

CookUp SRS Document

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Part A: Requirements Analysis Document

Section 1: Problem Statement

1.1 a) Problem & Need

It can be overwhelming to decide what meal to prepare despite having a variety of ingredients, even for experienced cooks. Moreover, novice cooks may be stumped on how to cook food from their existing inventory of ingredients.

These potential users may be interested in having a solution to overcome this dilemma, this is where “**CookUp**” comes in. Our software system will give users the ability to enter their currently owned ingredients into a digital inventory which will then output recipe suggestions for them to utilize. For instance, a user can add onions, garlic, peas, rice, etc and “**CookUp**” can make suggestions such as fried rice.

1.1 b) List of Capabilities and Benefits

(i) Capabilities

1. Register and store user profile information
2. Allow users to upload/import recipes
3. Allow users to accompany recipe uploads with photos/video
4. Search/Provide recipes using ingredients the user has
5. Allow users to find more information on their ingredients [from the original product website]
6. Allow users to rate recipes
7. Filter suggested recipes using different parameters (preparation time, difficulty, rating)
8. Allow kitchen appliance companies or food companies to offer to popular users to use their products as an advertisement (sponsored/promotional content).

(i) Benefits

1. Provide readily available recipes to users upon request
2. Share original recipes externally from application
3. Save time to think about recipes
4. View popular/trending/sponsored recipes
5. Gives users who aren't familiar/comfortable with cooking more accessibility to the practice

1.2 Identify the stakeholders and their roles

1. Recipe uploaders (consumer users, restaurants, high-profile chefs)
2. People who cook at home / potential users of the application
3. Professional chefs
4. External companies - with this, what we mean is that when a user inputs one of their available items, (such as Tim Horton's coffee ground) it will link that item to the Tim Horton's product website. ----this is an idea, to check with the group (can include google API for when a user adds in the ingredient to guess what uploader is typing)
5. Financial investors/sponsors
6. Administrative / Maintenance/support team

1.3 identify the sub-systems of your application (functional components)

- Registered user login subsystem
- User registration subsystem

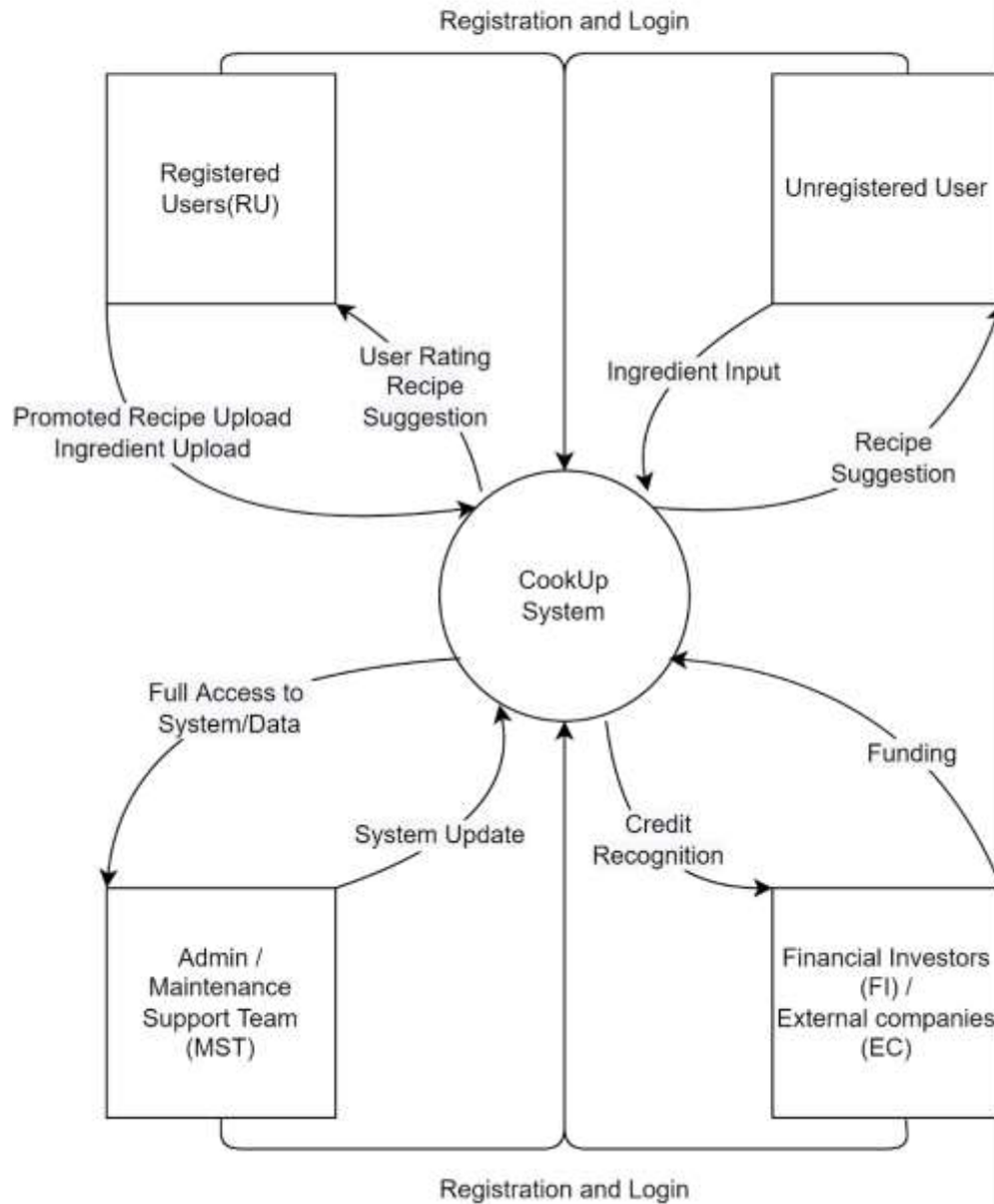
- Recipe search subsystem
- Recipe ratings subsystem
- Recipe upload subsystem
- News feed subsystem
- Ingredient inventory subsystem
- Recipe suggestion subsystem

