
Software Requirements Specification

for

Food Waste Management System

Version 1.0 approved

Prepared by Team 5

PSG College of Technology

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Revision History

Name	Date	Reason For Changes	Version
Team 5	29/08/2021	Document Creation	1.0

1. Introduction

1.1 Purpose

Food Waste Management System is designed to reduce the wastage of food in family functions, private events and during festive time. The remaining foods during the functions can be donated to the needy people through NGOs with the help of this system. In this system donors and NGOs can have their own account. From their account donors can request for food donation and now NGOs can accept the food. Donors and receivers will be notified during festival seasons.

1.2 Document Conventions

*This document will use IEEE format. The format for headings is as followed:
Major headings are in bold 18 pt. font and concurrent headings in bold 14 pt. font.*

1.3 Intended Audience and Reading Suggestions

Food Waste Management System is useful for NGOs as they will be notified when the donor's food take up request is available. Donors can also make use of this system to donate the food. This system is very useful in reducing the wastage of food during many occasions. Application of donor/recipient to get verified account will be approved by the admin.

1.4 Product Scope

Food Waste Management System will enable donors and recipients (NGOs) to request for the food take up and accept the food respectively. Recipients can also request for the food using this system. It is mainly designed to offer food for the needy people through NGOs and notify them when the donor is available.

Main modules of this system include:

Modules to manage the needs of this system

- *Donors requesting food take-up*
- *Application approval by admin*
- *NGOs accepting food take-up*
- *Notifying donors and receivers during festival seasons*
- *Recipient viewing food take-up requests*

Modules to manage user info

- *Admin managing donor/recipient info*
- *Donor/recipient log in*
- *Donor/recipient updating their profile if needed*
- *Donor/recipient sign up*

1.5 References

- <https://www.lovelycoding.org/waste-food-management-system>
- https://www.academia.edu/30988642/Food_Waste_Management_System

2. Overall Description

2.1 Product Perspective

- To provide food for the needy people donor can request for the food take-up and NGOs can accept the food.
- The main motive of this system is to reduce the wastage of food in many events.

2.2 Product Functions

Class of use cases	Use cases	Descriptions
Use cases related to sign up of donor/recipient(NGOs)	Donor/recipient sign-up by himself	store personal and contact details of donor/recipient
Use cases related to authorization of admin,donor & recipient(NGOs)	Login of admin,donor & recipient	Login of admin,donor & recipient into the system
Use cases related to change registration details of donor/recipient(NGOs) by himself or by admin	Change personal and contact details by donor/recipient himself or by admin	Change personal and contact details of donor/recipient by himself or by admin
Use cases related to donor/recipient sending verification request to admin	donor/recipient sending verification request to admin	donor/recipient sending verification request to admin for verifying them
Use cases related to verifying application of donor/recipient by admin	Admin verifying the application sent by donor/recipient	Donor/recipient request verified by admin
Use cases related to donor requesting food take-up	Donor requesting food take-up	Donor requesting food take-up through their login
Use cases related to recipient viewing requested food take-up	Recipient viewing requested food take-up	Recipient viewing requested food take-up
Use cases related to NGO accepting food take-up	Recipients can accept the food take-up request	NGO accepts the food take-up requested by donor
Use cases related to notify donors and NGOs during festive seasons	Donors & recipients notified during festive seasons as there will be more food take-up request & accept	Donors & recipients notified If is a festive season
Use cases related to log out from the system by users	System logs out from the system and redirects them to home page	Logs out of the system and redirects them to home page

2.3 User Classes and Characteristics

In this system admin, donor, recipient are the system users. Here, the users are donor and recipient. Donor can make request to take up the food and recipient can accept the food take up, if they need. Both the user can able to update their profile and can able to log in to the system after registration. Admin can manage the user information and he/she can only able to verify the donor/recipient account.

2.4 Operating Environment

Particulars	Specification
Operating system	Windows 10
Processor	1GHz processor
Hard Disk	500 MB
RAM	512

2.5 Design and Implementation Constraints

In this system, every user can get username and password to log in to the system for the authentication. If the entered username and password matches, he/she can able to proceed with the process. The information of users, admin must be stored in the database. Users may access the system from any computers that has good internet.

2.6 User Documentation

For user documentation and information please consult section 3 external interface requirement.

2.7 Assumptions and Dependencies

- *Every user has a mobile phone.*
- *The system database will be accessible in real time.*
- *The donor should not make any fake request for food take up.*
- *The recipient also should not accept any food take up, if they don't want it.*
- *Users should not submit any fake application to the system.*

3. External Interface Requirements

3.1 User Interfaces

The system is designed in such a way that it will be user friendly in each from of interface.

