Software Requirements Specification

For

Waste Food Management for Hostel Mess

Prepared by :

20BCS038 Ajay Thakur

20BCS052 Davish Mehata

20BCS056 Shubham Thakur

20BCS057 Sahil Lagwal

Table of Contents

Introduction

The purpose of this document is to outline the design and development of a Hostel Mess Waste Food Management Website. This website will serve as a tool for hostels to track and manage their food waste, with the goal of reducing waste and promoting sustainability.

1.1 Purpose

The purpose of the Hostel Mess Waste Food Management Website is to provide hostels with a centralised platform for tracking and managing their food waste. The website will help hostels to better understand their food waste patterns, identify areas for improvement, and implement strategies to reduce waste.

1.2 Scope

The scope of the Hostel Mess Waste Food Management Website includes the following:

- Tracking the amount of food waste generated by the hostel mess
- Providing tools and resources to help hostels reduce their food waste
- Allowing hostels to track their progress and see the impact of their efforts over time

1.3 Definition, Acronyms, and Abbreviations

The following terms and acronyms are used throughout this document:

- Hostel Mess: A communal dining area for residents of a hostel
- Food Waste: Uneaten food that is thrown away

1.4 References

This document is informed by the following references:

- Literature review on food waste reduction in hostel messes
- Interviews with hostel mess managers and sustainability experts

1.5 Overview

This document provides an overview of the design and development of the Hostel Mess Waste Food Management Website. It outlines the purpose, scope, and key features of the website, as well as the methodology and tools used in its development. The goal of the website is to help hostels reduce their food waste and promote sustainability.

Overall Description

This section provides a high-level description of the Hostel Mess Waste Food Management Website.

2.1 Product Perspective

The Hostel Mess Waste Food Management Website is a web-based tool that will be accessed through a web browser. The website will be hosted on a secure server and will be accessible to authorised users only.

2.2 Product

The Hostel Mess Waste Food Management Website will provide a centralised platform for hostels to track and manage their food waste. The website will include the following key features:

- A dashboard to display the amount of food waste generated by the hostel mess.
- A system to track food waste over time and identify trends.
- Tools to help reduce food waste, such as portion control and menu planning.
- A way for users to report food waste and provide feedback.
- Integration with other systems, such as food ordering and inventory management, to streamline the process and reduce waste.

2.3 User Characteristics

The Hostel Mess Waste Food Management Website will be used by hostel mess managers and staff. These users will need to be familiar with web-based tools and have some level of technical proficiency. They will also need to have a basic understanding of food waste reduction and sustainability.

2.4 General Constraints

The following constraints will impact the development of the Hostel Mess Waste Food Management Website:

- **Time**: The project will be completed within a set timeframe.
- **Technology**: The website must be developed using current and widely-used technologies.
- **Accessibility**: The website must be accessible to users with disabilities in accordance with relevant accessibility standards.

2.5 Assumptions and Dependencies

The following assumptions and dependencies will impact the development of the Hostel Mess Waste Food Management Website:

Assumption: The target hostels will have internet access and be able to access the website through a web browser.

Dependency: The website will require integration with other systems, such as food ordering and inventory management, in order to be fully functional. These systems must be in place and accessible in order for the website to be effective.

Specific Requirements

This section outlines the specific requirements for the Hostel Mess Waste Food Management Website.

3.1 External Interface Requirements

This section describes the requirements for the website's external interfaces.

3.1.1 User Interface

The user interface of the Hostel Mess Waste Food Management Website must be intuitive and easy to use. It must be designed in a way that allows users to quickly and easily access the information they need. The following requirements must be met:

- The website must be accessible through a web browser
- The website must be visually appealing and professional in appearance
- The website must be organized in a logical and easy-to-navigate manner
- The website must be accessible to users with disabilities in accordance with relevant accessibility standards

3.1.2 Hardware Interfaces

The Hostel Mess Waste Food Management Website will require a computer or mobile device with an internet connection to access. The website must be compatible with a range of devices, including desktops, laptops, tablets, and smartphones.

3.1.3 Software Interfaces

The website must be compatible with widely-used web browsers, including Google Chrome, Mozilla Firefox, and Microsoft Edge.

3.1.4 Communication Interfaces

The website must be able to communicate with other systems, such as food ordering and inventory management, in order to be fully functional. These systems must be in place and accessible in order for the website to be effective.

3.2 Functional Requirements

The following functional requirements must be met:

- The website must be able to track the amount of food waste generated by the hostel mess
- The website must provide tools and resources to help hostels reduce their food waste
- The website must allow hostels to track their progress and see the impact of their efforts over time
- The website must allow users to report food waste and provide feedback

3.3 Performance Requirements

The Hostel Mess Waste Food Management Website must be fast and responsive, with a minimal amount of lag or delay. It must be able to handle a high volume of data and a large number of users simultaneously.

3.4 Design Constraints

The following design constraints must be considered during the development of the Hostel Mess Waste Food Management Website:

- The website must be developed using current and widely-used technologies.
- The website must be completed within a set timeframe.

3.5 Attributes

The following attributes must be considered during the development of the Hostel Mess Waste Food Management Website:

- **Security:** The website must be secure and protect sensitive information
- **Usability:** The website must be easy to use and intuitive
- **Maintainability:** The website must be easily maintainable and updatable

3.6 Other Requirements

- The website must be scalable and able to handle future growth and changes.
- The website must be able to generate reports and export data in a variety of formats.
- The website must include comprehensive documentation and training materials for users.

4. Conclusion:

In conclusion, the Hostel Mess Waste Food Management Website is an essential tool for reducing food waste in hostel messes. By tracking food waste and providing resources and tools to help hostels reduce their waste, the website will help to reduce the environmental impact of food waste and make a positive impact on the world. With its user-friendly interface, performance capabilities, and strong security measures, the Hostel Mess Waste Food Management Website is poised to be a valuable resource for hostels looking to reduce their waste and improve their sustainability.