1.4 who are the intended users of the SRS documentation

- Front End Team
 - Software developers
 - Unit testers
 - Team managers
 - Graphic artist
- Back End Team
 - IT administrators
 - Database administrators
 - Unit Testers
 - Team managers

Section 2: A Context Flow - Structured Modeling

"CookUp" Context Flow Diagram



Section 3: Requirements - functional and non-functional

3.1 Non-functional Requirements

NFR#	Name	Description
NFR001	Efficiency	Requirements of the software system handles capacity, throughput, and response time to request.
NFR002	Security	Requirements of the software system to be able to protect its data, and profile information from internal and external sources.
NFR003	Flexibility	Ability of the software system to adapt to different configurations, and user expectations.
NFR004	Accessibility	Ability of the software to be usable by people that need it, and by people with the widest range of capabilities.
NFR005	Scalability	Ability of the system to expand its processing capabilities upward and outward.
NFR006	Interoperability	Ability of a system to couple or facilitate the interface with other systems
NFR007	Confidentiality	Ability of the system to protect sensitive data from universities, designers, architects, constructors, landowners, Home/place seeker
NFR008	Maintainability	Ability of the faults in the software to be easily found and fixed.

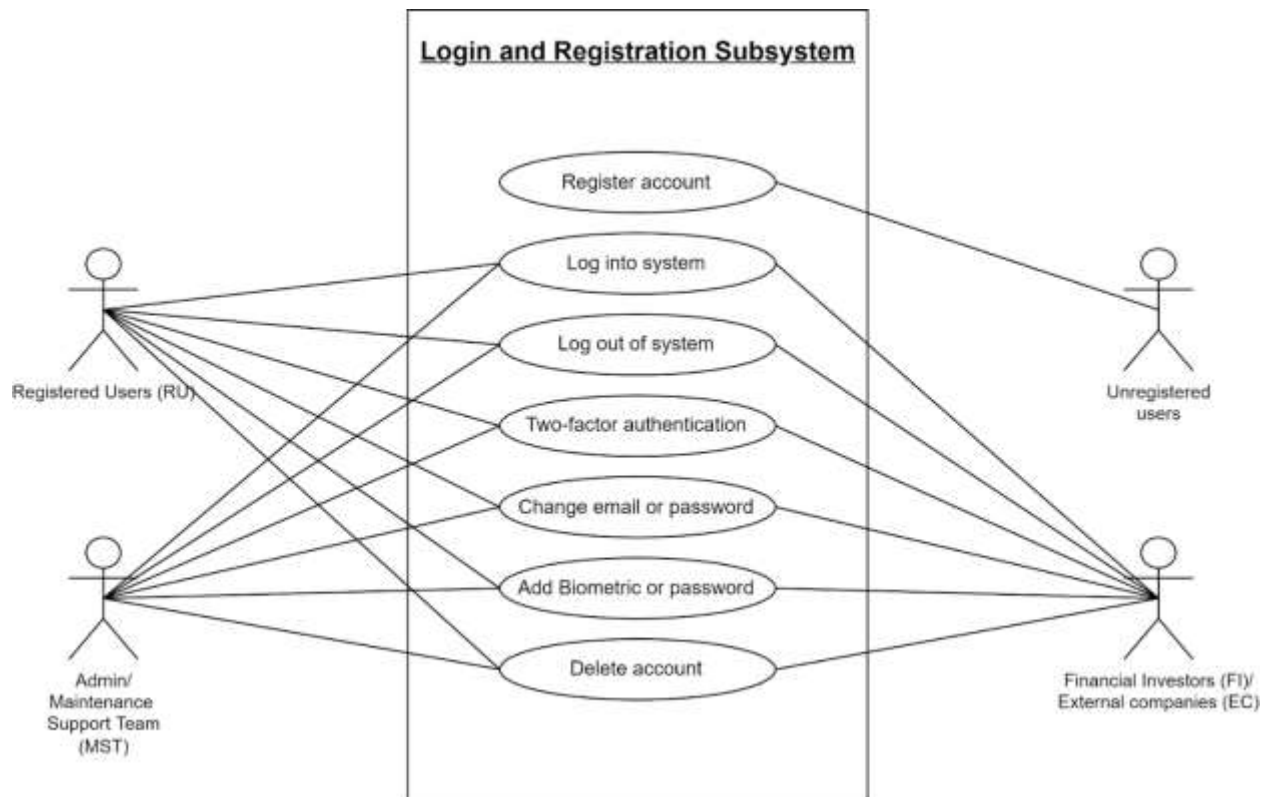
3.2 Functional Requirements

3.2.1 Login and Registration Subsystem

FR#	Name	Role	Description

FR001	Register account	Unregistered users	Allow the user to register for an account by creating a username & password
FR002	Log into system	RU, Admin/MST, CU, FI/EC	Allow the user to enter their username & password to login
FR003	Log out of system	RU, Admin/MST, CU, FI/EC	The user can log out of the system
FR004	Two-factor authentication	RU, Admin/MST, CU, FI/EC	The user will be able to enter their mobile phone number or scan a provided QR code into their authenticator application.