If admin of the system logs in,

- *View the donor list of the system.*
- *View the recipient list of the system.*

- *Verifies the donor/recipient account.*
- *Can delete the user from the system.*

If donor of the system logs in,

- *Edit/ update profile details.*
- *Change the password for login to the system.*
- *Make request to get verified account.*
- *Post food take up request.*
- *Checking the notifications.*

If recipient of the system logs in,

- *Edit/ update profile details.*
- *Change the password for login to the system.*
- *Make request to get verified account.*
- *Accept the food take up request.*
- *Checking the notifications.*

3.2 Hardware Interfaces

- *1GHz or High processor*
- *512 MB RAM & 500 MB Hard Disk*

3.3 Software Interfaces

- *Operating system – Any Windows operating system for better performance and user friendliness.*
- *The service in this food waste management system is manipulation like insertion, deletion and updating the details.*
- *And the records for donors and receivers will be stored in the database – mysql*
- *Also, we are using the languages like HTML and CSS in the frontend part to implement this project.*
- *And in backend the java script/ nodejs language is used to implement this project.*

3.4 Communications Interfaces

- *This food waste management system project supports all web browser and there will not be faced any issues in it.*
- *The database is communicated with the MYSQL server.*
- *Then software adapt MYSQL server and communicate database.*

4. System Features

4.1 Donors requesting food take-up

4.1.1 Description and priority

The registered donors can post the availability of food in their place with the help of this feature. This feature is of high priority because only when a donor requests food take-up, the NGO's come to know the food is available.

4.1.2 Stimulus/Response sequences

- *The donor login into the system.*
- *The donors select 'request for food take up'.*
- *The donor enters the meal information and click on 'post' for the receivers to view and accept*
- *After the request is posted in the website any receiver who wishes to take the food can accept the request.*

4.1.3 Functional Requirements

REQ-1: *The donor should have log in/sign in option to enter into the system.*

REQ-2: *The menu in the donor side should have an option to post the request for food take up*

REQ-3: *Once the option is chosen the donor should be directed to the 'request food take up' page where he can specify the meal, quantity, food take-up address and contact information.*

4.2 Receivers accepting food take-up:

4.2.1 Description and priority

The receivers can log in into their account and accept the food take-up request by the donors. This feature is of high priority since it is the main objective of the system.

4.2.2 Stimulus/Response sequences

- *The receivers log in into the system.*
- *The receivers choose 'accept the food take-up request'.*
- *A list of food take-up requests is displayed from which the receiver can accept the request.*
- *Once the receiver accepts the food, the requests for food take-up will be updated.*

4.2.3 Functional Requirements

REQ-1: *The receiver should have log in/sign in option to enter into the system.*

REQ-2: *The menu in the receiver side should have an option for viewing and accepting the requests.*

REQ-3: *Once the option is chosen the receiver should be directed to a page where they can view the list of requests.*

REQ-4: *An 'accept' button is placed along with the requests.*

REQ-5: *The user should be asked for the quantity required and finally click 'accept'.*

4.3 Notifying receivers during festival season

4.3.1 Description and priority

The receivers are notified during the festival season that there may be an increase in food take-up requests. This feature is of medium priority because it just provides additional information to the receiver.

4.3.2 Stimulus/Response

- *The receivers log in into the system*
- *During the holiday season or the festival season, the receivers are notified before a week.*
- *Once they are notified that there may be more food requests, the user can expect the food take-up requests accordingly.*

4.3.3 Functional Requirements

REQ-1: *The receiver should have log in/sign in option to enter into the system.*

REQ-2: *After logging in the receiver should get a pop-up window notifying the festival season.*

4.4 Request to get verified account

4.4.1 Description and Priority

The donors and receivers can request the admin to get a verified account. This feature is of medium priority because even without a verified account the users can donate and receive.

4.4.2 Stimulus/Response

- *The donor/receiver log in into the system.*
- *The donors/receivers choose 'request to get verified account' in the menu.*
- *The user is asked to fill the application and submit it.*
- *Once the application is submitted it is sent to the admin for approval.*

4.4.3 Functional Requirements

REQ-1: *The donor/receiver should have log in/sign in option to enter into the system.*

REQ-2: *An option should be available in the donor's menu and receiver's menu to request for verified account.*

REQ-3: *Once the option is chosen an application form is to be displayed for the users.*

REQ-4: *A 'submit' button is to be placed in the end of application for the users to send the application to admin.*

REQ-5: *After submission the user is redirected to the menu.*

4.5 Admin verifying the donor/receiver account

4.5.1 Description and priority

The admin can view all the donor and receiver application requesting for verified account. This feature is of medium priority because even without a verified account the users can donate and receive.

