

# TITLE OF THE PROJECT

(PNT2022TMID07937)

BATCH. NO : 08

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# OBJECTIVE

This project aims at building a web App that automatically estimates food attributes such as ingredients and nutritional value by classifying the input image of food. Our method employs Clarifai's AI-Driven Food Detection Model for accurate food identification and Food API's to give the nutritional value of the identified food.

# LITERATURE REVIEW

## **1) Monitoring Eating Behaviors for a Nutritionist E-Assistant Using Crowdsourcing Mario O. Parra and Jesus Favela , Luis A. Castro , Arturo Morales.**

- Paper-based methods for monitoring eating behaviors include food records, food-frequency questionnaires, and forms that include a meal description and time of intake.
- Mobile phones have been increasingly used to support this task.

## **2) iAPERAS – Intelligent Athlete's Personal Assistant Mateja Verlic, Milan zorman, Matej Mertik**

- The main challenge in developing comprehensive systems for consumers is that little is known about how patients interact with computer based informatics tools and how they digest and act on information.
- Health related problems in developed countries represent the major concern of national health organizations and other corresponding institutes. The focus of healthcare in the information age is changing from provider oriented medical information towards consumer health informatics.

# LITERATURE REVIEW Contd...

## 3) Alexa, What Should I Eat?

### **A Personalized Virtual Nutrition Coach for Native American Diabetes Patients Using Amazon's Smart Speaker Technology**

- In this paper, we propose a culturally appropriate tool to help this population to manage their disease.
- It does not require users to have any background on using complex digital computing devices.

## 4) Nutri-Mental” – An Android Application For Personal Health And Nutrition Management

- This module has abilities to store the works out and the calories they consume, and get genuine work out to consume the calories which the customer has gotten in excess.
- The proposed app gives an insight into nutrition that a person should have by eating a properly balanced diet and will present an outline on further research and development of the application.

# LITERATURE REVIEW Contd...

## **5) DEVELOPMENT OF A CLOUD BASED SOLUTION FOR EFFECTIVE NUTRITION**

### **INTERVENTION IN THE MANAGEMENT OF LIFESTYLE DISEASES Manju P George , C.A Kalpana**

- The cloud based system would have the ability to calculate the nutritional requirements and to guide first line nutritional management to patients and clients automatically.
- With cloud-based on-line diet consultation module and comparison of its efficacy with one-to-one counselling would be efficiently utilized for client education intervention programs.

## **6) “Dietitian assistant opportunities within the nutrition care process for patients with or at risk of malnutrition: A systematic review” Alita Rushton , Anna Edwards , Judith Bauer , Jack J. Bell**

- Malnutrition identification, assessment and management is a substantial proportion of dietitians' clinical workload in the acute care setting
- Additional studies exploring similar elements of the dietitian assistant role showed positive staff and patient feedback and beneficial financial impacts.

# REFERENCES

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- 3) "Usage and Effect of a Web-Based Intervention for the Prevention of Overweight; a Randomized Controlled Trial" S. M. Kelders;J.E.W.C. van Gemert-Pijnen;A. Werkman;E. R. Seydel. 2010
- 4) "Barriers and Enablers to Delegating Malnutrition Care Activities to Dietitian Assistants "Alita Rushton, Judith Bauer, Adrienne Young, Heather Keller , Jack Bell; February 2022

# REFERENCES Contd...

- 5) “Personalized Dietary Assistant - An Intelligent Space Application” INES 2017  
• 21st International Conference on Intelligent Engineering Systems • October 20-23, 2017 • Larnaca, Cyprus
- 6) “Evaluation of an Interactive Web-based Application to Promote Healthy Behavior in Order to Maintain a Healthy Weight – Preliminary Findings” SM Kelders · 2009



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