Software Requirements Specification

for

Recipe Buddy

Version 1.0.8 approved

Prepared by Andy Mahoney, Austin Dykeman, Michael Shea, Noah Lampron, & Tyler Neese

gOatmeal™

Oct. 6, 2019

Table of Contents

4.	troduction	4
1.1	Purpose	4
1.2	Document Conventions	4
1.3	Intended Audience and Reading Suggestions	4
1.4	Project Scope	4
	References	
	verall Description	
2.1	Product Perspective	5
2.2	Product FeaturesUser Classes and Characteristics	5
2.4	Operating Environment	6
2.5	Design and Implementation Constraints.	ნ
2.6		0
	Assumptions and Dependencies	
პ. აე	/stem FeaturesError! Bookmark n	5
3.1 2.2	System Feature 1 Error: Bookmark n	ot defined.
	System Feature 2 (and so on) Error! Bookmark n	
4. EX	cternal Interface Requirements	8
	User Interfaces	
4.2	Hardware Interfaces	11
4.3	Hardware InterfacesSoftware Interfaces	11 11
4.3 4.4	Hardware InterfacesSoftware InterfacesCommunications Interfaces	11 11 11
4.3 4.4 5. O t	Hardware InterfacesSoftware InterfacesCommunications Interfacesther Nonfunctional Requirements	11 11 11 12
4.3 4.4 5. O t 5.1	Hardware InterfacesSoftware InterfacesCommunications Interfacesther Nonfunctional Requirements	11 11 11 12
4.3 4.4 5. O t 5.1 5.2	Hardware Interfaces Software Interfaces Communications Interfaces ther Nonfunctional Requirements Performance Requirements Safety Requirements	11 11 11 12 12
4.3 4.4 5. Ot 5.1 5.2 5.3	Hardware Interfaces Software Interfaces Communications Interfaces ther Nonfunctional Requirements Performance Requirements Safety Requirements Security Requirements	11 11 11 12 12 12
4.3 4.4 5. Ot 5.1 5.2 5.3 5.4	Hardware Interfaces Software Interfaces Communications Interfaces ther Nonfunctional Requirements Performance Requirements Safety Requirements Security Requirements Software Quality Attributes	
4.3 4.4 5. Ot 5.1 5.2 5.3 5.4 5.5	Hardware Interfaces Software Interfaces Communications Interfaces ther Nonfunctional Requirements Performance Requirements Safety Requirements Security Requirements Software Quality Attributes Business Rules	
4.3 4.4 5. Ot 5.1 5.2 5.3 5.4 5.5	Hardware Interfaces Software Interfaces Communications Interfaces ther Nonfunctional Requirements Performance Requirements Safety Requirements Security Requirements Software Quality Attributes Business Rules Ey Milestones	11 11 12 12 12 12 12 12 12
4.3 4.4 5. Ot 5.1 5.2 5.3 5.4 5.5 6. Ke 7. Ke	Hardware Interfaces Software Interfaces Communications Interfaces ther Nonfunctional Requirements Performance Requirements Safety Requirements Security Requirements Software Quality Attributes Business Rules Ey Milestones Ey Resource Requirements	11 11 12 12 12 12 12 12 12 13
4.3 4.4 5. Ot 5.1 5.2 5.3 5.4 5.5 6. Ke 7. Ke	Hardware Interfaces Software Interfaces Communications Interfaces ther Nonfunctional Requirements Performance Requirements Safety Requirements Security Requirements Software Quality Attributes Business Rules ey Milestones ey Resource Requirements ther Requirements	
4.3 4.4 5. Ot 5.1 5.2 5.3 5.4 5.5 6. Ke 7. Ke 8. Ot	Hardware Interfaces Software Interfaces Communications Interfaces ther Nonfunctional Requirements Performance Requirements Safety Requirements Security Requirements Software Quality Attributes Business Rules Ey Milestones Ey Resource Requirements	11 11 12 12 12 12 12 12 12 13 14 14

Revision History

Name	Date	Reason For Changes	Version
Tyler	9/16/19	Started a rough draft of the requirement document	1.0
Tyler	9/18/19	Added more to section one of the document	1.0.1
Tyler	9/23/19	Added some info to section 2 and added some descriptions of features in section 3	1.0.2
Tyler	9/23/19	Filled out parts of section 4 and started section 5	1.0.3
Austin	9/28/19	Filled out all of section 2	1.0.4
Tyler	9/30/19	Added more of the core features in section 3	1.0.5
Austin	10/05/1 9	Parts of 4, and 5 & Sections 7, and 9	1.0.6
Tyler	10/6/19	Added more features to section 3, completed section 4, and completed section 10.	1.0.7
Noah	10/6/19	Completed section 8	1.0.8

1. Introduction

Purpose

Recipe Buddy is a website whose main function is to allow users to create, view, and follow other recipes on the website. The website will also be able to search through a database of recipes by tags indicating certain characteristics about the recipes and will also be able to store a grocery list of items that the users would need in order to make their recipes.

