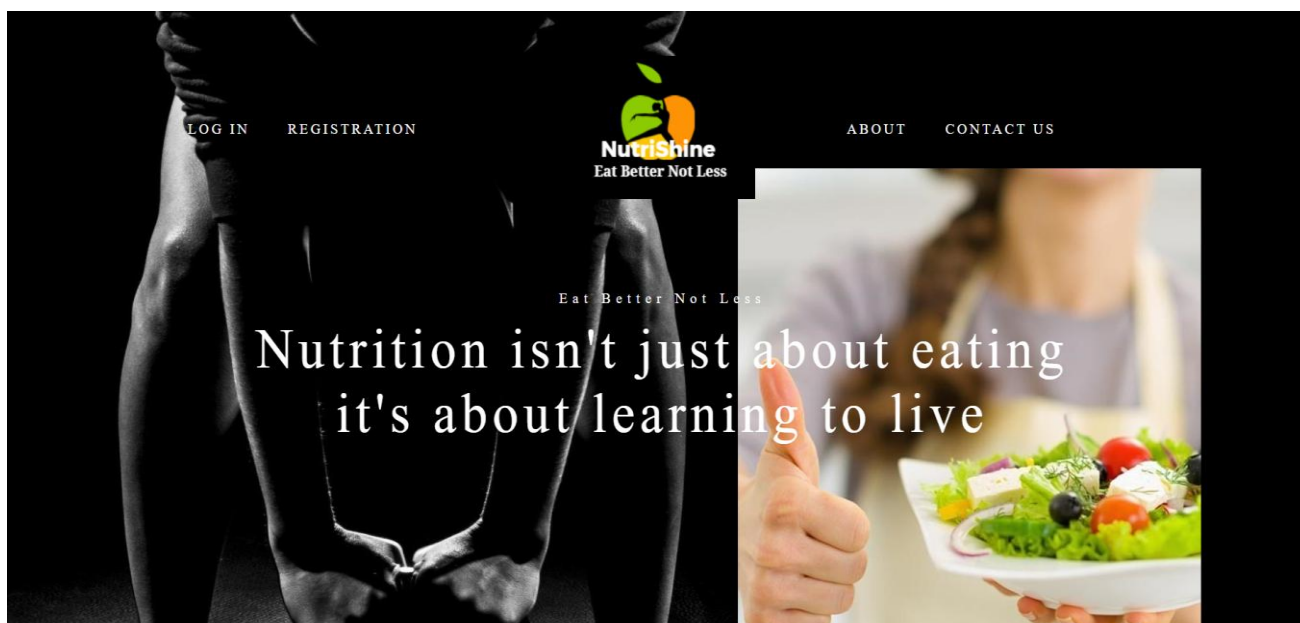


Fig 1: Home Page

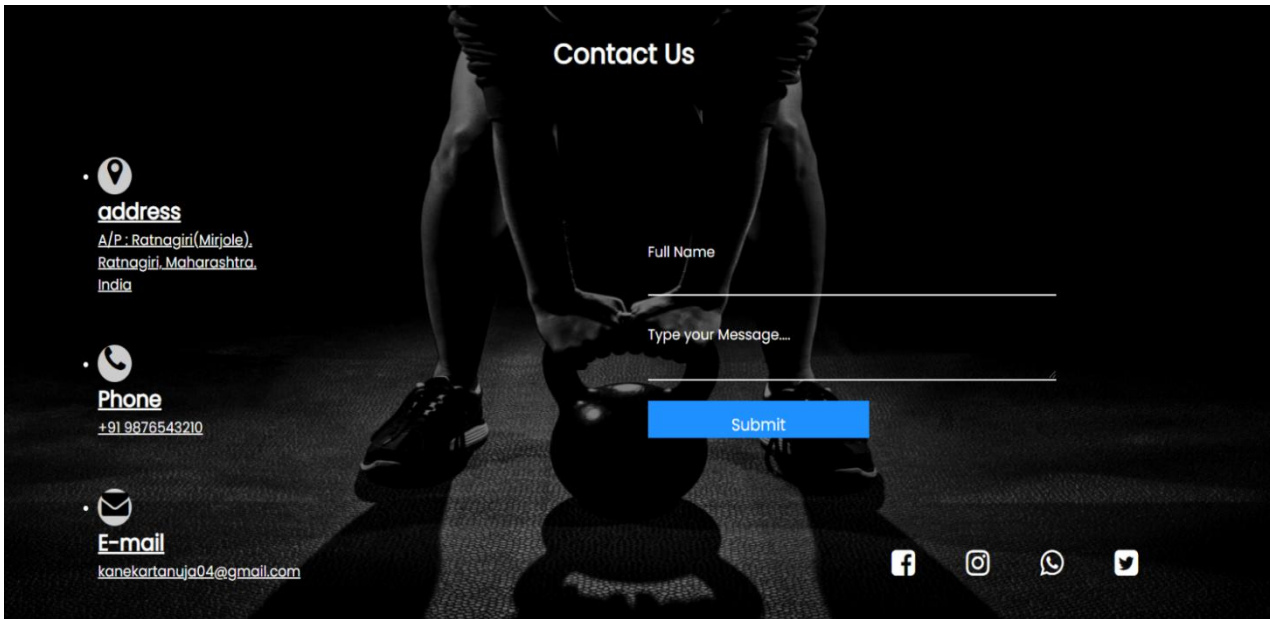


Fig 2 : Contact Us Page

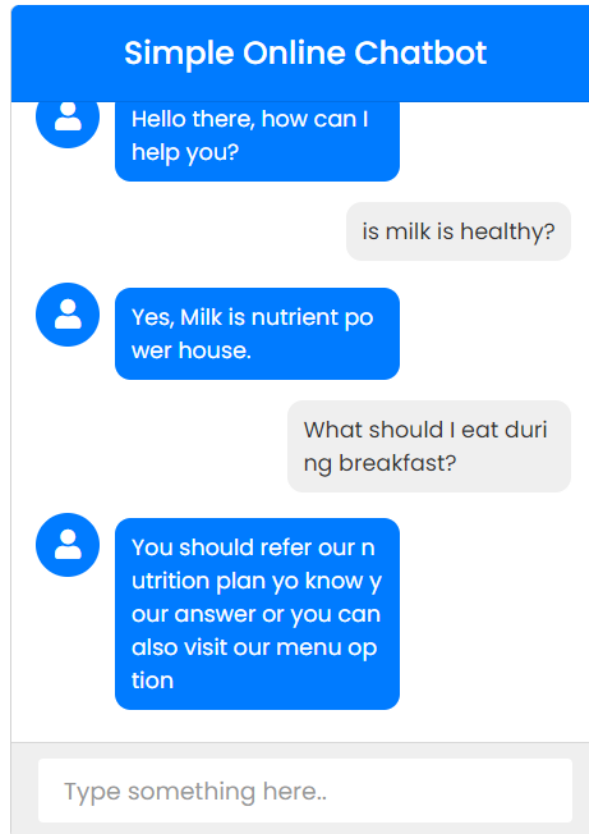


Fig 3 : Chatbot



VI. CONCLUSION

Artificial Intelligence based nutritionist helps user to maintain healthy life through proper nutrition. The system suggests user some healthy food items and exercises with their detailed information. And user can select any of them from their own choice. The chatbot will suggest that specific plan according the input given by the user. The user can also ask any query related to nutrition to the chatbot and chatbot will answer the query. The system is user friendly as we tried to designed it more convenient for user.

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