

Software Requirements Specification

For

SP5-Red Grocery Application

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Revision History

Name	Date	Reason For Changes	Version

1. Introduction

This grocery list application is designed to improve the efficiency of a person's day to day experience while shopping. User's will be able to create, manage and execute their personal grocery list to help make their shopping experience more convenient. There will also be many new features such as synchronization between multiple devices, sorting and categorizing store items, scanning of barcodes, predictive text, recipe integration, and even tracking of the user's budget! This application strives to enhance the way a user can plan, shop, and budget their groceries to help make their shopping experience the best.

1.1 Goals and Objectives

The main goals of this application are to:

1. **Streamline Grocery Shopping**- simplifying the creation and management of user grocery lists, making it more user-friendly and efficient. Users will be able to quickly add items, categorize, and organize their list for the best shopping experience
2. **Strengthen Shopping Efficiency**- we are aiming to strengthen shopping efficiency by providing many features such as barcode scanning, predicting text input, and recipe integration, these features will help users save time and errors as they shop
3. **Improving Budget Management**- this application will also help users in managing their grocery budget. This application will offer a budget tracking and spending alert in order for users to make better decisions and staying in their budget as they shop

2. Overall Description

Our grocery list application will be a user-centric software solution created to increase the efficiency and convenience of managing, creating, and executing grocery lists for users. The application aims to make the grocery shopping experience easier for users by offering a range of features, which include multiple device synchronization, sorting, predictive text, recipe integration, and many more features. This application strives to better the way users plan and budget their groceries in order to improve their overall shopping satisfaction.

2.1 Product Environment

The application operates in a dynamic and evolving digital world. It is mainly designed to be used on mobile devices such as smartphones and tablets using operating systems such as iOS and Android to make sure it reaches as much accessibility for everyone. It will also integrate with cloud-based services to allow users to sync their grocery lists across different devices with no data problems. The application will also connect with external databases to control features such as the barcode scanning, importing different recipes, and price comparisons if there are weekly discounts. A web based alternative version of the application will also be developed to add more flexibility for users to access their lists from desktop computers or laptops.

3. Usability Requirements

Usability requirements are a must have for this application. The application will have a visually appealing user interface with easy navigation and straightforward decisions with the grocery lists to help accommodate everyone, even people with disabilities. The data entry side of the system must also be prioritized. Users will be able to add, edit, and remove their grocery items from their lists effortlessly through multiple ways; barcode scanning, manually changing the list, or voice recognition some time in the future. We will also make the application inclusive for accessibility standards such as keyboard navigation and screen reading. Users will also get clear error messages with guidance to resolve these issues. Included with this is confirmation messages whenever someone adds an item or for notifications. There must also be a user guidance program or a tutorial to help users understand how the application works.

3.1 Functional Requirements

R.1.0 Launch Page

R 1.1 Login button redirects to login page

R 1.2 Register button redirect to create account page

R 2.0 Login Page

R 2.1 Login with username

R 2.1 Password

R 2.3 Recover password (optional)

R 3.0 Register - Create Account – Page

R 3.1 Email (this is your user name ?)

R 3.2 Password

R 3.3 First Name

R 3.4 Last Name

R 3.5 Phone

R 4.0 Settings Page

R 4.1 Update email

R 4.1.2 Requires confirmation

R 4.2 Update password

R 4.3 Update Phone Number

R 4.3 Change Names

R 4.4 Leave a Group

R 5.0 Create a “Group”

R 5.1 Group Name

R 5.2 Each group will have a grocery cart

R 6.0 Invite Others to Group

R 6.1 Send another user a “Group Invite” using user’s email

R 6.2 User can either decline invite or accept within 30 days

R 6.3 When accepted, new member will be added to the group

R 7.0 Adding Items to Cart

R 7.1 Any user in a group will be able to add an item to the cart

R 7.2 A user can search for an item in a search bar or add it by name

R 7.3 Added items will appear in everyone’s Cart menu

R 8.0 Removing Items from Cart

R 8.1 Users can remove items from cart one of two ways:

R 8.1.1 Deleting an item entirely from the cart

R 8.1.2 “Purchasing” item signifying item is bought

R 9.0 Generated Reports

R 9.1 Generate an expense report for users

3.2 Safety Requirements

Because we are dealing with sensitive personal information, it is important to keep this information safe. This is why in Section 3.1, we have implemented certain features which we will expand on here. To change an email or password, we require confirmation to make sure the user is the one changing the information. In another instance, we require “invites” into groups so a user can't be added to an unwanted group.

3.3 Documentation and Training

The plan for training will be through a document that describes the features. Documentation will be done both inside the project's code and within other files. These include the Gantt chart that we use for our requirements that we plan to use to track the progress.

3.4 User Interface

The UI should have a productive feel to it while still maintaining ease of use. Since the app is designed for anyone from the age of 13 and above, the app should be family-friendly. The features should be familiar such that 90% of users should be able easily navigate through it and use the requirements without much hassle.

4. Usability

Our grocery app aims to simplify shopping through an intuitive and seamless user experience. The interface will be designed with the user in mind, making it easy to navigate and access key features. Users can add items to their cart manually, by scanning barcodes, or through voice commands. An onboarding tutorial will help users take advantage of all the app's capabilities, like generating grocery lists from recipes and managing budgets. Features will be organized and sortable for quick access, while spending alerts provide helpful budget oversight. Sharing features will be simple to use, enabling coordination between users. The focus throughout is on an intuitive, user-friendly experience that simplifies and streamlines shopping.