Document Conventions

The document is written in Arial font size 11. Sections are made bold in order to make them stand out.

Intended Audience and Reading Suggestions

This document is intended to be used by developers of the software as well as users and testers of the software. This SRS contains the standard format and includes an overall description of the software, requirements it needs to meet, key milestones in the development process as well as a documentation of the edits made along the way.

Project Scope

Recipe Buddy is a website that aims to improve the cooking experience of its users by making viewing and creating recipes fluid and easily accessible. Recipe Buddy attempts to seamlessly integrate viewing many other users' recipes and following along with recipes a user makes themselves or finds online. Users should also be able to sort and navigate the website easily in order to find recipes that appeal to their specific needs.

References

There are currently no references.

2. Overall Description

Product Perspective

RecipeBuddy is a self-contained website that is free to use. It will be a brand-new website that is not a part of a larger project. Our goal is to provide users with the ability to find and use recipes. RecipeBuddy has a database to store recipes in.

Product Features

The main features and functionalities of RecipeBuddy are listed below:

- > Adding a recipe. (Added recipes will enter the database for all to see).
- > Editing a recipe.
- > Deleting a recipe.
- > Step-by-step instruction for cooking, called the Cook mode.
- > Timer feature available during Cook mode, use is optional to user.
- > Shopping list of ingredients.
- > Ability to see all information on recipe.
- > Upload pictures to recipes.
- > Infinite Scrolling.
- > Tags are preloaded to recipes, and users have the ability to add their own tags.
- > Sort through recipes by name, tag, ingredients, calories, and more.

Any of these features can be used in the website.

For more detailed information, see Part 3 of the document.

User Classes and Characteristics

RecipeBuddy anticipates a couple of different types of users:

1. General users who can use the software casually. These users want to find something to cook. The following features are what we believe these users will us the most:

Sort and search

Cook mode, with timer

Adding tags to recipes

2. Professional users who expect easy to use features. These users will add the most to the recipe list. The following features are what we believe these users will us the most:

Add, edit, and delete

Cook mode, with timer

Uploading pictures

Adding tags to recipes

The professional users are more favored because they will be adding to the recipe database, while casual users will be the bulk of the traffic for RecipeBuddy. As such, most features are tailored

Software Requirements Specification for gOatmeal Page 6

toward the professional users. Though we expect not both groups to want ease of use for most features.

Operating Environment

RecipeBuddy is a website designed the desktop version of Firefox, specifically version 69.0.1. Since this is the case RecipeBuddy will work on most OS's, while the only hardware requirements are the ability to open and view websites. Also, a working gpu, to see images.

Design and Implementation Constraints

RecipeBuddy is written in html, CSS, and JavaScript for the website, and SQL for the database. The database will be used to store recipes.

User Documentation

There is no user documentation. RecipeBuddy is designed to be as simple to use as possible.

Assumptions and Dependencies

A running Firefox browser and connection to the internet.

3. System Features

Ability to Add Recipes

3.1.1 Description and Priority

This feature will allow users to add new recipes to the website. It is of High priority and is one of the required features of the finished website. This feature needs to be implemented for the website to function correctly, so it is one of the first features to add.

3.1.2 Stimulus/Response Sequences

The user will press button on the website which will allow them to create a new recipe on a new page. The website will give several blank boxes for the user to fill out, labeled with the category the user is filling out. Once the user is finished with their recipe, they will be able to push another button in order to upload the new recipe to the site.

3.1.3 Functional Requirements

There needs to be a button on the website that allows the user to publish a new recipe. It should bring them to another page that contains several fields detailing what information the user should enter into the fields in order to complete there recipes.

REQ-1: Add Recipes

Infinite Scrolling.

3.2.1 Description and Priority

This feature will allow the user to view new recipes infinitely by scrolling to the bottom of the page over and over again and continuing to have new recipes load at the bottom of the page. This is a feature of high importance and was specifically requested by the customer. This feature doesn't affect the success of any of the other features, but it is still of high importance.

3.2.2 Stimulus/Response Sequences

The user would view all the recipes currently displayed by the screen by scrolling to the bottom of the page, then once the website sees that the user is at the bottom of the page, it will automatically load more recipes allowing the user to continue scrolling and viewing more recipes.

3.2.3 Functional Requirements

The website needs to be able to continuously detect if the user is at the bottom of the page or not and if they are, then automatically load more recipes. This might require the use of libraries in order to make this easier. The website needs to also retrieve these recipes from a database that stores all recipes entered on the site.

