INTERNATIONAL ISLAMIC UNIVERSITY,ISLAMABAD

SOFTWARE REQUIREMENTS SPECIFICATIONS
(SRS DOCUMENT)

For

"Recipe Management System"
Version 1.0

By

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1. Introduction

1.1 Purpose

The Recipe Management System (RMS) version 1.0 provides users with a user-friendly platform to store, browse, and share their favorite recipes. This initial release focuses on core functionalities, allowing users to easily add, edit, and search for recipes within a centralized digital cookbook. The system lays the foundation for future enhancements to improve meal planning, ingredient management, and social sharing capabilities.

1.2 Document Conventions

No special typographical conventions are used in this SRS.

1.3 Project Scope

The RMS is designed to help users efficiently store, organize, share, and access their collection of recipes. A detailed description of the system's purpose, features, and planned development is available in the Recipe Management System Vision and Scope Document.

1.4 References

1.https://krazytech.com/projects/sample-software-requirements-specificationsrs-report-airline-database
2. https://asana.com/resources/software-requirement-document-template
3. https://youtu.be/KUcAClem3V4?si=uc6YHMWxuZT6mhmo
4. **http://www.processimpact.com/norm_kerth.html**

2. Overall Description

2.1 Product Perspective

The Recipe Management System (RMS) is a new software application that addresses the evolving needs of modern cooking enthusiasts and professionals. Developed from the ground up, the RMS provides an intuitive and efficient tool for managing culinary creations. Designed to integrate into digital kitchens, the RMS serves as an independent application with the potential for future integrations with food-related software. The primary purpose is to empower users with a centralized platform to store, organize, share, and access their recipe collections, streamlining meal planning and preparation. The context

diagram in Figure C-1 illustrates the external entities and system interfaces for the initial release 1.0.