FR005	Change email or password	RU, Admin/MST, CU, FI/EC	Allow logged-in user will be able to change their password
FR006	Add biometric login option	RU, Admin/MST, CU, FI/EC	Give users the option to log in using biometrics such as: fingerprints, face
FR007	Delete account	RU, Admin/MST, CU, FI/EC	Registered users will be able to delete their account from the system

3.2.1.1 Use Case Diagram



3.2.1.2 User Story

1. As a user, I want to create my account so that I can log in to the system.

Acceptance Criteria

Should be able to provide his/her identity by entering:

- First name
- Last name
- Email address
- Physical address
- Username
- Password

2. As a user, I want to log in to my account so that I can access the system as an account holder.

Acceptance Criteria:

- Should be able to access his/her account by entering the Login Email and Login password.

3. As a user, I want to log out from the system so that I can log out anytime I need

Acceptance Criteria:

- Should be able to log out anytime I want by clicking on the logout button.

4. As a user, I want to log in to the system securely so that someone else cannot log into my account.

Acceptance Criteria:

- Should be able to receive an email with a unique numeric code and securely log into my account by entering the code

5. As a user, I want to change my email or password so that I can change my personal information when needed.

Acceptance Criteria:

- Should be able to change my email or password by completing a form.

6. As a user, I want to log in to the system using fingerprints or facial recognition so that I can save time.

Acceptance Criteria:

- Should be able to use a fingerprint or face for login instead of a string password.

7. As a user, I want to delete my account so that my personal information will be deleted from the system.

Acceptance Criteria

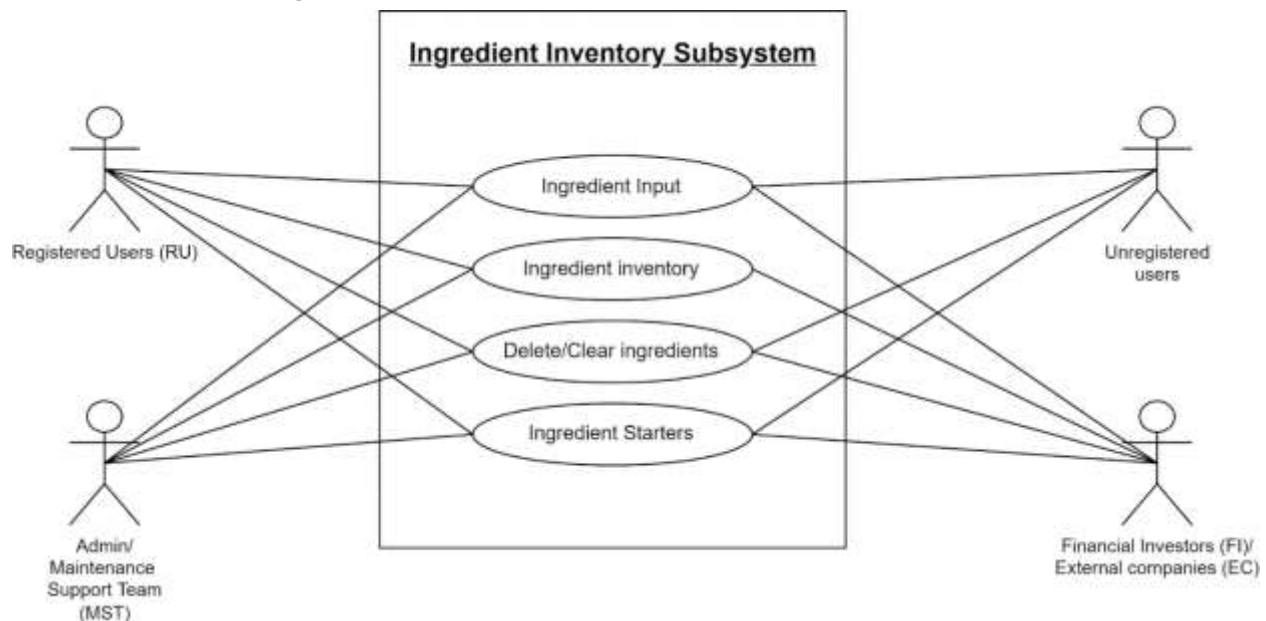
- Should be able to erase all user information from the system.

