Build An Image Based Nutrition Analysis Dashboard

1. INTRODUCTION

1.1 Overview:

In the busy world and current senario of the world it is hard to move out and find a place to find the correct nutrition diet. Also, it a time consuming process to find the nutrient values and properties of any food the people consume. Thus, an easiet web based application is required to analyze the nutrient values of the food items we consume in our daily life in short time duration.

1.2 Purpose:

To identify the type of food and the calories in the food items through an web based application. The classification is based by providing an input food image using IBM Watson food model for accurate food identification and food APIs for identifying the nutrient values of food.

2. LITERATURE SURVEY

2.1 Existing problem:

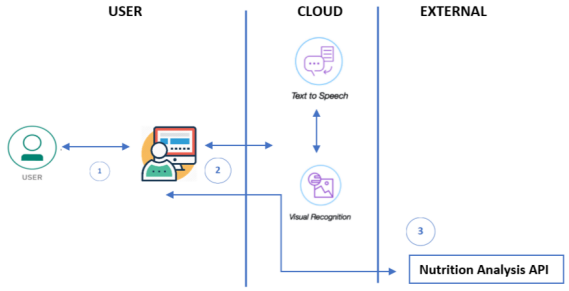
It takes time for a person to go to a clinic and find the a right nutrition for themselves. Also its hard to find the same food while travelling. Wihtout knowing the proper nutrient values people take wrong food that may leads to obesity.

2.2 Proposed solution:

To find the calories in any food with the help of Aritfical intelligence and IBM watson food model. With just a given input foof picture all the nutritional information and its values.

