



REQUIREMENTS DOCUMENT

GROUP 1

GROUP 1 - SHAREABITE

Introduction:

List all sections and subsections that are defined as expected deliverables from the requirements document available in course content with corresponding page numbers.

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Requirements Document - ShareABite

Document Details

Document Information

Assigned to: Princess Emmanuel

- **Introduction:** Provide details like the document owner, issue date, last saved date, and file name.

Document Owners:

Kuldeep Mohanta
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Issue Date:

2024-06-02

Last Saved Date:

2024-06-15

File Name:

"Phase 2 - Requirements Document.docx"

Document History

Introduction:

Track changes made to the document, including version number, date, and a brief description of changes.

Version Number	Date	Description
1	2024-06-02	Local Document was created when the Assignment was announced
2	2024-06-10	Group Discussion / Meeting was had to assign roles on which components each member had to do
3	2024-06-11	Cloud-based Doc was created to allow all members to contribute to their section of the document
4	2024-06-12	The document was formatted to contain all components of the initial Requirements Document outline given from the Course Content
5	2024-06-15	Final Revisions done to the cloud document before downloading for submission

Document Approvals

Project Plan Information

"Phase 1 - Project Plan V2.docx"

Started: May 31st, 2024

Completed with Final Team Revisions: **June 1st, 2024**

"Phase 2 - Requirements Document.docx"

Started: June 13th, 2024

Completed with Final Team Revisions: **June 15, 2024**

Project Overview

ShareABite helps plan meals, find recipes, and track nutrition. It makes cooking easier by offering recipes that fit specific diets and encourages sharing recipes and cooking tips. ShareABite is great for busy people who want to eat better. It encourages healthier eating habits and reduces food waste by suggesting smart meal planning and using ingredients wisely. It helps users make smarter food choices and supports eco-friendly cooking practices.

ShareABite also helps users monitor their nutrition by providing detailed information about each recipe's calories, protein, fat, and carbs. This is especially helpful for people with specific health goals, such as losing weight, building muscle, or managing their diet.

The app is easy to use and provides a variety of meals/recipes to fit anyone's needs, making it a great tool for inspiring cooking skills and improving current meal habits. Whether you're a pro in the kitchen or just starting out, ShareABite gives you the support and resources to make delicious and healthy meals easily.

Project Scope

Project Scope:

The "**ShareABite**" application aims to be an interactive desktop browser application for meal planning and finding recipes. The app will help users discover new recipes and plan meals while tracking their nutrition according to their personal preferences.

Inclusions:

- **User Authentication and Profile Management:** Secure login and registration features and personalized user profiles.
- **Recipe Database:** A vast collection of recipes with advanced search and filtering options based on dietary preferences.
- **Meal Planning:** Tools for users to plan meals, including automated generation of grocery lists for selected meals.
- **Nutritional Tracking:** Features to view and track the nutritional information of meals.
- **Responsive Design:** Ensuring the application is optimized for use on various desktop browsers such as Chrome and Safari.

Exclusions:

- **Mobile Application Development:** The current scope does not include creating a mobile app version of the platform.
- **Community Interaction:** Social features allow users to share their recipes and meals, fostering community engagement.
- **Advanced Personalization Algorithms:** No complex machine learning algorithms are implemented for personalized recipe recommendations.
- **Integration with External APIs:** Limited to basic functionalities without extensive third-party service integrations.

Stakeholder Analysis

Introduction:

The stakeholder analysis identifies and analyzes the key individuals and groups that have an interest in the ShareABite project. This section outlines the roles and responsibilities of each stakeholder, ensuring effective communication and engagement throughout the project lifecycle. Understanding stakeholder needs and expectations is crucial for the successful development and implementation of the application.

1. Users (End Users):

- **Role:** The primary users of the meal planning application or service.
- **Responsibilities:** Provide feedback on usability, features, and overall satisfaction. Use the application as intended.
- **Communication:** Surveys, user feedback forms within the application, focus groups, and possibly user interviews for in-depth insights. Regular updates via email or in-app notifications about new features or changes.