3.2.2 Ingredient Inventory Subsystem

FR#	Name	Role	Description
FR008	Ingredient input	All users	All users will be able to enter their ingredient items into the system

FR009	Ingredient inventory	RU, Admin/MST, CU, FI/EC	Registered users will be able to save their ingredients for persistent cross-platform sessions
FR010	Delete/Clear ingredient(s)	All users	Allow the user to delete a single ingredient or their entire inventory
FR011	Ingredient starters	All users	The system will suggest common/popular ingredients to help the user get started

3.2.2.1 Use Case Diagram



3.2.2.2 User Story

1. As a user, I want to input ingredients into the ingredients list, so I can get recipes.

Acceptance Criteria:

- Should be able to input ingredients into the list.
- Should be able to store ingredients from the list.

2. As a user, I want to save my inputted ingredients so that I can use it again next time.

Acceptance Criteria:

- Should be able to save my previously inputted ingredients by clicking the “save” button.

3. As a user, I want to remove an ingredient so that I can update my list.

Acceptance Criteria:

- Should be able to delete one or more ingredients from the list by clicking the remove button.
- Should be able to delete the recipe by swiping on the ingredient.

4. As a user, I want to have basic ingredients suggested to me so that I can get assistance in the beginning.

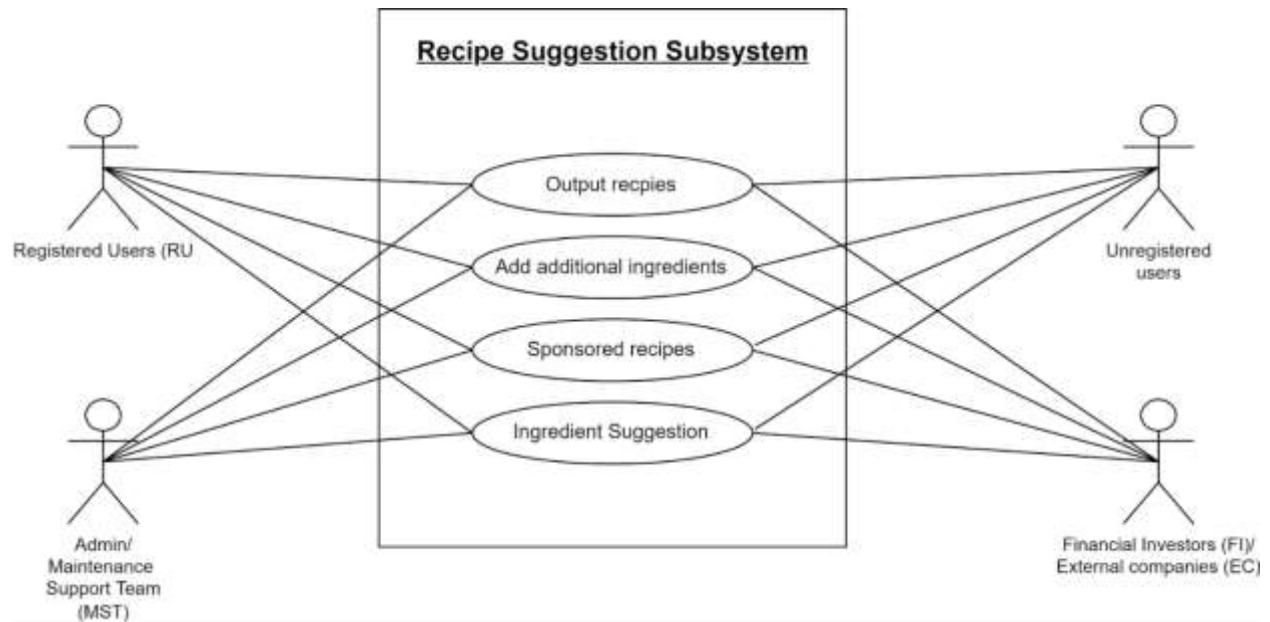
Acceptance Criteria:

- Should be able to see suggestions of more possible ingredients from the system.
- Should be able to have automatic additional ingredient suggestions for more recipes.

3.2.3 Recipe Suggestion Subsystem

FR#	Name	Role	Description
FR012	Output recipes	All users	All users will be able to receive recipes from the system according to their inputted ingredients
FR013	Add additional ingredients	RU, Admin/MST, CU, FI/EC	The system will allow users to add more ingredients to update the recipe output list
FR014	Sponsored recipes	RU, Admin/MST, CU, FI/EC	The system will put sponsored recipes at the top of the recipe output list
FR015	Ingredient suggestion	RU, Admin/MST, CU, FI/EC	The system will recommend the user to add additional ingredients to expand their recipe output list

3.2.3.1 Use Case Diagram



3.2.3.2 User Story

1. As a user, I want to input my ingredients, so I can receive recipes that use what I have.

Acceptance Criteria:

- Should be able to see recipe suggestions.

2. As a user, I want to input additional ingredients in the middle of searching for recipes, so I can fix my input errors or research more flexibly.

Acceptance Criteria:

- Should be able to add more ingredients if some ingredients were missed.

3. As a user, I want to show the recipes that use my products, so I can promote my products

Acceptance Criteria:

- Should be able to promote recipes that use my products.

