
ANDROID DIET CONSULTANT

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ABSTRACT

The online artificial dietician is an application with artificial intelligence about human diets. It acts as a diet consultant similar to a real dietician. This system acts in a similar way as that of a dietician. A person in order to know its diet plan needs to give some information to the dietician such as its body type, weight, height and its working hour details. Similar way this system also provides the diet plan according to the information entered by the user. 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 dietician which also saves time and the user can get the required diet plan in just a click. The project also has a login page where in the user is required to register and only then can view the availability of blood and may also donate blood if he/she wishes to. This project requires internet access and thus there is a disadvantage of server failure. The system will give more accurate results as it accepts the data entered by the user and processes it depending on some metrics already known to the application on the basis of which a diet plan is generated and ask the user if the user accepts the diet plan. If not accepted the system may also give an alternative diet plan.

I. INTRODUCTION

Just similar to a human dietitian, this AI Diet Consultant is based on android operating system which will act like your device dietitian. When you go to a doctor of nutrition, than she will ask you your personal details related to body and health such as your age, your height, your weight etc. Just similar to this doctor, this artificial intelligent diet consultant also asks you similar questions in your device and you have to answer all those questions and then this AI Diet Consultant will also advice you about what should your intake in your diet and what should you ignore in order to keep yourself healthy via your diet. Generally, you have to hire a dietitian in order to get advice. Hiring a nutrition doctor will not only waste your time 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. A situation might also arise when they will not available for you and you have to search for some other dietitian urgently. The main advantage of using this standalone AI Diet Consultant application is that the time required by the people to travel to the dietitian will be reduced and also it reduces the cost of hiring dietitians for some particular purpose.

DietExpert is an android application is a provides a personalized diet to its users. 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 his/her diet plan needs to give some information to the dietitian such as its weight, height, gender etc. Similar way this system also provides the diet plan according to the information entered by the user. The system asks all data from the user and processes it to provide the diet plan to the user. The project has a login page where the user is required to register his/her account and then they can use the app. 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. The system will give more accurate results as it accepts the data entered by the user and processes it depending on some metrics already known to the application on the basis of which a diet plan is generated and ask the user if the user accepts the diet plan. If not accepted the system may also give an alternative diet plan. If a user wants to stay fit and eat healthy, he can surely follow the program provided to him. The Application also has a card for Health Facts on the home screen, which will provide all the general knowledge and some amazing facts on our human body and body parts. This Application can be a vital part of a user if he wishes to maintain his health and body perfectly and follow the diet plan & the workout plan provided to the user.

II. METHODOLOGY

The system comprises of 2 major modules with their sub-modules as follows:

A. Admin

1. Login: Admin can login his personal account.
2. Add Food: Admin can add food with its nutritional detail in database.
3. Create Custom Plan: Admin can build a custom plan for user if the request is received from the user.
4. View User: Admin can see user data.
5. View Feedback: Admin can view feedback message received from registered user's.
6. Logout: Admin can logout from his account.

B. User

1. Register: User can register his detail.
2. Login: User can login his personal account by providing valid username and password.
3. Diet Plan: User can see his diet plan which is generated by the application with Macro Nutrients data under each Category.
4. Diet Track: User can make a record of the food he has eaten for the day or see the track history of the past and simultaneously can see how much calories he/she has consumed while eating the food.
5. Custom Plan: If User can not satisfy with application generated diet plan then he can request for custom plan.
6. Feedback: User can give feedback over his experience.
7. Logout: User can logout from his account.