3. THEORITICAL ANALYSIS

3.1 Block diagram

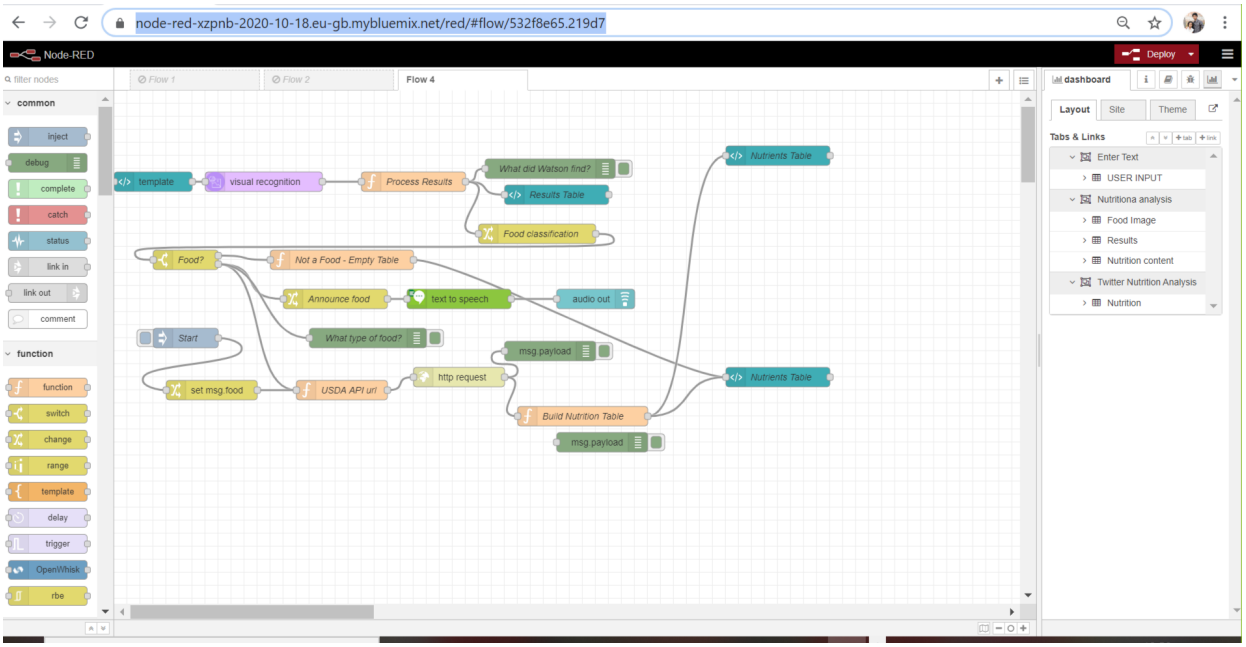


4. EXPERIMENTAL INVESTIGATIONS

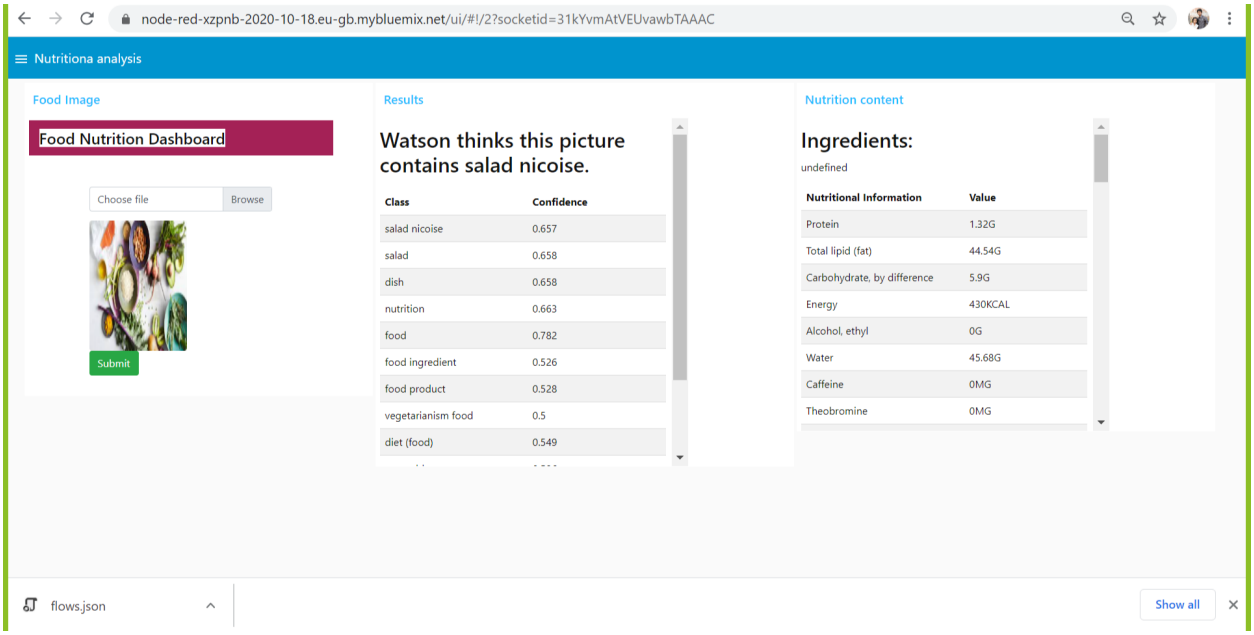
The various types of food have been categorized using IBM waston food model. The

USDA url has been used for finding the nutritional value of the particular food type. Using nodered application the flow of the project has been created using nodes and deployed. Finally in the UI using the dashboard the food image can be selected and nutritional analysis is displayed and audio is played using text to audio service from IBM cloud.

5. FLOWCHART



6. RESULT



7. ADVANTAGES & DISADVANTAGES

Advantage:

1. It is efficient and easy to get the nutritional values of any food type using an image
2. It will help the user to avoid some foods which is high in calories or any specific nutrients they need to avoid

Disadvantage

1. It does not support to give an alternate food items for chosing
2. Diet chart is not used in this image based nutrition analysis dashboard

8. APPLICATIONS:-

- This technology can be used by any one. It has a very easy to use.
- It can give almost any information about all food. It will not help as any real time nutriniost prescriptions but can help any person at realtime.

9. CONCLUSION

Thus using this IBM waston food model an effcient web based nutritional infomation for an given food item is analysed. The visual recognition serice supports the project for giving the nutriteintial properties of the food items given in the picture.

10. FUTURE SCOPE

Using this nutritional analysis further the project can be extended to create a diet chart for an individual based on their body mass index (BMI) and their regular food habits for healthy living.

11. BIBILOGRAPHY

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APPENDIX

A. Source code