



Cover page

Project title: FoodGuard

Academic Year: 2025

Group Members: Dima Wafa ALshanti

Department Name: Computer Engineering

Masa Mutasem Anani

Project Type **Software**

Supervisor Name: Amjad AbuHassan

Format:

- Single space, Times New Roman.
- 12 pt,
- Maximum 1 page.

Abstract Body:

Items must be provided in the Abstract:

- Why do you think this project is important? Please explain the significance of this Project in brief.
- In your point of view what are the important aspects that should be covered in the project?
- Objective(s): In your view, please explain the main objectives of the project.
- Methodology: Give a brief outline of the application development process.
- Had this project been done before? Are there any similar applications available today?
- **Note:** Please deliver this abstract early to ensure that your Project has been approved by the department's projects committee. **Registration will not be done without this approval.**



Project's Abstract:

In light of the increasing consumption in today's world, we are witnessing vast amounts of food being wasted daily due to poor management or a lack of awareness. From here, the idea of **FoodGuard** comes to reappraise the blessing of food. This application focuses on addressing the issue of food waste, a problem that extends beyond our region and affects many countries around the world. By identifying the causes of food waste and offering practical solutions, **FoodGuard** seeks to educate individuals on how to reduce waste by improving food management and guiding them on the proper way to dispose of wasted food. The app also aims to reduce the environmental impact of improper food disposal, providing suitable options for handling excess food that benefits individuals, society, and the environment.

Key Features:

Expiration Date Tracking Feature: Our app includes a system that tracks the expiration dates of products and food in your home, sending reminder notifications to ensure food is used before it expires. This feature helps users reduce food waste by offering early alerts, promoting more effective and mindful consumption.

Smart Basket Feature: Users can only record the products they truly need. By tracking the user's consumption, it determines the quantities required, preventing the purchase of excessive or unnecessary food. This ensures that users only buy what they need, significantly reducing the potential for food waste.

Environmental Guidance and Donation Feature: The app allows users to donate excess food or money to specialized charitable organizations, contributing to helping those in need. It also guides users on safe and proper ways to dispose of wasted food, such as turning it into compost through agricultural institutions or donating it to animal welfare organizations.

Artificial Intelligence for Tips and Recipes: The app offers smart tips and creative recipes based on the user's consumption. These recommendations help make better use of available ingredients.

The development of the app began with designing simple and easy-to-use interfaces to ensure a comfortable experience. Firebase will be used to store notifications, and a robust database system will be implemented to organize data securely. All these steps will take place within a collaborative working environment among the team members to ensure coordination and efficiency in execution. While we continue to exchange ideas regularly, we will gradually add features based on implementation needs and platform requirements. Depending on the situation, some features may be adjusted or changed to meet user needs and ensure the best possible experience.

Although there are applications focused on tracking expiration dates, this project offers additional features that make it unique. The app doesn't only track expiration dates but also provides practical solutions for dealing with excess and wasted food, such as donations and reuse, while promoting environmentally responsible practices for disposing of wasted food.