III. PROJECT WORKING DIAGRAM



Fig1: Activity diagram for User

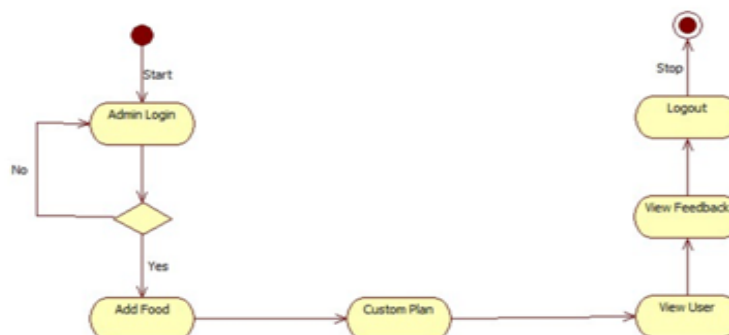


Fig2: Activity Diagram for Admin

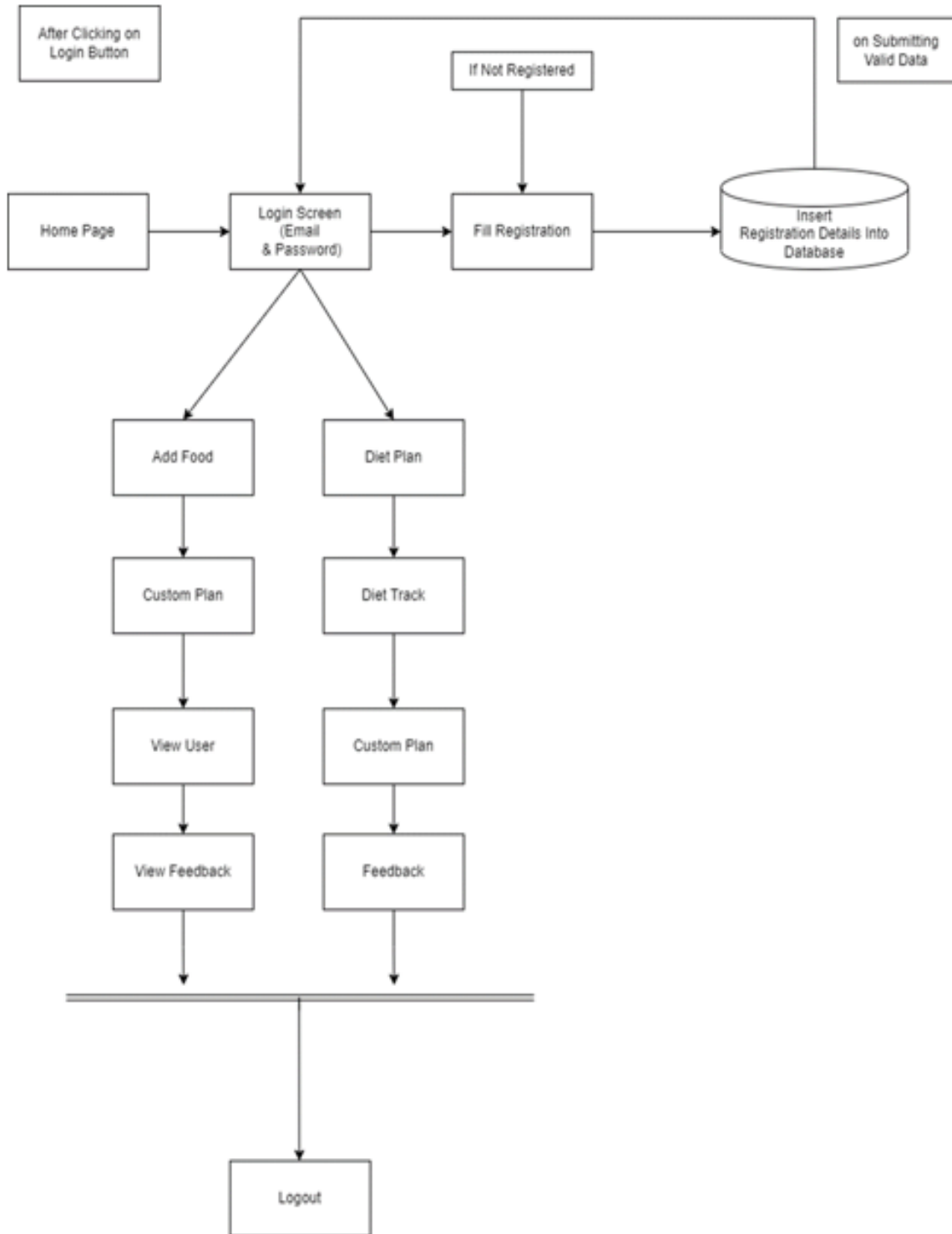
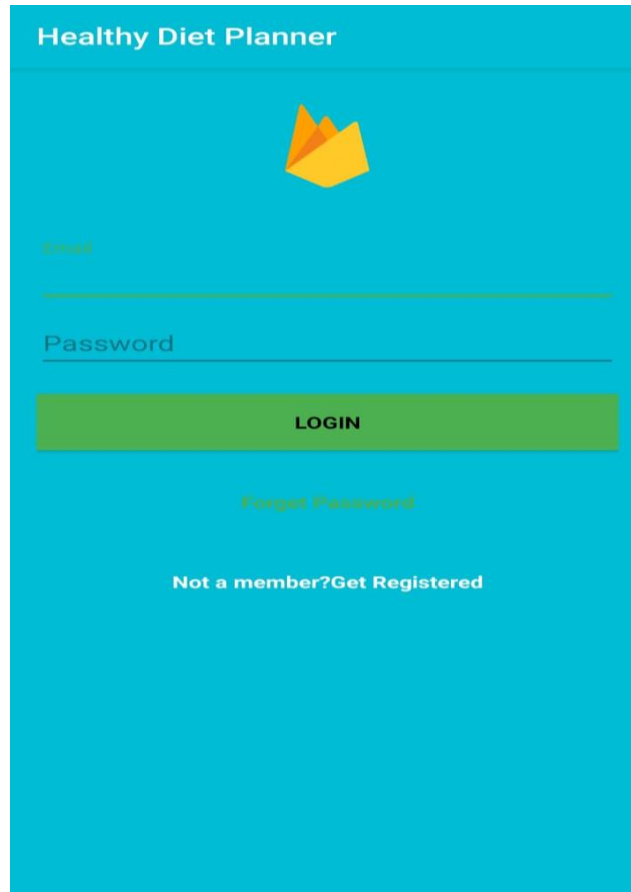