REQ-2: Infinite Scrolling

Ability to Delete Recipe

3.3.1 Description and Priority

This feature will allow the user to delete recipes that they have created. This feature is of high priority because it is required to make the website function smoothly. The users should be able to select a button that will allow them to delete recipes that they have created permanently from the database. This feature has a benefit of 9, a penalty of 1, a cost of 3 and a risk of 1.

3.3.2 Stimulus/Response Sequences

The user should be able to press a button that will allow them to delete the recipe they are currently viewing. Once they select the delete button there should be a pop-up window that confirms that they are sure they want to permanently delete the recipe.

3.3.3 Functional Requirements

There needs to be a button on the website that is clearly marked "Delete" and once pressed allows the user to delete a recipe permanently from the website. There should be a confirmation pop up box that allows users to confirm that they want to delete the selected recipe and once they have confirmed it, there must be code that allows the website to find the selected recipe in the database and permanently remove it.

REQ-3: Delete Function

Ability to Edit Recipe

3.4.1 Description and Priority

This feature should allow the user to edit all parts of an already created recipe then upload the changes to the database. The user should be able to change the descriptions of steps, add or delete new steps, as well as change timers in the recipe. This is a medium priority for the project.

3.4.2 Stimulus/Response Sequences

The user should be able to press a button on the website that allows them to edit a recipe. It should then show the user a outline of the recipe and allow them to edit the descriptions of each step as well as timers and tags on the recipe.

3.4.3 Functional Requirements

The website should have some form of gui that allows the user to see there completed recipe as well as alter the features of it. The website should then take the new data and add it to the database while removing the old data. The website needs to be able to add and remove data from an existing recipe in the database.

REQ-4: Edit Function

Software Requirements Specification for gOatmeal Page 9

Online Shopping Cart

3.5.1 Description and Priority

This feature will allow a user to add ingredients to a shopping cart in order to remember what they need for recipes they plan to cook. The user should be able to manually add and delete ingredients from the shopping cart and ingredient options will be pulled from a list stored on the database. This feature is of medium importance because it is not crucial to the success of the website, but the client specifically said they wanted this feature.

3.5.2 Stimulus/Response Sequences

The user should be able to press a button on the website that indicates it leads to the shopping cart and then be taken to a different page which features the functioning online shopping cart. This page should show them items currently in their shopping car with a option to delete them and also a add section in order to add new recipes to the shopping car. If a user frequently visits the same recipe the website should automatically add those ingredients to a shopping cart.

3.5.3 Functional Requirements

The website needs to have a functioning and intuitive interface in order to make navigating to and from the shopping cart as easy as possible. The shopping cart feature also needs a functioning database in order to store a user's ingredients as well as hold a list of ingredients that the user can pick from to add to their shopping cart.

REQ-5: Shopping Cart

Tags

3.6.1 Description and Priority

This feature will allow a user to label their own recipes with tags to make them easy to characterize. There will be several different tags to choose from in order to properly characterize the user's recipe. These tags will appear next to the recipe when viewing many recipes so that it will be easy for a user to find a recipe that is best for them. This feature is of medium priority because it is not essential, but it would be a nice feature to have.

3.6.2 Stimulus/Response Sequences

The user will be able to select tags for their recipe when they are adding a new recipe or editing a recipe. A tag should visibly change when it has been selected in order to indicate that the user has already selected that tag for the current recipe.

3.6.3 Functional Requirements

The tags require a functioning database in order to store a list of tags for each recipe as well as the list of optional tags to choose from. It also requires a easy to interpret user interface so users are aware of how to add tags. The website should also prompt the user to add a tag to a recipe if they have not already done so and are trying to upload their completed recipe.

REQ-6: Tags

Software Requirements Specification for gOatmeal Page 10

Search

3.7.1 Description and Priority

This feature will allow the user to search through the entire database of recipes in order to find a recipe closest to what they are looking for. The user should be able to give key words or phrases that help identify which recipes to display. This feature is of low priority because the customer didn't need it and said it would be nice to have if possible.

3.7.2 Stimulus/Response Sequences

When the user enters a keyword or phrase the website should search through the database and find recipes that most closely match these keywords and phrases. It should also automatically filter out the recipes that do not match the selected keywords.

3.7.3 Functional Requirements

The website must contain a method to search through the database and select recipes that match a selected keyword entered by the user. It should be able to sort correctly between matching and not matching recipes. Also, the website should have a good graphical interface in order to display the chosen recipes.

REO-7: Search Feature

Cook Feature

3.8.1 Description and Priority

This feature will allow the user to follow a step by step instruction sequence on how to cook a recipe of their choosing. The user should be able to cycle through the steps required to cook the recipe and also use timers built into the website, view ingredients, and choose a serving size which will alter the required amount of each ingredient. This is a high priority requirement because it was specifically requested by the customer and would be a feature that isn't critical to the website but is very important in order to make a useful recipe website.

