AI Diet Consultant Android APP

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A R T I C L E I N F O

A B S T R A C T

Today, where eating unhealthy foods and leading sedentary lives have become the norm, diet is extremely important. The maintenance of optimum health, the prevention of chronic diseases, and the promotion of general well-being all depend on proper nutrition.

Health and proper nutrition both depend on a balanced diet. Several deteriorations, and non-communicable diseases are protected from you. For optimal health, a balanced diet with low amounts of salt, sugar, saturated fats, and Tran's fats from industrial manufacture is essential.

The significance of a balanced diet for living a healthy life cannot be exaggerated. You may lead a healthy life by eating a balanced diet and making sure you get all the essential nutrients your body needs. Maintaining healthy body weight and reducing the threat of habitual conditions like diabetes, cardiovascular complaint, and colorful cancers are both eased by a sound diet plan.

This application gives users access to a sophisticated algorithm that may generate a customized diet plan for them. With the suggested system, users would have access to a simple user interface where they can register for an account, manage it, and order the diet with the click of a single button. The suggested system requires users to first register before requesting their login information. A diet plan that contains meals and other options that must be consumed every day shows after logging into the system. The system then logs the user's diet, and the user can access his or her diet history.

Keywords – Registration Panel, Login Panel, Diet Plan, Daily Graph, Android Programming, Reliable

I. INTRODUCTION

People today are too busy to even take care of their health. They stay away from the doctor. A typical working person may find it pricey to contact a nutritionist. Hiring a doctor or dietitian is a waste of time, money, and effort as well. The monthly expense of visiting a dietitian is rather significant. It could also happen that they won't be available, in which case you'll need to look for another dietician right away.

Our bodies need the nutrients and energy that come from the food we eat for all of their basic processes, including digestion, metabolism, and tissue repair. Essential macronutrients (carbohydrates, proteins, and fats) and micronutrients (vitamins and minerals) are provided by a healthy, balanced diet and are necessary for maintaining a healthy body.

Artificial intelligence (AI) uses computers and other technology to simulate how the human mind solves problems and makes decisions. Diet is an algorithm that instructs you on what to eat in order to live longer and in better health. The AI diet is entirely founded on science since, as you are probably aware, an algorithm is a procedure or set of guidelines that a computer uses to perform computations or solve problems.

The operating system, middleware, and integrated applications that make up the open source software stack known as Android are built on a customised version of Linux. Android can be further modified by device makers to further set them apart from one another. Writing the business logic code, giving the application the multimedia assets it needs, and offering the user interface's resources—like the layout specification written declaratively in XML, iconography, and localization strings—are all part of this process.

The proposed project is based on a dietician app. The proposed app helps us learn what to eat to maintain a healthy lifestyle. The suggested system is suitable for people of all body types because it offers a suitable diet plan for those who want to gain weight and those who want to lose weight.

II. METHODS AND MATERIAL

In our life, health is of the utmost significance. Our daily hobbies, passions, and aspirations may all be pursued with good health. It is the cornerstone of a contented and happy existence. We cannot completely appreciate the advantages of riches, knowledge, or achievement without good health.

Furthermore, maintaining good health has an impact on our relationships, careers, and general quality of life in addition to enhancing our physical and mental wellbeing. We can prevent chronic illnesses, disability, and early death by maintaining good health.

We must lead a healthy lifestyle that includes regular exercise, a balanced diet, proper sleep, stress management, and abstaining from unhealthy behaviours like smoking, binge drinking, and drug use if we want to stay in good health.

As many people are aware, diet has become crucial as people consume more junk food than healthy food. In addition, many tend to avoid good food because it takes too much time and might be expensive to see a dietician. You can use this AI-based programme, which is cost-free and includes your daily meals, in place of wasting time and money on a personal dietician. This system provides you simple diet plan which includes- vegetables, water, nuts, fruits, etc.

The suggested work begins by requesting that the user register, and following registration, the application requests that the user log in to the system. The programme displays your diet plan after you log in. Both people who want to lose weight and those who want to gain weight can benefit from the diet plan.

The application includes a straightforward diet plan that can be followed every day. The application includes a proportion that gives the user an idea of how

much to eat, and after consuming the foods listed in the diet plan, a graph is given so you can see if you followed the recommended meal plan or not.

Your percentage is tracked on the graph, and the application records the information. The diet plan can be customised to your preferences; for instance, you can set it to days, months, or years. Depending on your needs or the length of time you wish to stick to the diet. The backup and reminder options are also included in the application. You can back up your previous data in backup, and you can set a reminder so that the application will alert you when it's time to fill out the diet chart so you won't forget

III.RESULTS AND DISCUSSION
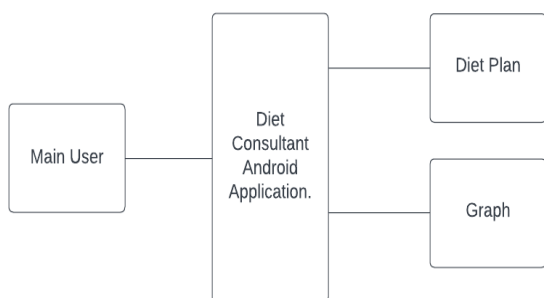
Here, the system prompts the primary user to create an account with the diet consultant Android application by entering their name, and email address, and creating a strong password. The system prompts the user to enter the proper login information after registration.

After logging in, the system immediately displays a diet plan that has been approved, complete with food items, beverages, vitamins, etc. The diet plan's food items are very straightforward; there are no gastronomic extravagances.

The diet plan should be followed at the user's own pace and comfort level, according to the programme. Additionally, the user can adjust it as needed, for example, for days, months, and years.

You can verify your consumption on the graph in the top right corner after entering or turning in your proportion. You may monitor your diet in this way.

