

Final Year Project Proposal - [PRFE 302-EI00]**Brief FYP Proposal**

General information**Student(s):** *Galina Akoury 202011711, Lyne Matta 202110117***Major:** *MN, SE***Campus:** *BA***Email :** 202011711@ua.edu.lb, 202110117@ua.edu.lb,**Mobile:** *76/185012, 70/001885***Supervisor(s):** *Dr Zahi Chami***Project title*****NutriTrack: AI-Powered Personalized Recipe & Nutrition Companion*****Project Description*****Domain of Application***

This project lies in the field of health technology, artificial intelligence, and nutrition management.

Problem statement

The general problem addressed is the difficulty individuals face in deciding what to cook, meeting dietary restrictions, and adapting meals to health conditions such as high cholesterol or high blood sugar. Traditional recipe apps ignore these personal health needs, resulting in poor food choices, food waste, and lack of personalization.

Objective

The main objective is to develop an intelligent mobile application that generates personalized recipes based on user-provided ingredients, dietary preferences, allergies, and medical lab results. Core features include computer vision for ingredient recognition, lab result parsing, nutrition-aware recipe adjustments, a chatbot for health Q&A, and a social community for sharing recipes. The expected result is an accessible, reliable, and interactive health-focused application that empowers users to eat smarter and live healthier.

Keywords: *Artificial Intelligence, Nutrition, Personalized Recipes, Health Technology, Computer Vision*