4. As a user, I want to get additional ingredient suggestions from the app, so I can expand my recipe options.

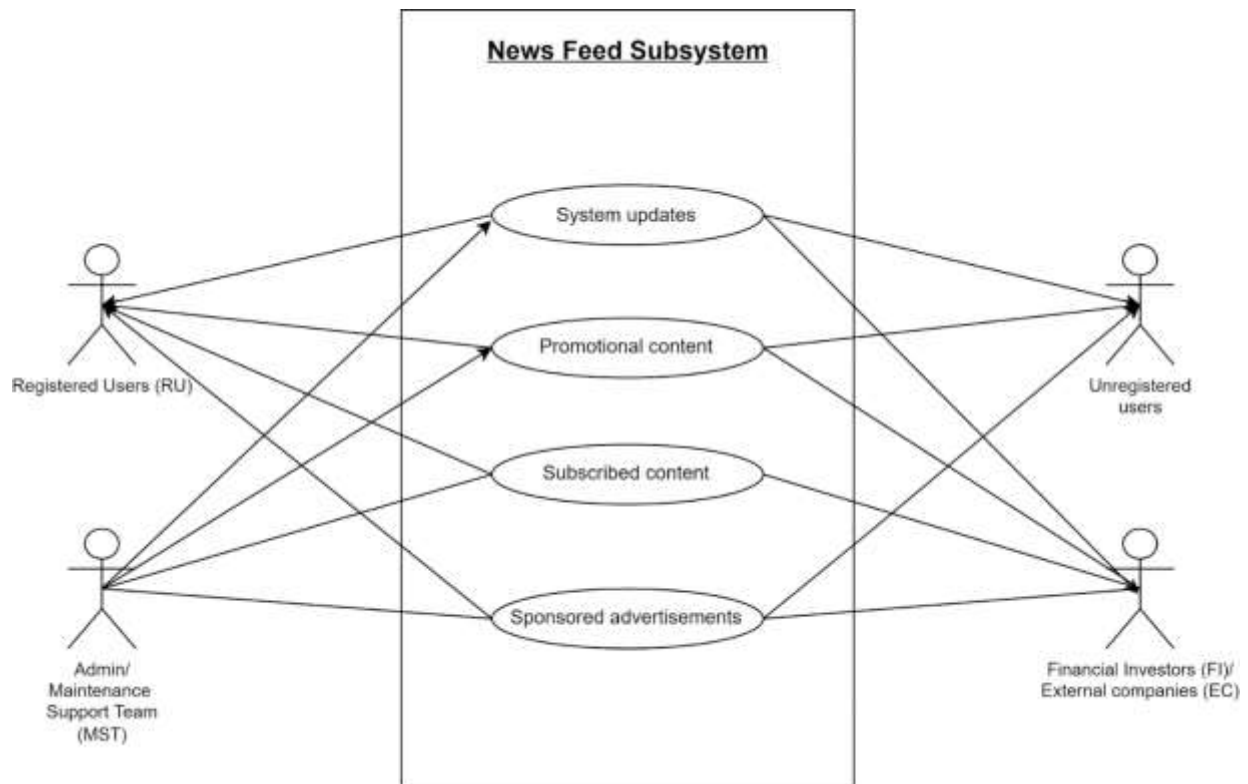
Acceptance Criteria

- Should be able to suggest additional ingredients while browsing the recipe list to enhance the recipe list.

3.2.4 News feed subsystem

FR#	Name	Role	Description
FR016	System updates	All users	Users will be able to view system update change logs published by the software developers
FR017	Promotional content	RU, Admin/MST, CU, FI/EC	Verified users will have their content updates prioritized on the user's news feed
FR018	Subscribed content	RU, Admin/MST, CU, FI/EC	Users who subscribe to recipe authors will be able to view their content updates
FR019	Sponsored advertisements	All users	Users will encounter sponsored advertisements as they scroll along their news feed

3.2.4.1 Use Case Diagram



3.2.4.2 User Story

1. As a user, I want to update the software so that all users can see new content and updates.

Acceptance Criteria:

- Should be able to post system updates.
- Should be able to view system updates.

2. As a user, I want to promote my recipe to get more exposure to other uses.

Acceptance Criteria:

- Should be able to upload my own recipes and promote them for app users

3. As a user, I want to see recipes posted by people I follow so I can also make those recipes.

Acceptance Criteria:

- Should be able to follow users and see their latest uploaded recipes

4. As a user, I want to share information about my company so that I can have more user activity on my domain.

Acceptance Criteria:

- Should be able to push advertisements through the system.
- Should be able to view advertisements.
- Should be able to post advertisements.