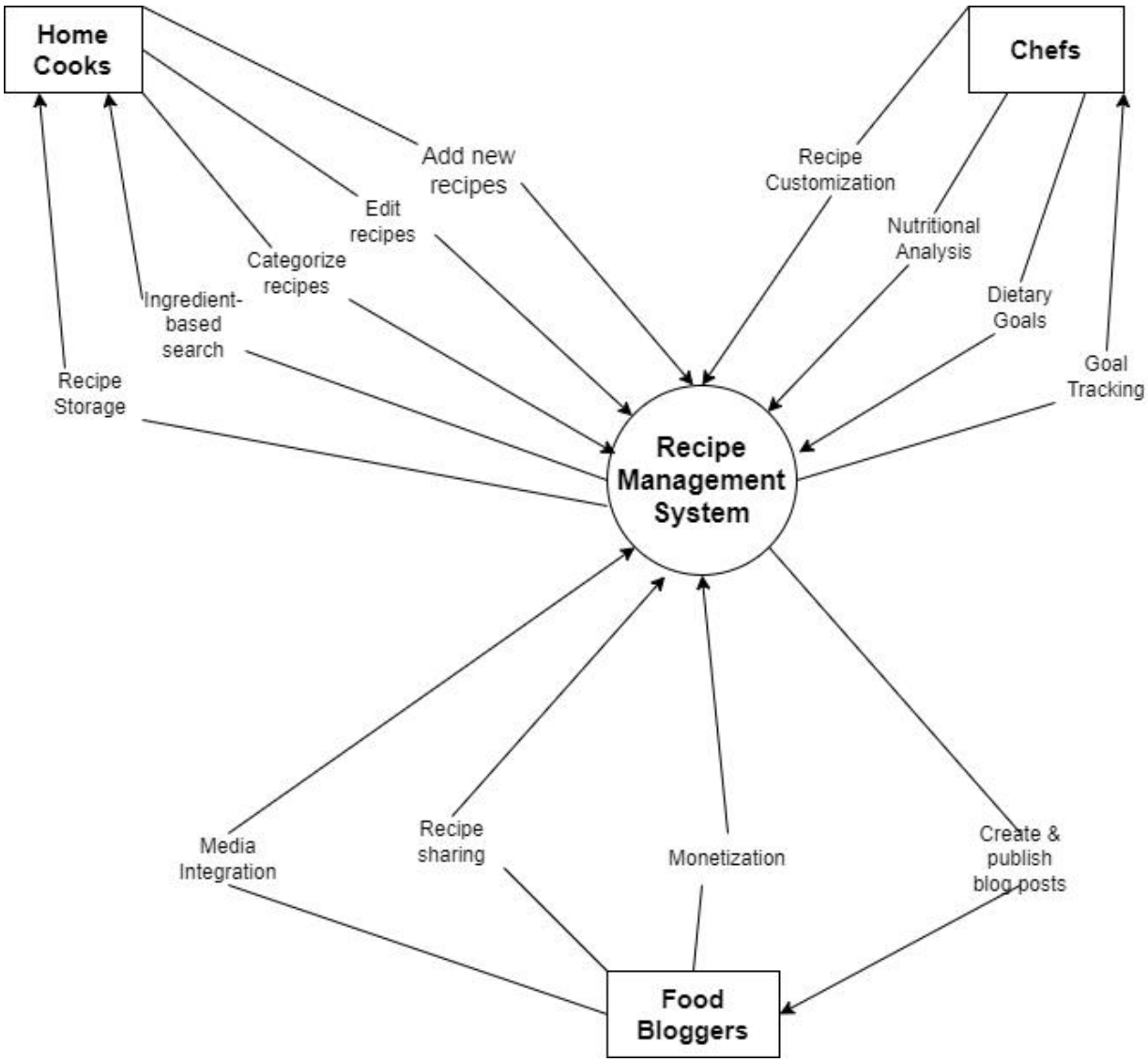

Figure C-1: Context diagram for release 1.0 of the Recipe Management System

2.2 User classes and characteristics

User Class	Description

Home Cook	The home chefs are passionate cooks with diverse culinary preferences who are both creative and time-conscious. They prioritize health and nutrition, while also being technologically savvy, These individuals actively engage with RMS, utilizing features that allow them to edit, add, and categorize recipes according to their preferences. They also enjoy sharing their culinary creations and engaging with fellow cooking enthusiasts.
Chef (favored)	Professional chefs, distinguished by their culinary expertise, excel in customizing recipes to meet diverse dietary goals and preferences. They are also responsible for conducting precise nutritional analyses. Their proficiency in recipe customization, nutritional analysis, and dietary alignment makes professional chefs a favored user class, vital in refining and advancing recipe management systems.
Food Bloggers	Food bloggers leverage social media and digital platforms to seamlessly integrate photos and videos, creating immersive experiences for their audience. They actively engage in recipe sharing to inspire and connect with fellow food enthusiasts.

2.3 Operating Environment

OE-1: The RME shall operate with smart phones and tablets running Android OS versions 5.0 and later and iPhones and iPads running iOS versions 9 and later.

2.4 Design and implementation constraints

CO-1: The development team must use Git as the version control system for managing codebase changes and collaboration.
CO-2: The system must comply with the organization's security policies and standards, including encryption of sensitive data and secure authentication mechanisms.
CO-3: The system architecture must be designed to scale horizontally to accommodate increasing user demand and data volume and ensuring smooth performance.

2.5 Assumptions and dependencies

DE-1: The system requires stable internet connectivity for user access and external data integration. Any disruptions in internet connectivity could impact user productivity and system functionality.

The pertinent information regarding other assumptions and dependencies of the system has been previously detailed in the Vision and Scope document.

3. System Features

The pertinent information regarding the features of the system has been previously detailed in the Vision and Scope document.