Fig3: Project Flow Diagram

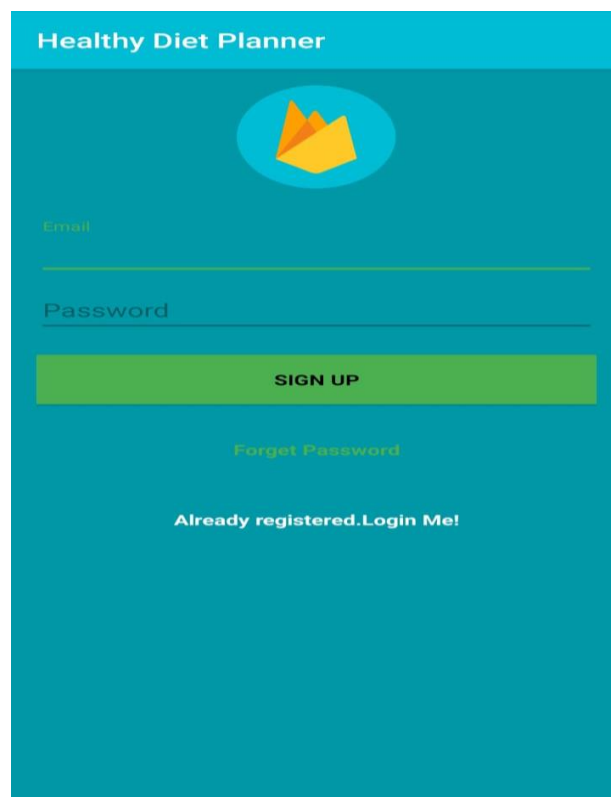
IV. RESULT

Login Page -



The screenshot shows the login page for 'Healthy Diet Planner'. The page has a blue header with the title 'Healthy Diet Planner'. Below the header is a yellow folder icon. There are two input fields: 'Email' and 'Password'. A green button labeled 'LOGIN' is positioned below the input fields. Below the button are two links: 'Forget Password' and 'Not a member?Get Registered'.