4.5.2 Stimulus/Response

- *The admin log in into the system.*
- *The admin choses to verify the accounts.*
- *The admin view list of requests and clicks on it to view the application.*
- *The admin clicks 'accept' to verify the account.*
- *Once the application is verified it will be specified along with the donor and receiver's account.*

4.5.3 Functional Requirements

REQ-1: *The admin should have log in/sign in option to enter into the system.*

REQ-2: *The admin's menu should have an option to verify the donor and receiver accounts.*

REQ-3: *Once the option is chosen the admin should be able to view the requests from donors and receivers.*

REQ-4: *Then the admin should be able to view the complete application of each request.*

REQ-5: *An 'accept' button should be present to make the account of donors and receivers as verified.*

4.6 Food recipient viewing the requested food take-ups

4.6.1 Description and Priority

The food recipient(NGOs) after successfully logging in, can view the list of food take-ups requested by the donors(restraunts).The recipients can accept any request from the list displayed.The list displayed will be personalized based on the location of the recipient and the no of people served by them.This feature is of high priority as without this,the donor's request can't actually be viewed by the recipient.

4.6.2 Stimulus/Response Sequences

- *The recipient visits the site and logs in to the system.*
- *Then,the recipient selects the 'view food take-up request' option.*
- *The system displays a list of requested food take-ups.*

4.6.3 Functional Requirements

REQ-1: *The recipient should be able to log into the system.*

REQ-2: *For the recipient to select the 'view food take-up request',a menu bar with a list of items to select must be present in the recipient's dashboard.*

REQ-3: *For the recipient to view the food takeups,there must be 'view food take-up request' page to display the food takeup requests.*

4.7 Donor/Recipient Log in

4.7.1 Description and Priority

The registered donor/recipient visiting the site can log in to the system to get access to some user specific system features.This feature is of high priority as the donor/recipient can actually utilize any system feature only after logging into the system.This feature provides authentication to the users of the system and secures the system from unauthorized imposers.

4.7.2 Stimulus/Response Sequences

- *The donor/recipient visits the site.*
- *Selects the log in/sign in option.*

- The system opens sign in page and displays text fields to enter the user credentials.
- Enters the user credentials like username and password.
- The system validates the user details.
- If valid, the system directs the user to the dashboard. If invalid, the system asks the user to reenter the details upto maximum 3 times.

4.7.3 Functional Requirements

REQ-1: For the user to log in, the system must have a 'log in/sign in' option in the home page.

REQ-2: For the user to enter their details, the system must have a log in/sign in page.

4.8 Donor/Recipient managing their information

4.8.1 Description and Priority

After successfully logging into the system, the donors and recipients can update their profile by selecting the 'edit profile' option present in their dashboard. This feature is of moderate priority. This feature enables the users to keep their profile up-to date and helps them to manage their information effectively.

4.8.2 Stimulus/Response Sequences

- The user(donor/recipient) logs into the system.
- The system displays the dashboard to the user.
- The user selects the 'edit profile' option.
- The system opens the edit profile page and displays the current profile details of the user.
- The user updates the details and presses on the 'update profile' button.
- The system updates the user's details in the database.
- The user is prompted with the message 'Profile updated Successfully'.

4.8.3 Functional Requirements

REQ-1 : The users should be able to log into the system.

REQ-2 : For the users to select the 'edit profile' option, a menu bar with a list of items to select must be present in the user's dashboard.

REQ-3 : *The user should have a 'edit profile' page for them to edit the current profile details.*

4.9 Donor/Recipient Sign up

4.9.1 Description and Priority

For the donor and recipient to have the privileges of a registered user, the donor and recipient must be able to sign up to the system. This feature is of high priority as without this the users won't be able to access user specific system features. This feature enables the system to authenticate the users each time they log in to the system.

