

## **Ideation Phase Literature Survey**

Date	02-09-2022
Batch	B11-5A1E
Project Name	Nutrition Assisstant Application
Maximum Marks	4 Marks

### **Information Gathering**

Nutrition assisstant make sure patients in healthcare unit and are fed according to their nutritional needs. Essential duties highlighted on a Nutrition assisstant resume sample are distrubuting meals,making sure restrictions are respected,adhering to sanitation policies, discussing dietary problems with patients, and completing duties as required by treating physicians. Nutrition research aims to use personal information about individuals or group of individuals to deliver nutritional advice that,theoretically would be more suitable than generic advice.

As the people are gaining awareness around the health benefits of eating nutrient-rich food, they are getting more inclined towards getting their diet charts being made by official nutritionists. However, a diet chart is not enough for a nutritionist to keep going. Therefore, they have started asking their clients to rely on these sites for getting a better understanding of their meals and counting their calories.

The willingness of the people in order to get and stay fit by eating the correct and right amount of food has also generated a source of revenue for both health business and site developers who can create sites for the health and fitness industry.

For Dietitians,Nutrition Experts and Health Experts

1. Live Chats
2. Hire a Dietitian
3. Recipe List
4. Profile Management
5. Create / Manage Custom Diet plans

## Literature Survey

### PAPER 1

**1. Name of the Paper :** Personal Dietary Assistant

**2. Published Year :** 2017

**3. Author :** Gabriella Simon-Nagy, Balazs Tusor

**4. Summary :** Nowadays, there are numerous types of diets that aim to improve the quality of life, health and longevity of people. However, these diets typically involve a strictly planned regime, which can be hard to get used to or even to follow through at all, due to the sudden nature of the change. In this paper, the framework for an Intelligent Space application is proposed that helps its users to achieve a healthier diet in the long term by introducing small, gradual changes into their consumption habits. The application observes the daily nutrition intake of its users, applies data mining in order to learn their personal tastes, and educates them about the effects of their current diet on their health. Then it analyzes the knowledge base to find different food or drink items that align with the perceived preferences, while also add to the balance of the daily nutrition of the users considering their physical properties, activities, and health conditions (e.g. diabetes, celiac disease, food allergies, etc). Finally, the system uses the findings to make suggestions about adding items from the consumption list, or change one item to another.

### PAPER 2

**1. Name of the Paper :** Effects and challenges of a using a nutrition assistance system.

**2. Published Year :** 2021

**3. Author :** Monika Wintergerst , Markus Bohm

**4. Summary :** 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. By using

quantitative and qualitative measures of 34 participants during a study of 2–3 months, we provide a deeper understanding of how our nutrition application affects the users' physique, nutrition behaviour, system interactions and system perception. Our results show that Nutrilize positively affects nutritional behaviour (conditional  $R^2=.342$ ) measured by the optimal intake of each nutrient. The analysis of different application features shows that reflective visual feedback has a more substantial impact on healthy behaviour than the recommender (conditional  $R^2=.354$ ).

### **PAPER 3**

**1. Name Of The Paper :** Primary Nutrition Health Care.

**2. Published Year :** 2020

**3. Author :** Christian Kraef et al. Bull World Health Organ

**4. Summary :** In this article , we argue that comprehensive primary health care should be used as a platform to address the double burden of malnutrition. We use a conceptual framework based on human rights and the Astana Declaration on primary health care to examine existing recommendations and propose guidance on how policymakers and providers of community oriented primary health care can strengthen the role of nutrition within UHC agenda.

### **PAPER 4**

**1. Name Of The Paper :** Perioperative Nutrition

**2. Published Year :** 2018

**3. Author :** Michael Scott et al. Anesth Analg

**4. Summary :** The key role of oral nutrition supplements, enteral nutrition, and parenteral nutrition (implemented in that order) in most perioperative patients was advocated for with protein delivery being more important than total calorie delivery. Finally, the role of often inadequate nutrition intake in the posthospital setting was discussed, and the role of post discharge oral nutrition supplements was emphasized.

## **PAPER 5**

**1. Name Of The Paper :** Virtual Nutritionist using AI

**2. Published Year :** 2019

**3. Author :** Siddarthan Chitra Suseendran

**4. Summary :** In this way, a requirement for a full help for furnishing them with solid nourishment is a fundamental focus to reach. In this paper, we propose a model for a sustenance master framework which point is to give its clients the nourishment skill. It creates solid dinners for people in various ages as indicated by various criteria including their development stage, sexual orientation, and their wellbeing status. An application is created and a few contextual investigations are connected to show how the proposed model can be connected for deciding one's nourishment utilizing Artificial Intelligence (Machine and deep learning). Few key advantages are: Customized diet for any lifestyle and age along with various types of diets to choose from which acknowledges your pre medical conditions with appropriate macronutrient ratio split that ensures micronutrient supplement suggestions based on the foods you consume.