

**Nutro shopper - Personalizing Healthy Grocery shopping
experience with nutritional product recommendation**

Sandithi Amarasinghe

Supervisor: Mr.Nishan Harankahawa

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Abstract

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It has been identified as a major issue by the World Health Organization that there is an overall increase in diseases such as diabetes, premature heart diseases, and cancer. The reason has been always the same cause for many diseases. Unhealthy diets have been identified as the important triggering factors for the root cause. Even though people are always encouraged to consume and live a healthy lifestyle, they do not have the luxury of finding a trusted way to find out what types of nutrition and the right quantity to be consumed to lead a healthy lifestyle.

To address these concerns, personalized nutrition emerges as new research for the experts to provide tailored food intake based on the specific goal that they have adhered to set, hence the recommendations should be based on the physiological data and personal health information.

Nutro Shopper comes into the picture as a Grocery Shopping entity for the health-conscious individuals seeking to track their day-to-day grocery items, making sure the right amount of calories and nutrition are on point. Recommendations are seen to be effective if it is healthy and has a high nutritional value, where main functionality being the Grocery shopping. This application offers a general framework for daily meal/product recommendations, incorporated as a unique feature the concurrent management of nutritional-aware and preference-aware information which could be compared to the previous sets of research done. Consolidating Health preferable and grocery shopping into one framework is successful, rather than investigating the subjects individually.

Moreover, it incorporates an optimization-based stage for generating a daily meal plan or the set of products to be purchased whose goal is the recommendation of food highly favoured by the user, not consumed recently, and also satisfying the buyer's daily nutritional requirements.