

Shadow Detection and classification using image processing: A Review

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ABSTRACT

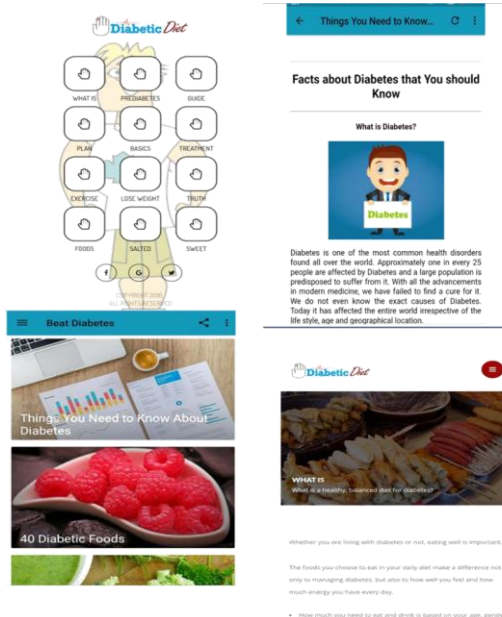
Intake of a good diet is very important to fight any disease and the most common diseases now a day is diabetes. We observed in our environment and we found out many people don't know what that they should follow in their diet to fight their diabetes and how to maintain healthy living with the healthy diet. App will take information from the user about food habits and their current Health information. After taking necessary information from the user app will process the data and will create a diet plan accordingly for a diabetic patient which can fight diabetes.

1. Introduction

The disease diabetes increasing rapidly and many people are not able to maintain a healthy diet to fight with diabetes. Nowadays everybody is using a mobile phone and thus we decided to make a app which can provide a healthy diet for a diabetic patient. Most of the people and having habit of using mobile app to track each and every activity and set reminders this app for that will be of great used for the people who are having this app for that will be of great use for the people who are having diabetes. Current users health data will be asked by the app for the first time of login according to the input diet plan will be created by the app. This app will smartly manage users diabetes with the help of diet plan if users sugar level is high then this app will provide you such a diet which will help you in controlling users sugar level. App will ask input from user for his current food habits and we are not going to drastically changed the diet because its impossible for a person to adopt a truly new diet from the current diet which he is following, so we have decided to customize the diet slowly in the way such that the person can adopt to the diet slowly.

2. Existing System

You might have seen many bad apps for healthy living and fitness on App Store and there are many apps for diabetes as well but every app is a static app. Have you ever imagine that they are providing us same diet plan to each and every person who is using that app how its possible every person's body is different and everybody should be provided with a personalized that according to his requirement and here comes the solution of the diabetic app which we are creating app is a dynamic app which will create that according to the persons input data which is his health information and his current food habit. We are not claiming that our app is totally different from the apps which are available in the market but our app is unique when you compare it to some other apps in the market. Because our app will provide you dynamic diet plan and other apps are providing users static diet plan, a static diet plan is same for each and every user.



3. Literature Survey

The diabetic data sets which are available online and not fulfilled data sets and are having many impurities. with the help of data smoothing techniques we are removing the impurities in the data set which can be used for prediction and analysis of diabetes. Thus the raw data will be turned into informative data with the help of data smoothing technique.[1].

In this study, they uses F-score feature to identify the accuracy of predicted values. F-score gives us the minimal clustering error. The correctly classified instances finds the pattern for diagnosis and are used for further classification process. The improved performance of the in terms of Accuracy of the classifier, Sensitivity proves that the proposed feature approach indeed improves the performance of classification. [2].

In this study, decision tree algorithm is used to predict diabetes. They implement algorithm in two phases. In the first phase they performed data preprocessing including attribute

identification and selection, handling missing values, and numerical discretization and In the second phase they performed a diabetes prediction model construction using the decision tree method.[3].

Diabetes self-management app for android smartphones to manage the diabetic dietary. Also manage weight, blood glucose self monitoring and promoting behavior changes. It will suggest the diet plan for diabetic patient and also maintain the dietary habit of diabetic patients. [4].

The use of mobile phone is increase exponentially in the 21st century. For each and every aspect of tracking mobile phone is used in 21st century. For various health monitoring and fitness tracking many application have been introduced for android and ios platform. As diabetic is a major concerned with thought of developing app which can track your diabetic condition and provide result in percentage. Various inputs like current food intake, blood sugar and BMI. The minimum the percentage better is the health. It develops a competition within to fight and overcome the previous result.[5].

4. Proposed System

Our app will take users data input for analysis and prediction purpose. The most important uses data like health information will be asked and secondly the current diet plan According to the input given by the user and by understanding the current diet habits of the user, app will be preparing a custom diet plan for the user We understand that every individual has different body type and different food habits the user to user that plan will be different and it will be customize only for particular user none of the diet plan of two person will be same.

5. Mathematical Model:

●INPUT :

- I : { I1, I2, I3 }
- I1 : User Personal Information.
- I2 : User Health Information.
- I3 : ToDoList.

●FUNCTION :

- F : { F1, F2, F3, F4, F5, F6, F7 }
- F1 : UserSignup (Email, Password, CPassword, Mob_No) / UserLogin (Email, Password)
- F2 : UserHealthInfo (Age, BMI, Insulin, BP)
- F3 : ToDoList ()
- F4: StoreData ()

- F5 : CheckSugerLevel ()

- F6 : MakeDietPlan ()
- F7 : DisplayDiet ()

●OUTPUT :

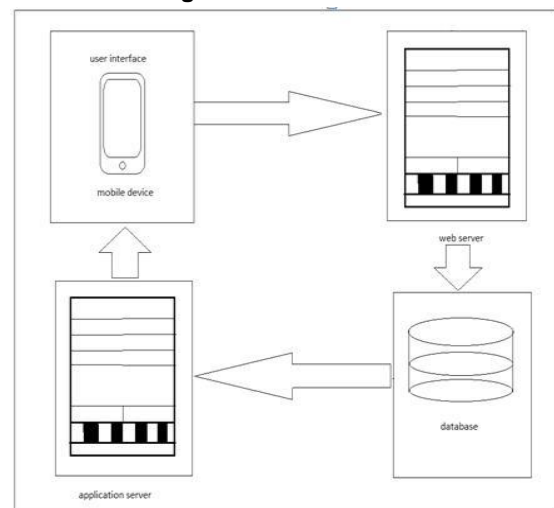
- O : { O1, O2 }
- O1 : Low / Medium / High Sugar Level
- O2 : Diet Plan For Low / High Sugar Level.

●CONDITION :

- C : { C1, C2, C3}

- C1(O1= 'LOW') : F7(LOW).
- C2(O1= 'MEDIUM') : F7(MEDIUM).
- C3(O1= 'HIGH') : F7(HIGH).

Architecture Diagram:



6. Future Scope

In future we will be adding home delivery of good diet food. Which is recommended to the users by the app most of the times we have observed that our senior citizens are not capable of going to the market and buying good diet food and best to make it easier we will be adding a basic online card feature from which our users can order food recommended by our diet chart online and it will be delivered to their homes.

7. Conclusion

Our app will be to help for senior citizens for home managing a diet is difficult. Hence, our Android app will Help users smartly organize their daily diet to fight the diabetes and our main aim is to fight diabetes with the help of healthy diet and not with the help of medicines or any external.

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