2. Development Team:

- **Role:** Design, develop, and maintain the meal planning application or service.
- **Responsibilities:** Translate user needs into technical requirements, build and test features, ensure the application runs smoothly, and address technical issues promptly.
- **Communication:** Daily stand-up meetings for progress updates, weekly or bi-weekly sprint meetings, task management through tools like Jira or Trello, and regular status reports to stakeholders via email.

3. Project Sponsor:

- **Role:** Provides strategic direction and oversees the project's alignment with business goals.
- **Responsibilities:** Monitor project progress, mitigate risks, and ensure the project meets objectives.

- **Communication:** Monthly or bi-monthly status meetings to review progress, budget updates, and milestone achievements. Detailed project reports and financial summaries delivered via email or presented in meetings.

Functional Requirements

Introduction:

The following are detailed functional requirements for the "ShareABite" Recipe and Meal Planning Application. These requirements outline the essential functionalities needed to achieve the project's objectives. User stories are provided to illustrate these functionalities.

- **User Registration and Authentication:**
 - **Requirement:** The application must allow users to register with a unique username and password.
 - **User Story:**
 - *User Story:* "As a user, I want to register an account so that I can save my meal plans and recipes."
- **Profile Management:**
 - **Requirement:** Users should be able to manage their profiles including updating personal information and setting dietary preferences.
 - **User Story:**
 - *User Story:* "As a user, I want to update my dietary preferences so that I receive suitable recipe recommendations."
- **Advanced Recipe Search and Filtering:**
 - **Requirement:** The application must provide advanced search and filtering options to help users find recipes based on ingredients and meal types.
 - **User Story:**
 - *User Story:* "As a user, I want to search for recipes using specific ingredients to find meals I can make with what I have."

- **Meal Planning and Grocery List Generation:**
 - **Requirement:** Users should be able to plan meals for a specified period and generate a corresponding grocery list.
 - **User Story:**
 - *User Story:* "As a user, I want to plan my meals for the week and generate a grocery list to streamline my shopping."

Non-Functional Requirements

Introduction:

The non-functional requirements for the ShareABite website ensure that the application meets performance, security, and usability standards. These requirements are crucial for providing a seamless user experience and maintaining the overall quality of the application.

Security

- Implement CAPTCHA to verify human activity during sign-ups and orders, preventing automated attacks and spam.

Scalability

- Ensure the website scales appropriately based on screen size, providing an optimal user experience on various devices, including desktops, laptops, and tablets.

Performance

- Optimize loading times to ensure that each page or component loads within a maximum of 5 seconds to achieve near-instantaneous load times wherever possible.

Assumptions and Constraints

Introduction:

The assumptions and constraints section outlines the foundational assumptions made during the requirements gathering process and identifies any constraints that may impact the ShareABite project. Understanding these assumptions and constraints is essential for setting realistic expectations and planning effectively. This section helps in identifying potential risks and ensuring that the project stays within defined boundaries.

Assumptions:

1. Users will access the application via modern desktop browsers (e.g., Chrome, Safari).
2. Nutritional data for recipes and grocery lists will be sourced from a MongoDB database populated by user entries or pre-seeded data.
3. Users are comfortable with basic digital navigation and have a moderate level of technical literacy.
4. Stakeholders will provide timely feedback and approvals leading to smooth progress and contributing to the project timeline.
5. The project will not face significant budget constraints allowing for the use of necessary development and project management tools.

Constraints:

1. **Budget Constraint:** The work must be done within the allocated budget, which limits the ability to utilize expensive equipment and services.
2. **Security Constraint:** Applications must adhere to best security practices, including HTTPS, data encryption, and secure authentication methods.
3. **Resource Constraint:** The development team has members with varying levels of expertise, which can impact the pace of the development process.

