

University of Information Technology and Sciences



SRS Document

Course code: CSE 356

Course Title: Software Engineering And System Analysis Lab

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Project name: “Food Price Control Website”

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1. Introduction:

1.1 Purpose:

This SRS document outlines the requirements for a website that displays food product prices across 64 districts in Bangladesh. It is designed to allow users to check current food prices, file complaints, and provide a secure admin login for authorized personnel to update prices. Moreover we can find weekly, monthly, yearly graphs of the price fluctuation of non-packaged foods.

1.2 Intended Audience and Reading Suggestions:

This document is intended for:

- All types of retail and wholesale food vendors
- Project managers
- All citizens of Bangladesh
- Admins and authorized personnel
- Government officials
- Researchers and Analysts
- Local Authorities

1.3 Project Scope:

The project aims to provide a platform where users can view food prices, submit complaints, and admins can securely update the food list and prices. It will cover all 64 districts of Bangladesh, with prices categorized weekly, monthly, and yearly. It will be beneficial to monitor the time-to-time price variations in different areas.

1.4 References:

Though it is solely our own idea, we researched and found some related websites that helped us enrich the scope of our project.

Here are the links to the websites we've gone through:

- <https://www.foodsecurityportal.org/tools/food-price-monitor>
- <https://www.usda.gov/topics/food-supply-chain>

2. Overall Description:

2.1 Product Perspective:

The website will display a comprehensive list of food prices, organized by district and time period. Users will have the ability to view price changes and submit complaints, while admins will be able to log in and update the prices.

2.2 User Classes and Characteristics:

a. General Public (End Users):

These are everyday users, such as consumers, who visit the website to view food prices across districts.

Characteristics:

- Varying levels of technical knowledge, from novice to experienced.
- Need a simple and easy-to-use interface.
- Likely to access the website through smartphones, tablets, or computers.
- Interested in accurate, real-time data.

b. Administrators:

Government officials or authorized personnel & local representatives in the 64 districts who input price data regularly to manage and update food price data.

Characteristics:

- Technical knowledge about the backend system.
- Requires a secure, restricted interface for updating data.
- Needs to handle bulk updates efficiently.

3. System Features:

3.1 Functional Requirements:

a. Price Display by District:

Function: Display current food prices for each of the 64 districts in Bangladesh.

Details:

- Users should be able to select a district and view a list of food items along with their prices.

b. Real-Time Data Updates:

Function: Ensure food price data is updated regularly.

Details:

- Administrators or Data Entry Operators should be able to input or update prices in real-time or periodically.
- The system must validate data for accuracy and prevent duplicate entries.

c. User Authentication and Authorization

Function: Control access to different areas of the website.

Details:

- Public users do not need to log in to view prices.
- Administrators and Data Entry Operators require login credentials to update data.
- Role-based access: only authorized personnel can update district-wise data.

d. Mobile-Friendly Interface

Function: Ensure the website is responsive.

Details:

- The site should work smoothly on mobile devices, with easy navigation and viewing of prices.
- These are the core components that will guide the development and usability of the Food Price Control Website.

4. External Interface Requirements:

4.1 Software Interfaces:

Front-end Software:

The front-end of the website will be developed using **HTML** for the structure of web pages, **CSS** for styling and layout, and **React.js** for building a dynamic and interactive user interface. React.js will help in creating a responsive and engaging experience for users as they browse and interact with various site features.

Back-end Software:

The back-end will be managed using **Django**, a high-level **Python** web framework that facilitates rapid development and clean, pragmatic design. Django will handle server-side logic, database interactions, and overall management of the website's functionality. The database will be powered by **MySQL**, which will store and manage data related to food price, user profiles, and other essential information.

5. Nonfunctional Requirements:

5.1 Safety/Security Requirements:

- Admin login will be restricted to authorized personnel with multi-factor authentication.
- Data encryption for user details and complaint submissions.
- Secure database for storing food price information.