Ideation Phase

Literature Survey

Date	19 September 2022
Team ID	PNT2022TMID01769
Project Name	Nutrient Assistant Application

S.NO	Title	Authors	Year published	Techniques	Survey Outcome
1.	Personalized dietary assistant — An intelligent space application	Balazs Tusor, Gabriella Simon-Nagy,J.T. Toth, A. R.Varkonyi-Koczy	20-23 October 2017	The software tracks its users' daily dietary intake, uses data mining to discover their specific preferences, and informs them of the negative implications of their current diet on their health. Then it conducts an analysis of the knowledge base to identify various food or drink items that fit the users' reported tastes while also balancing their daily nutrition in light of their physical characteristics, activities, and health concerns (e.g. diabetes, celiac disease, food allergies, etc). Finally, the system suggests adding items to the consumption list or switching one item for another based on the findings.	A graph-based architecture is used to materialise the knowledge base, with each node standing for a concept or actual instance in the real world. The relationships between the concepts are described by the edges linking the nodes, which may also assign numerical or fuzzy data. Specialized fuzzy look-up table classifiers carry out data mining and idea recognition.

2.	Intelligent Diabetes Assistant: Using machine learning to help manage diabetes	David L. Duke,Charles Thorpe, Mazahir Mahmoud, Mahmoud Zirie	31 March 2008 - 04 April 2008	In order to solve this issue, the Intelligent Diabetes Assistant (IDA) collects data remotely, immediately transmits it to a doctor,and then automatically processes it to identify significant trends. For both the patient and the care team, the system increases the efficiency of data gathering and analysis. Using IDA, wehave carried out a two- week longitudinal studythat followed 10 diabetics' dietary habits,lifestyle choices, and blood glucose measurements.	The patient picks up knowledge based on their own food habits. The care team also receives a thorough sample of the patient's behavior from the data gathered by IDA. Due to the fact that it is based on data that moreaccurately reflects the patient's habits, this could result in better therapeutic guidance.
3.	Profile-basedsystem for nutritional information managemen t	Rui Costa, Luís Marcelino, Catarina Silva	09-12 October 2013	This application may help improve people's quality of life by recommending foods and beverages that adhere to their dietary needs and/or nutritional requirements (for instance, due to hypertension or obesity, among others). On a mobile device, the user can view and customise their profile. The basic rules are provided by a set of predefined templates, which may then be changed to match your personal nutrition guidelines. Later, the food that is offered to each user canbe filtered using the rules that were set in theprofile.	There is still opportunity for a solution that combines the fields of shopping assistants and nutritional control. The subject of nutritional advice and counselling hasn't been adequately investigated. Applying profiles using straightforward filters may not be interesting to users, according to preliminary research. Users were more interested in testing out standard shopping features than they were in using the profiling technique during the tests. This behaviour may be brought on by the user's defined profile not being adequate.

4.	Mobile Application Based Teli-nutrition System for Covid-19 Pandemic	Taslima Akter Tamanna, Srijani Choudhury, Afsana, Mohammad Monirujjaman Khan	27-30 October 2021	Seek out direct and psychosocial help from qualified health care professionals, including lay and peer guides in your community. Protecting the function of nourishing nourishment as a partner against illness will be made possible by pursuing nutrition advice, promoting breastfeeding, and combating misinformation regarding COVID-19 transmission. This application is simple to use for any healthcare provider in Bangladesh. Our health workers frequently fail to provide moms with accurate nutrition information. With the use of such a tool, moms might be provided with a suitable way to conveycertain dietary instructions based on their developmental phases and the age of their infants.	This nutrition tool may be used to save data for expectant moms and their newborns, and it offers the right technique to educate mothers of their nutrition messages based on their ANC, PNC state, and the age of the newborn kid. Nutritionists using this programme can easily carry out the proper work of communicating dietary messages to mothers. Awriting survey was also conducted to identify the significant problems with computer programmingand the need for portable programmes for handling medical problems.