

# Assignment 1

Date: / /

① Define a problem statement and give a brief Executive Summary

i) Executive Summary

ii) project description

iii) project Scope.

# Problem Statement:- Food Waste and inefficient expiration date management.

- Food Waste 30-40% of food produced globally is lost or wasted.

- Food waste contributes to greenhouse gas emission climate change and resource depletion.

- It wasted water land and labor use for food production.

- Food Waste ends up in landfills, producing methane a potent greenhouse gas.

- It wasted exacerbates food insecurity and hunger.

- Current solution are fragmented and education is limited.

# Executive Summary.

Food waste is a significant global issue. Contributing to environmental problems and economics losses. Effective expiration date management is crucial in mitigating food waste. The Summary outline the problems associated with food waste and expiration date management and



propose solution to address these challenges

Develop an intelligent expiration date management System, Fresh Tracker. that:

1. Tracks expiration dates of perishable food items
2. Sends reminders and notifications before expiration
3. provides Storage and handling guidelines for optimal freshness.
4. Enables user to scan barcodes or upload receipts for easy tracking.
5. offers personalized recommendation for upload receipts for easy tracking.
6. Include a database of common food items with their average shelf life.
7. Allows users to mark items as Consumed or expired.

#### ★ Key features. ★

1. Expiration date tracking and reminders.
2. Storage and handling guidelines for optimal freshness.
3. Barcode Scanning and receipt upload for easy tracking
4. meal planning and grocery shopping recommendations.
5. Database of common food items with shelf life information.



## # Project Description.

- Project overview :- i) Development an intelligent expiration date mangement System to reduce food waste and prevent Foodborne illness
- ii) Track expiration dates of perishable food items and provide personalized recommendations for meal planning and grocery shopping.

- Objectives :-
- i) Reduce Food Waste by 50%.
  - ii) prevent Foodborne illness and health risk
  - iii) offer adequate food storage and handling guidelines.
  - iv) Increase awareness of food waste.

- Functional Requirements :-
- i) user registration and login
  - ii) Food item tracking and expiration date
  - iii) Reminder and notification System.
  - iv) meal planning and grocery shopping recommendation.
  - v) Data analytic for insights on Food Waste reduction.

- Non-Functional requirement :-
- i) user-friendly interface and navigation
  - ii) Secure data storage and encryption
  - iii) Scalability and performance optimization
  - iv) Compatibility with Various devices and browsers.



## # Project Scope.

- i) Develop a user-friendly Web mobile application for tracking expiration dates and managing food item.
- ii) Design a database to store user data, food item information, and shelf life details.
- iii) Integrates barcode scanning and receipts Upload feature for easy tracking.
- iv) Implement a reminder and notification system for approaching expiration dates.
- v) provide personalized meal planning and grocery shopping recommendation.
- vi) offer storage and handling guidelines for optimal freshness.
- vii) Conduct user testing and quality assurance to ensure a seamless user experience.

Assumptions:- i) user will have access to smartphone or computer to use the application.

ii) User will accurately input food item information and expiration dates.

iii) Barcode scanning and receipt upload features will be compatible will.