Since the programme includes a straightforward eating plan, it may be used by both people who want to gain weight and those who want to lose weight. There are no objects in the application that could injure someone's body. It includes foods that are readily available on the market and meals that we typically eat.
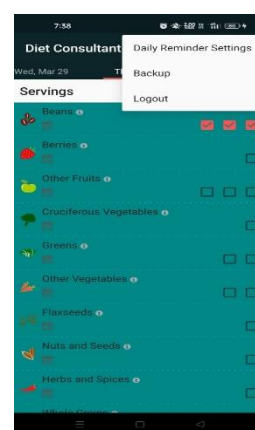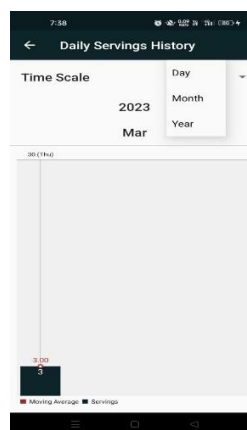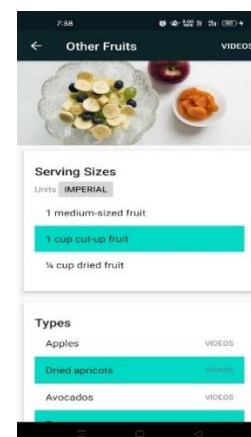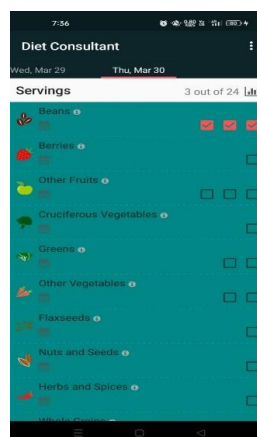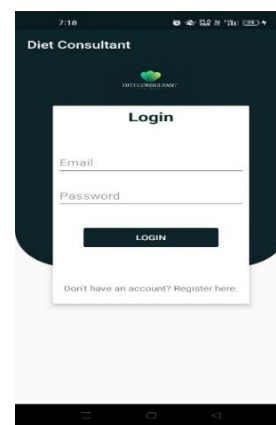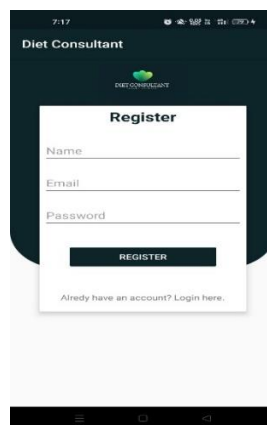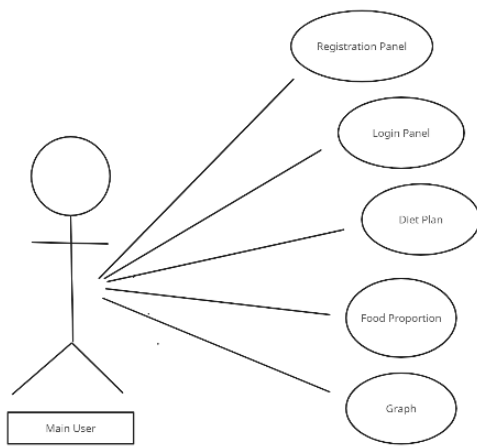

The key advantage of this application:
- This is a stand-alone application which will give accurate results.

- A diet counsellor app can save time by offering immediate recommendations without requiring a user to physically visit a nutritionist.
- Users can learn about healthy eating practices and get advice on how to choose healthier foods via a diet adviser application.
- The usage of this application greatly reduces the time required to get the best diet plan.
- Usage of this application will save you money as consulting a personal dietician is expensive.

Use-case diagram:

In this, an entity is the primary user. The user can sign up, log in, acquire a diet plan, change the food proportion as needed, and view the results as a graph here.

Data Flow Diagram (DFD) level 1:

This is detailed diagram of our project

IV.CONCLUSION

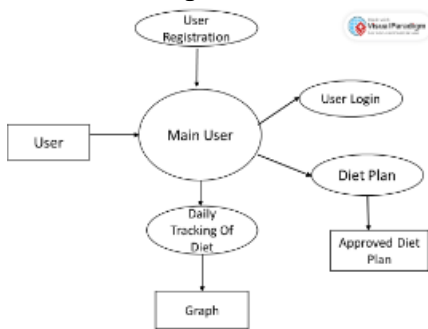Nowadays, everyone aspires to a healthy life cycle. Everyone wants to live a healthy, balanced life in today's hectic world. Because your organs and tissues need the correct nutrients to function effectively, a balanced diet is essential. A balanced diet is composed primarily of foods that are high in vitamins, minerals, and other nutrients and low in unnecessary fats and sweets. Furthermore, a poor diet has been associated with a number of chronic conditions, including obesity, diabetes, heart disease, and several forms of cancer. Eating a balanced, healthy diet has become more important than ever in today's world if you want to prevent these chronic diseases and maintain good health.

By doing everything on their phone instead of going to a nutritionist, this software will save users a tonne of time. By employing this approach, people will be able to save a tonne of time and money as they won't need to see a personal dietician. Simply by utilising this approach, folks might put on or lose weight.

To sum up, the advancement of AI has simplified and made everything digital. People don't need to travel to different places to work; they can do things virtually. By utilising this application, you can achieve the ideal diet plan faster because it is a stand-alone programme and there is no danger of one point failure.

In conclusion, nutrition is very important for preserving good health and preventing chronic illnesses. Making healthy food choices and maintaining a balanced diet is so crucial in today's society. Overall, a well-designed and informative diet consultant application can be a valuable tool for individuals looking to improve their dietary habits and achieve their health goals

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