4.9.2 Stimulus/Response Sequences

- *The user clicks on the 'sign up/register' button.*
- *The system displays the signup page with text fields to collect user details.*
- *The user fills in the details and clicks on the 'register' button.*
- *The system checks for the detail's constraints.*
- *If the constraints are satisfied, the user details are added to the system database and the system prompts the user with the message ' Successfully registered!'.*

4.9.3 Functional Requirements

REQ-1 : *For the user to register, the system must have a signup/register button in the home page which should direct the user to a signup/register page.*

REQ-2 : *To register to the system, the user should have a signup/register page.*

4.10 Admin managing user information

4.10.1 Description and Priority

The admin of the system can view the list of donors and recipients of the system and can remove any registered user from the system. This feature is of moderate priority. This feature enables the admin to manage user information effectively.

4.10.2 Stimulus/Response Sequence

- *The admin logs into the system*
- *The system displays the admin's dashboard*
- *The admin can select 'view donor list' or 'view recipient list' from the menu bar.*
- *The system displays the appropriate list.*

- *The user then can select the 'delete user' option from the menu bar.*
- *The system asks for the details of the user to be removed from the system.*
- *The user gives the required details.*
- *The system checks for validity of the details*
- *If valid, the system deletes the user's account.*

4.10.3 Functional Requirements

REQ-1 : *The admin should be able to log into the system.*

REQ-2 : *The admin should be able to view the list of donors/recipients.*

REQ-3 : *The admin should be able to delete a user from the system.*

4.11 Log out

4.11.1 Description and Priority

After using the intended features, the users(Admin/Donor/Recipient) can logout from the system. This feature is of high priority as it enables the user of the system to exit the system as a registered user.

4.11.2 Stimulus/Response Sequences

- *The user selects the 'log out' option from the menu bar in the dashboard.*
- *The system logs out the user from the system and redirects them to the home page.*

4.11.3 Functional Requirements

REQ-1 : *The user should be able to log in to the system.*

REQ-2 : *The user's dashboard must have the 'log out' option in the menu bar.*

5. Other Nonfunctional Requirements

5.1 Performance Requirements

- *This food waste management system is more interactive and the delays are most probably lesser.*

- *The system must be compatible to hold the general traffic*
- *And it shouldn't get hang and should not show that problems are arising out due to large no of concurrent users.*
- *And most importantly the system should be fast enough to meet the customer.*
- *And the high and low temperature should not affect the performance of the device.*

5.2 Safety Requirements

- *The information of all donors must be stored in the database, which should be accessible to the users.*
- *All registered donors should have few of the details like quantity of peoples, time and the location.*

5.3 Security Requirements

- *All details and information of the donors are maintained confidential.*
- *After a period of inactivity, the users should be removed from the system.*
- *The pin and password confidentiality should be there on the password panel of this system of food waste management.*

5.4 Software Quality Attributes

- *The final application must be packaged in a set up program for the purpose of that the products can be easily installed on machines.*

AVAILABILITY:

This food waste management system is available for everyone (donor and receiver). This is the final version of developing system. If any user logging to the system, system identify type of user and give permission to their work.

OPERABILITY:

System allows the user to operate with a mouse unless input is required from the keyboard. This is allowing the user to insert data easily.

CORRECTNESS:

Various test cases were implemented and checked the accuracy of the system. If any errors are found will correct them before delivering the software to the client.

FLEXIBILITY:

After delivering software if a client wants to do any changing will hope to do that change immediately without any charges.

MAINTAINABILITY:

One year maintain warranty is given to the client. Will fix all trouble within the warranty period. During the delivery time of the project, it will be delivered along with a user manual to the client.

5.5 Business Rules

System administrators can view each operation any time. The system is also capable of handling it in case of any changes too.

6. Other Requirements

Appendix A: Glossary

SRS - Software Requirement Specification

NGO - Non-Governmental Organization

Plagiarism screenshot

Submissions Overview

Background Information [\[what is this?\]](#)
 Batch file name: SRS_Team 5_Food Waste Management System.docx
 Report generated on: 29/08/2021, 12:00:23 PM

Checking Parameters [\[what is this?\]](#)
 Matching scope(s): Within submission, Internet
 Leniency: Detailed matching with threshold 70%
 Minimum sentence length: Sentences with more than or equal to 3 meaningful words were checked

Similarity Statistics

Similarity Statistics [\[what is this?\]](#)
 Total number of documents: 1
 Number of documents which can be processed: 1
 Number of documents which cannot be processed: 0

Show entries Search:

Entry	Document	Status	Similarity	Action
1	SRS_Team_5_Fo...Waste_Management_System.docx	processed	10/247=4.00%	View details

Showing 1 to 1 of 1 entries [First](#) [Previous](#) [1](#) [Next](#) [Last](#)