Section 4: UML Domain Class Diagram

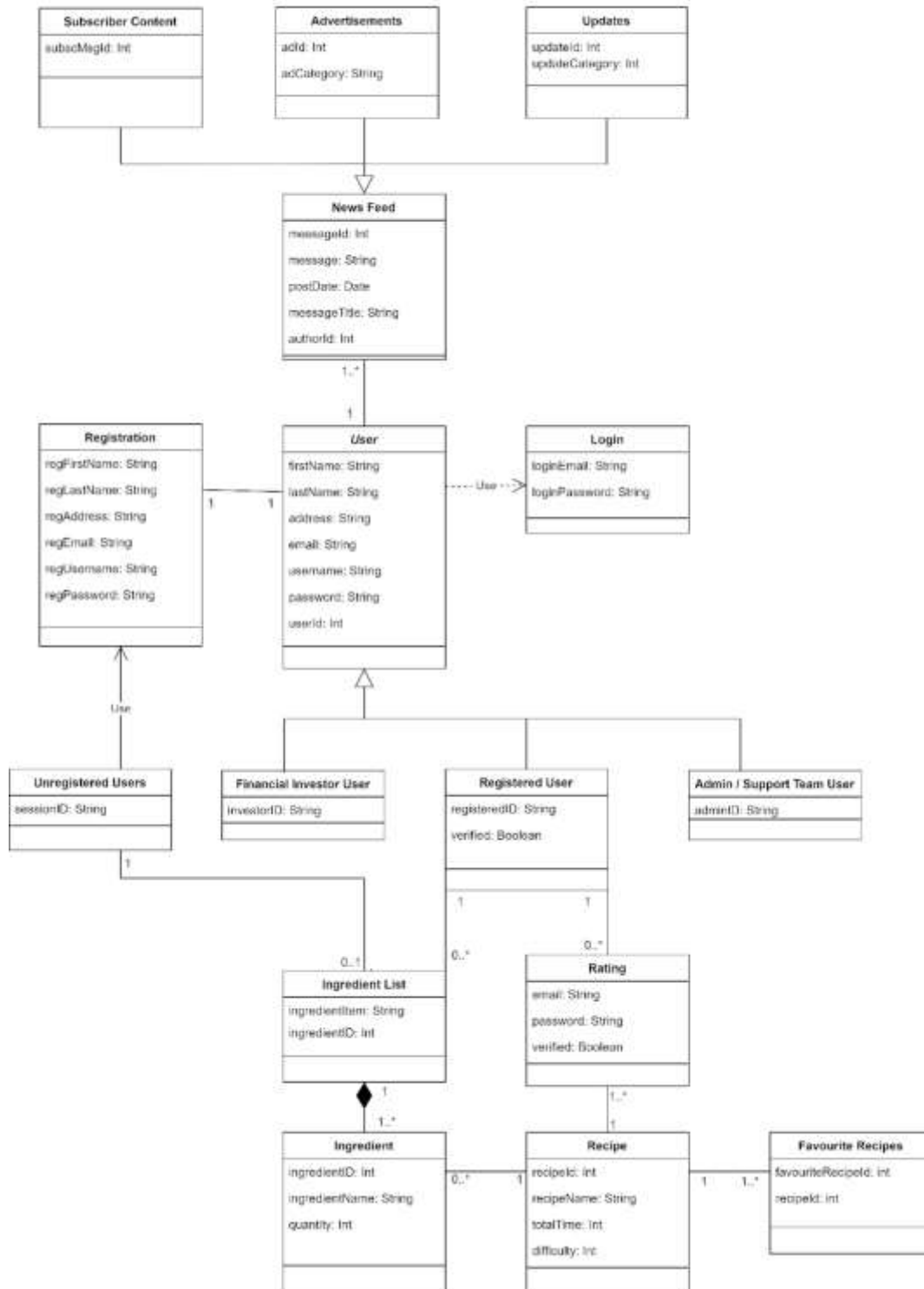
4.1 Class List

1. User
2. Registered user
3. Unregistered user
4. Financial investors
5. Admin maintenance support
6. Ingredient
7. Recipe
8. Ingredients List
9. Rating
10. Recipe
11. Favourite Recipe
12. News Feed
13. Subscriber Content
14. Advertisements
15. Updates
16. Login