Requirements Section

Requirements Traceability Matrix

Assigned to: Princess Emmanuel

- **Introduction:** Create a table that links each requirement to its source (e.g., "User interview") and the project objectives.

Requirement	Source	Project Objectives
Weekly Meal Planner	User Feedback	Develop a user-friendly meal planning tool and provide structured meal organization
Ingredient list	User Feedback	Develop a user-friendly meal planning tool, enhance meal preparation efficiency
Cooking instructions	Culinary Expertise	Provide cooking guidance
Seasonal menu suggestions	User Feedback	Provide seasonal variety and inspiration

Requirements Management Plan

Assigned to: Kuldeep Mohanta & Jiabao Wu

- **Introduction:** Outline how changes to requirements will be managed (e.g., "Changes will be reviewed weekly"). Describe tools and techniques for tracking requirements (e.g., "Using Trello for tracking").

Managing Changes to Requirements:

1. Define how Changes are Managed / Processed:

- Establish a formal process for requesting, evaluating, and approving changes to requirements. This could involve a change request form or a designated channel (e.g. email, project management tool, etc).

Designated Channel: Submit and track change requests using a project management tool (e.g., Trello). This centralizes communication and ensures transparency.

- Creating Card(s) within Trello that further focuses on independent areas of the application (homepage PHP, SQL scripts, etc.) and highlights attention to current development progress, bug highlighting, and approving new changes/modifications to existing requirements if necessary.

2. **Approval Authority:**

Clearly define who can approve changes within our team so there is a clear approval process, and the project's scope does not underdeliver or overcomplicate the application.

- **Project Leader (Kuldeep Mohanta):** Responsible for initial assessment, defining the expectations needed by the team/application, and preparing and planning the development process to meet those expectations.

3. **Change Implementation:**

Once approved, changes should be:

- **Documented:** Update all relevant project documents to reflect the approved change.
- **Communicated:** Inform all team members and stakeholders about the change and its implications.
- **Implemented:** Integrate the change into the project plan and adjust tasks, schedules, and resources as needed.

Tools and Techniques for Tracking Requirements:

1. Tools and Techniques for Tracking Requirements:

- Using collaborative platforms like **Microsoft Teams** for real-time discussions on requirement changes and updates.
- **Trello**
 - The previous functionality is supported by using Trello to manage the overall progress of development, monitor bug(s), and discuss how to achieve the functionality defined within our application proposal.

2. Regular Review:

Schedule regular meetings using **WhatsApp** or **in person (during class time)** to review upcoming deliverables, check in on progress on current development components, and review concerns (on a priority basis) on the project as a whole.

Appendix

Assigned to: James Swaine

- **Introduction:** The appendix contains additional supporting materials that provide further clarification and context for the requirements and design of the ShareABite application.

This section includes various definitions that support the main document, offering detailed insights and supplementary information essential for the project's development and management.

Supporting Materials	Description
Shopping lists	Individual recipe cards for each meal included in the plan, featuring ingredients, instructions, and nutritional details.
Cooking Tips and Techniques	Tips on meal preparation, cooking techniques, and storage recommendations.
Sample Menus	Example meal plans for different dietary preferences
Health Guidelines	Guidelines for achieving balanced nutrition and meeting dietary recommendations
User Feedback	Forms or surveys for users to provide feedback on the meal planning document and recipes.
Trello	A collaborative platform used for project management, task tracking, and organizing project activities.
Project Sponsor	The individual or group that provides the financial resources and support for the project.
Development Team	The group of individuals responsible for designing, coding, testing, and implementing the project.
Project Scope	A detailed definition of the project's boundaries, including what is included and excluded from the project.
Stakeholder Analysis	The process of identifying and analyzing the roles and interests of individuals or groups with a stake

	in the project.
Functional and Non-Functional Requirements	Functional requirements define what the system should do, while non-functional requirements specify how the system performs certain functions.
Requirements Traceability Matrix	A table that links requirements to their source and project objectives, ensuring all requirements are addressed.