3.8.2 Stimulus/Response Sequences

When the user selects the "Cook" button on a recipe the website should take them to another page that asks them to select a serving size and then brings them to the first step of making the recipe. Each step of the recipe should include a timer if the user chose to include one as well as the instructions, ingredients, and a button to go to the next step and a button the return to the previous step.

3.8.3 Functional Requirements

The website needs to have a good graphical interface in order for the user to easily go from step to step and see all the necessary information for each step such as ingredients, timers, and detailed instructions for the step.

REQ-8: Cook Feature

4. External Interface Requirements

User Interfaces

The website will have modern and minimalistic look to it. It will have the name RecipeBuddy at the top of the screen as well as a small toolbar that has the options to add, delete, view and edit recipes as well as access other features such as a virtual shopping cart built into the website. Below the toolbar, the website will display other users' recipes and allow the user to infinitely scroll and continue to view recipes. If the user clicks on a recipe it will pop out and show a textbox with a brief description of the recipe. Below each of the recipes there will be some small bubbles that are filled with tags that the users entered in order to describe their recipes to others.

Hardware Interfaces

A working computer that can support the latest versions of Firefox browser.

Software Interfaces

RecipeBuddy requires the latest version of Mozilla Firefox to run which is version 69.0.2. It also requires any operating system that is capable of running the latest version of Mozilla Firefox since the website is intended to function on the latest version of Mozilla Firefox.

Communications Interfaces

This website should be designed to work on the Mozilla Firefox browser and does not need to send data to other websites. It should only communicate with the user's browsers as well as its own database.

5. Other Nonfunctional Requirements

Performance Requirements

The user's machine must be able to run a modern website that does not contain any extremely hardware reliant software. The website should be accessible to everyday normal people that enjoy cooking and easily searching for new recipes. It should not be difficult or counter intuitive to navigate and should be execrable to people that are not tech savvy.

Safety Requirements

There are currently no safety requirements.

Security Requirements

There are currently no security requirements.

Software Quality Attributes

The website software should run smoothly without giving any reason for concern to the user which includes minimizing bugs and other issues. It should also be intuitive and easy to use for anyone even people that are not great at using computers. It should continue to run without needing to be monitored every day and should continue to allow users to add recipes and view new recipes in the future.

Business Rules

There is no need to restrict access to any functions. All users can currently use any function they desire.

Software Requirements Specification for gOatmeal Page 13

6. Key Milestones

#	Milestone	Target Completion Date	Comments
1.	SRS Document	10/6	First version is done
2.	SDD Document	11/8	Will wait until we know what this is.
3.	GUI & Website	Date Pending	Mockup of GUI is done.
4.	Database	Date Pending	People are assigned.
5.	Syncing Database with Website	Date Pending	People are assigned.
6.	Implement Features	Date Pending	People are assigned.
7.	Infinite Scrolling	Date Pending	People are assigned.
8.	Final Deliverable	12/16	The final deadline for RecipeBuddy

7. Key Resource Requirements

Major Project Activities	Skill/Experti se Required	Internal Resource	External Resource	Issues/Constr aints
Implement Features	JavaScript, Html	General Knowledge	Internet	Potential Schedule Conflicts
Database	SQL	Someone is Learning	Internet	Potential Schedule Conflicts
Infinite Scrolling	How to do it, JavaScript, Html	Someone is Learning	Internet	Potential Schedule Conflicts
GUI	Html, CSS	General Knowledge	Internet	Potential Schedule Conflicts
Syncing Database with Website	How to do it, JavaScript, Html, SQL	Someone is Learning	Internet	Potential Schedule Conflicts

8. Other Requirements

A database for Recipe Buddy requires a server-side implementation that will store recipes and use information for the website. It will be constructed using MySQL. It should be able to store the following information

Recipes: ID, Name, Steps, Ingredients, Calories, Time to cook, Date last accessed

The server will be running on a Linux platform. The interaction between the database and the website will be handled using PHP.

9. Requirement Change Management

Changes will be decided based on the customers' demands, and when 3 or more team members make agree with a change.

10. Restrictions, Limitations, and Constraints

This website must be completed by December 16th with no exceptions. It will not be possible to get more time in order to finalize some details so we must prepare to have the website completed by this date.

Appendix A: Glossary

GUI stands for graphical user interface

Appendix B: Analysis Models

<Optionally, include any pertinent analysis models, such as data flow diagrams, class diagrams, state-transition diagrams, or entity-relationship diagrams.>

Appendix C: Issues List

< This is a dynamic list of the open requirements issues that remain to be resolved, including TBDs, pending decisions, information that is needed, conflicts awaiting resolution, and the like.>

Appendix D: System Traceability Matrix

<A matrix that traces stated software requirements back to the system specification.>