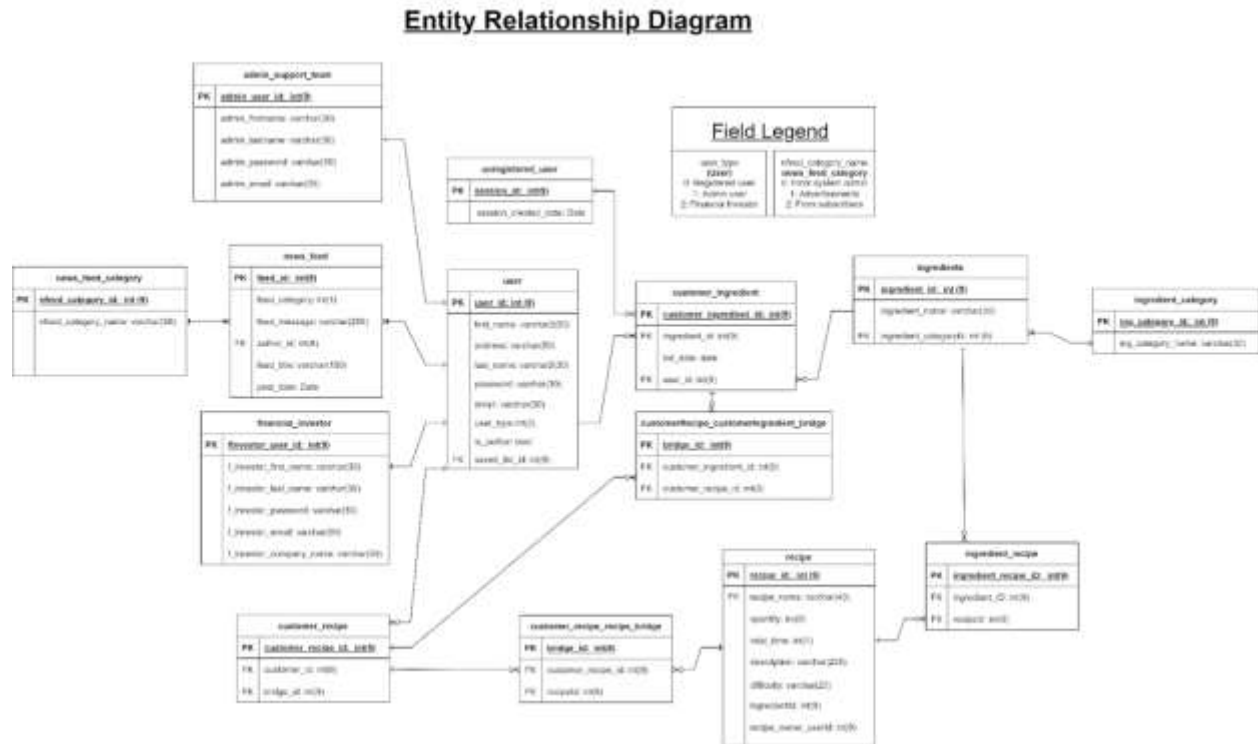
4.2 Domain Class Diagram

"CookUp"