4. Data Requirements

4.1 Logical Data Model

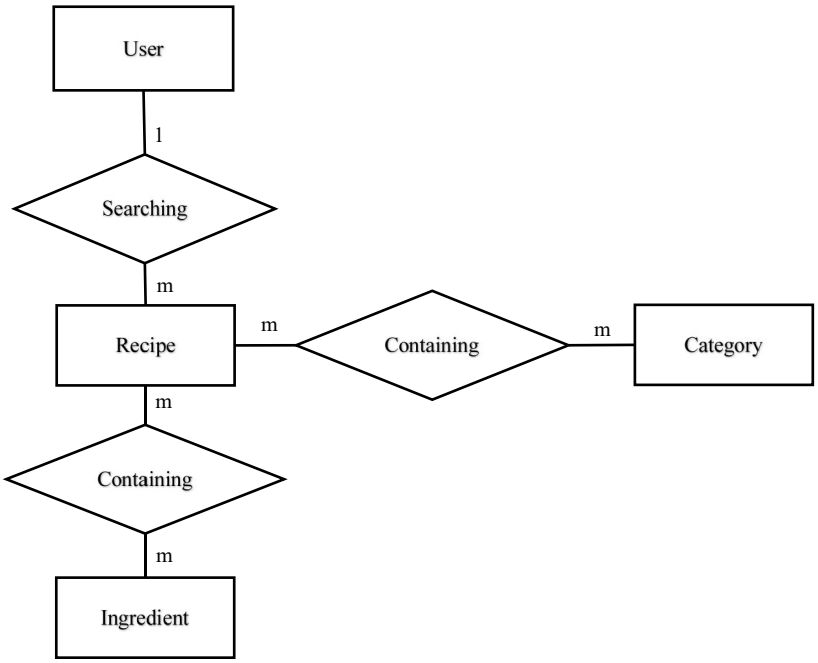

Figure C-2: Partial Data Model For Release 1.0 Of Recipe Management System

4.2 Data Dictionary

Data Element	Description	Composition or Data Type	Length	Values
User ID	Unique identifier for users who	integer	8	

	have signed up			
Grocery Item Unit	Unit of measurement for the grocery item	alphabetic	20	hyphens and commas permitted
Cook Time	Estimated time required to cook the recipe	time, HH:MM	5	

4.3 Report

4.3.1 Seasonal Recipes Report

Report ID	**RMS-RPT-1**
Report Title	Seasonal Recipes Report
Report Purpose	User wants to see a list of all the recipes that are suitable for specific seasons or holidays allowing users to easily identify and select dishes that are appropriate for the current time of the year or upcoming events.
Priority	Medium
Report Users	Users
Data Sources	Recipe Database, User Data
Frequency and Disposition	Report is generated monthly and is available in PDF format. The report is stored in the central document repository and shared with authorized users.
Latency	The report is generated within 24 hours of the end of each month
Visual Layout	Portrait mode
Header and Footer	Report header shall contain the report title, report ID and date range specified. If printed, report footer shall show the page number and date of report generation.
Report Body	Fields shown and column headings: • Recipe ID • Recipe Name • Cuisine(type of cuisine or cultural origin of the recipe) • Difficulty • Prep Time(amount of time required to prepare the ingredients) • Cook Time(amount of time required to actually cook the recipe) • Total Time(overall time required to complete the recipe)

	• Servings Selection Criteria: Cuisine, Dietary Restrictions, Difficulty Level Sort Criteria: Rating, Servings, Cook Time

5. External interface requirements

5.1 User Interface

UI-1: There will be a search bar where user can add key words , ingredients or recipe name to get his desired one.
UI-2: The system shall provide a help link for customer service.
UI-3: The web pages shall permit complete navigation and recipe selection by using the keyboard alone.

5.2 Software interface

SI-1: Database will be cloud based allowing users to save information of the user profile alongside with recipes, shopping list and ingredients.
SI-2: Payment methods shall support both credit and debit card payments for subscription to unlock more features
SI-3: To allow a user to register and deregister for recipe modification and customization.

5.3 Hardware interface

A browser that supports CGI, HTML & JavaScript.

5.4 Communication interface

This project supports all types of web browsers.
CI-1: For bloggers it gonna send email for the approval of his article.
CI-2: The RMS will send an email or text message to user to confirm registration.
CI-3: The RMS will send an email or text message to user to inform about server maintenance.

6. Quality Attributes

6.1 Usability

USE-1: 90% of the new users shall be able to search for a recipe successfully without any error on their first try.

USE-2: The RMS shall allow users to retrieve the saved recipes and customize them according to their interests with a single interaction.
USE-3: The RMS shall remember past searches and saved recipes and recommend suggestions based on those searches and saved recipes on the interface.

6.2 Performance

PER-1: The system shall display search results within 2 seconds of the user entering the information about a certain search.
PER-2: All the web pages should load within 4 seconds from the time the user requests the page with over a 25Mbps or faster internet connection.
PER-3: The system shall display the confirmation message to the user within an average of 3 seconds and a maximum of 7 seconds after the user submits information about a recipe or adds ingredients to the shopping list in the system.

6.3 Scalability

SCA-1: The system shall accommodate a total of 10,000 users and a maximum of 8000 concurrent users during the peak usage time (Meal time) and 10,000 concurrent users during the local time without any degradation in performance.
SCA-2: The RMS should handle large amounts of data including thousands of recipes, user profiles, and saved preferences without any data loss or breakdown of the system.
SCA-3: The system should maintain quick and fast access times, and efficient querying as the amounts of recipes and user interaction grows.