Registration Page -



The screenshot shows the registration page for 'Healthy Diet Planner'. The page has a blue header with the title 'Healthy Diet Planner'. Below the header is a yellow folder icon. There are two input fields: 'Email' and 'Password'. A green button labeled 'SIGN UP' is positioned below the input fields. Below the button are two links: 'Forget Password' and 'Already registered.Login Me!'.

Physical Activity -**V. CONCLUSION**

The System is a valuable apparatus for instructing clients on healthful related themes with the assistance of enormous and dependable information base made with help of master dieticians. Many individuals counsel a dietician when needing a legitimate eating regimen to go with their activities. Since, our proposition will assist individuals with the eating routine; they won't have to visit dieticians. The clients will get diet conveyed to their screens for them which will save time as well as cash as the administrations given by our undertaking will be liberated from cost, in contrast to different choices available right now. Our application is utilizing man-made reasoning calculation called RETE calculation so every single client will get a customized diet as indicated by their need and inclinations.

VI. REFERENCES

- [1] Sneha Sadhwani [1], "way of life and wellbeing: advantages of utilizing wellness applications" medindia.net on 22nd June 2019
- [2] Chinan Mehta [2], "Top advantages of building wellbeing and wellness applications: significance of wellbeing and wellness applications" SolutionAnalysts.com on third walk 2020.
- [3] Oleksandr Sh [3], "How to make a wellness application that moves clients" cleverhead.com on 30th November 2020
- [4] Antasia Khomych [4], "Ten should have highlights for wellbeing and wellness applications" blog.getsocial.im on 22nd september 2020
- [5] Jen-Hao Hsiao and Henry Chang [5], "SmartDiet: An individual eating routine specialist for wellbeing feast arranging" IBM Research Collaboratory, Taiwan
- [6] Divya Mogaveera and Vedant Mathur [6], "e-Health Monitoring framework with diet and wellness proposal utilizing AI", ICICT 2021
- [7] Dr. Meera Gandhi and Vishal Kumar Singh [7], "IntelliDoctor - AI based clinical colleague", ICONSTEM 2019
- [8] Sanchit Kalra, Garvit Arora and Rajat Aggarwal [8], "Application of Artificial Intelligence for weekly meal planning for children" IIT Delhi

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- [9] Fule Wang, Yuan Yuan, Yu Pan, Nin Hu [9], "Study on the principles of the intelligent Diet Arrangement System based on Multi Agent", College of Management Science and Engineering, Nanjing University of Technology, Nanjing
- [10] Shaikh Saqib, khan Vaqui, Shaikh Mohd Asfaque [10], "Online Dietician Using Artificial Intelligence", Rizwi College of Engineering
- [11] Kartik K , Vignesh K, M.Dhurgadevi [11], "Android based diet consultant using rule pattern based algorithm", Nehru Institute of Engineering and Technology Coimbatore
- [12] Prajakta Dadasaheb Jadhav [12], "AI Dietician", Modern Education Society's College of Engineering Pune, India.
- [13] Siddharthan Chitra Suseendran [13], "Virtual Nutritionist using AI", IJEAT(2019)
- [14] Yulong Xu [14], "Research and Implementation of Improved Random Forest Algorithm Based on Spark", Hebei University of Technology Tianjin, China (2017)
- [15] Xiaolong Xu, Wen Chen [15], Implementation and Performance Optimization of Dynamic Random