

Software requirement specification (SRS) document template

Project name: Smart Shop

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Definitions and acronyms

1 Introduction

Describe the purpose of the document.

1.1 Product scope

List the benefits, objectives, and goals of the product.

Smart Shop intends to make shopping easier for users and help them be able to plan out the meals they will eat. It will generate recipes from user submitted criteria, allow users to pick a recipe, and then generate a shopping list based on what the recipe needs. Solving issues when planning out meals and shopping trips all in one set of actions.

1.2 Product value

Describe how the audience will find value in the product.

Our product will allow users to be able to easily create meal plans by giving users recipes and generate a shopping list for them based off of those meals and other criteria set by the user so that users can know exactly what they want and what they can afford before shopping for groceries. It also does most of the work of looking for recipes, creating a meal plan, and making a shopping list for the user so they do not have to do it themselves.

1.3 Intended audience

Write who the product is intended to serve.

The intended audience is anyone that has issues when shopping, such as with budgets or not knowing what to shop for or those who do not know how to make a meal plan. This mainly targets young adults but can be used by anyone.

1.4 Intended use

Describe how will the intended audience use this product.

First the user will fill out information for the meal plan. When filling out the meal plan they will find and choose a recipe based on criteria they submit. After that Smart Shop will generate and add items to the users shopping list for the user and continue to offer recipes. The user can then continue planning out their meals for any amount of time and use the shopping list next time they shop.

1.5 General description

Give a summary of the functions the software would perform and the features to be included.

First the user will fill out information for the meal plan and choose a recipe for each meal. When looking for a recipe the user will type keywords for recipes they would want, for example "hamburger" along with other criteria such as a budget. Smart Shop will then provide recipes using this keyword and criteria, and allow them to pick one they like. After that it will generate the user a shopping list based on those ingredients and provide other recipes using those ingredients to give ideas on reusing bought products. Users will continue doing this to fill out a complete meal plan and having a shopping list ready for all of the meals they have planned.

Functional requirements

List the design requirements, graphics requirements, operating system requirements, and constraints of the product.

Login feature where a user clicks log in button and selects a google account

Once logged in, new page

Button to access user profile

In user preferences: Dropdown button to add allergies Textbox input to add food items that user does not want in recipes

Button to sign out

Button to go back

After selecting new meal plan: New page with button to view shopping list, view shopping list button remains after switching pages Button to add a day

Button to delete a day

Button to save meal plan

After selecting add a day: New page with input box to label day Once inputted: shows button to add a meal

Once add a meal is pressed: New page

Dropdown to label meal as breakfast/lunch/dinner/other

Textbox to input a budget

Textbox to input a calorie amount

Textbox to input keyword for recipe that once entered, will show recipes that fit criteria

Ability to select a recipe

Once recipe is selected: Items associated with recipe are added to shopping list and user is taken back to day

Recipe is added in a list labeled "Recipes" with picture of recipe and a button to delete that recipe

Button to view recipes based on items in shopping list and criteria Once button is selected: Shows recipes within criteria that include one or more items from shopping cart

Button to save day

Button to go back to editing day

Day is shown at the meal plan menu, along with button to add a day and delete a day

Button to go back to meal plan

Meal plan is shown at the main menu along with button to delete the meal plan

Once shopping list is pressed: shows the shopping list on the same page

button to delete an item from the list and add one, unable to go past budget or add restricted items

Total price shown on shopping list

External interface requirements

3.1 User interface requirements

Describe the logic behind the interactions between the users and the software (screen layouts, style guides, etc).

The user interface intends to be simple and user friendly. Each page only has a few areas to input and every item on the page is clearly labeled. On the login screen there will be a short description of Smart Shop to inform users of what the website does. There will also be a one sentence guide on how to use it. The edit profile button will be represented with a simple filled outline of a person and will be on each page. The shopping list button will appear after selecting a meal plan and will remain on each subpage. It will be represented with a list icon.

3.2 Hardware interface requirements

List the supported devices the software is intended to run on, the network requirements, and the communication protocols to be used.

Software requires an internet connection to be able to access. It can be run on any PC or mobile device that can load a webpage on an internet browser. Requires a mouse or substitute to be able to click on buttons and input boxes
Requires a keyboard to be able to type in input boxes

3.3 Software interface requirements

Include the connections between your product and other software components, including frontend/backend framework, libraries, etc.

Any web based application that can be accessed by web browser. Frontend/backend both use .net framework. APIs that give information on recipes. Also APIs for grocery outlets and what products they have and the price of products.

3.4 Communication interface requirements

List any requirements for the communication programs your product will use, like emails or embedded forms.

We will use embedded forms for communication between client and server. We will also need to communicate with Google's login services.

4 Non-functional requirements

4.1 Security

Include any privacy and data protection regulations that should be adhered to.

User information cannot be accessed by anyone else but the original user.

4.2 Capacity

Describe the current and future storage needs of your software.

Storage for databases that we use and account information of each user. Account information for each user will not be too large as there is not much information that is saved.

4.3 Compatibility

List the minimum hardware requirements for your software.

Any hardware that is able to access a website through a browser

4.4 Reliability

Calculate what the critical failure time of your product would be under normal usage.

There likely won't be a critical failure time and the only time our product would fail is if something happens to the servers.

4.5 Scalability

Calculate the highest workloads under which your software will still perform as expected.

User has a large number of meal plans/days along with an extremely long shopping list loaded on the page. Servers can fail if we run out of space which is unlikely

4.6 Maintainability

Describe how continuous integration should be used to deploy features and bug fixes quickly.

Servers will need to be maintained and will be updated if we need to update the website. We can deploy features and bug fixes quickly since it is a website

4.7 Usability

Describe how easy it should be for end-users to use your software.

It should be easy enough for anybody to use and it should be quick to understand all features.

4.8 Other

List any additional non-functional requirements.

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API	Application Programming Interface
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