

# **Nutrition Assistant Application**

## **Team ID: PNT2022TMID12404**

### **Problem Statement**

Among the common mass food information systems are not yet popularized as a domain and thus there are huge potentialities to work on this. Mobile cloud computing has been introduced to be a potential paradigm for mobile health services to overcome the interoperability issues over distinctive information formats. In this, we propose a mobile cloud-based food calorie measurement framework.

### **Literature Survey**

Healthy nutrition contributes to preventing non-communicable and diet-related diseases. Recommender systems, as an integral part of mHealth technologies, address this task by supporting users with healthy food recommendations. However, knowledge about the effects of the long-term provision of health-aware recommendations in real-life situations is limited. This study investigates the impact of a mobile, personalized recommender system named Nutrilize. Our system offers automated personalized visual feedback and recommendations based on individual dietary behaviour, phenotype, and preferences.

Cloud computing is applicable in a different field in the current scenario, such as Education, Public Administration, Business & Commerce, Health, and Medicine etc. Interestingly, cloud computing may be applicable in the field of Food and Nutrition. This is a conceptual paper deal with cloud computing related aspects which include benefits, advantages, challenges, and issues. Moreover, the paper also talks about cloud computing applications in different and diverse areas of Food Science, Nutrition and Dietetics. Further, the paper discusses some of the contemporary and future challenges to build Cloud Computing based Food Information Systems.

A nutrition-information app research looked at how users attitudes about healthy eating change over time and whether they become more knowledgeable about it. The advice is that consumer behavior scientists, marketing researchers, nutritionists, and app developers collaborate in the creation of the apps. This helps to improve the effectiveness of nutrition-information apps.

Numerous recommendations for natural remedies and different kinds of supplements with thaumaturgical capabilities in preventing and combating the coronavirus infection have been made during the COVID-19 pandemic via websites and social media. This indicates and helps to overcome situations like in severe pandemic.

Health Data Science is not only an interdisciplinary health and medical science field but also an applied science field. Gear-up and modernization of Food and Nutrition Systems may also positively possible with the initiation of advanced research for the creation of a sustainable development. Food Informatics and its implementation are rising in some developed countries and in the industrial segment. It is essential to take proper steps for the creation of a modern advancement in healthcare systems and here healthy

Nutrition System will help to reach the same. Planning is essential for any development and obviously, their solid implementations are required for real development.

Hence for complete development such as management, statistical, information technology, information systems applications in the food and complete healthcare system initiatives, planning etc are highly desired. Academic professionals, as well as Industrial professionals who are working on Food/Nutrition and Informatics, need to work parallel basis for actual solution. Manpower development will be important criteria for solid ready workplace, no doubt.

A web based tool is being planned for therapeutic nutrition prescriptions in clinical settings. 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. Also, it serves as an electronic medical and dietetic record, and personalised nutrition consultation approach can be client can converse to his/ her personal dietitian at their own convenient setting. The implementation once done would invite more and more queries for personalised nutrition support rather than depending on the set menu plans as in the case of current online approaches. Authenticity of the consultant dietitian would also be ensured by the responsible team providing nutrition support.

## References

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