Domain Class Diagram



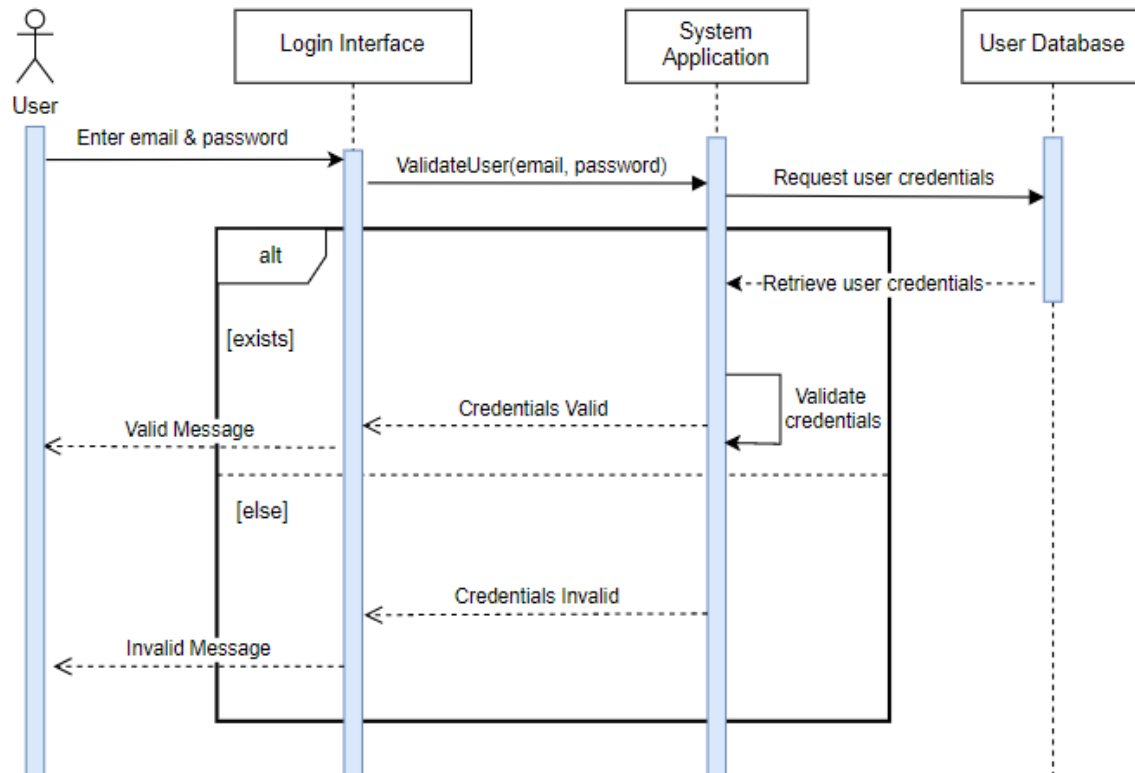
Section 5: ERD



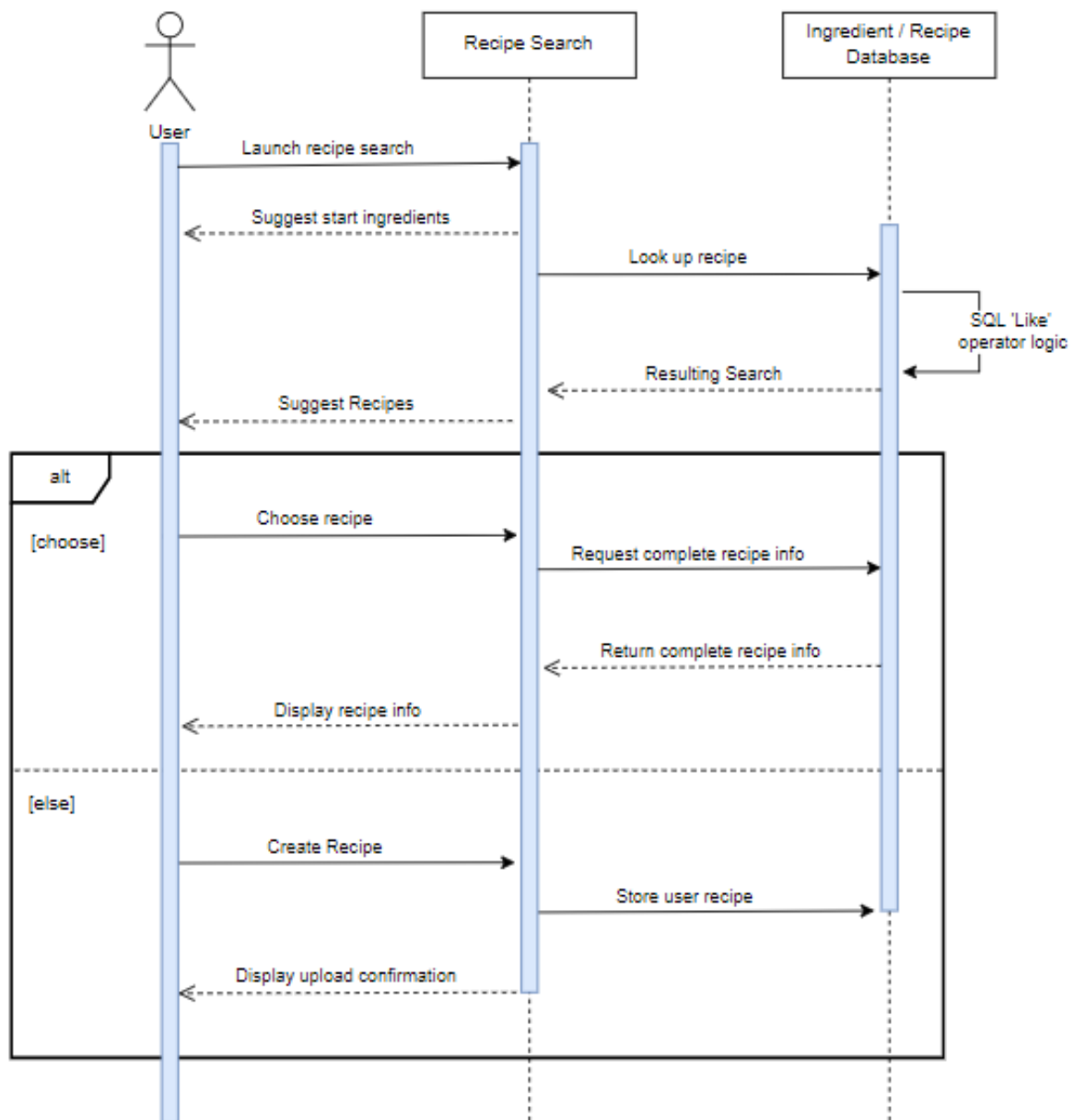
Section 6: System Sequence Diagrams

6.1 subdomain one

Goal Use Case: User login



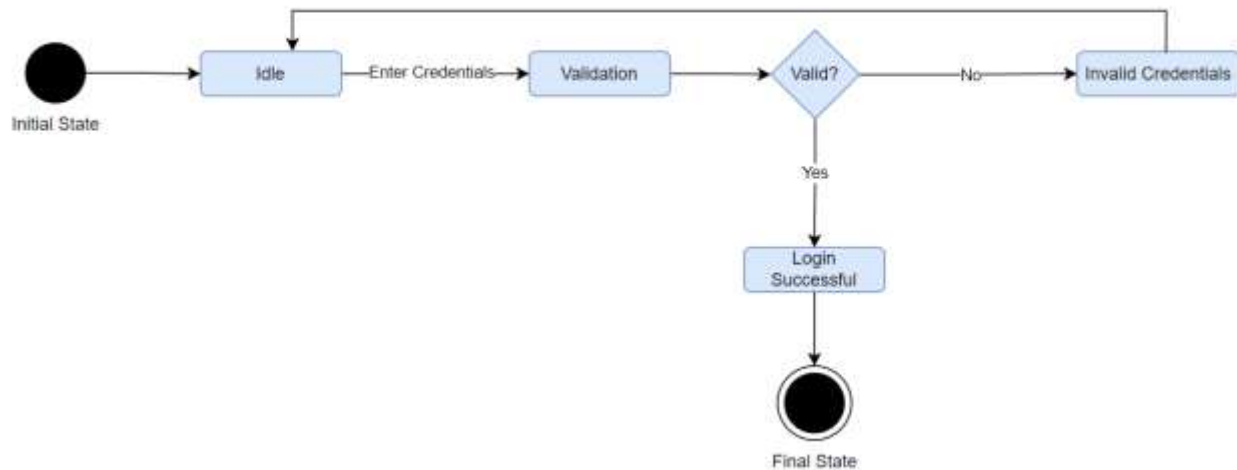
Goal Use Case: Recipe Search



Section 7: State Machine Diagrams

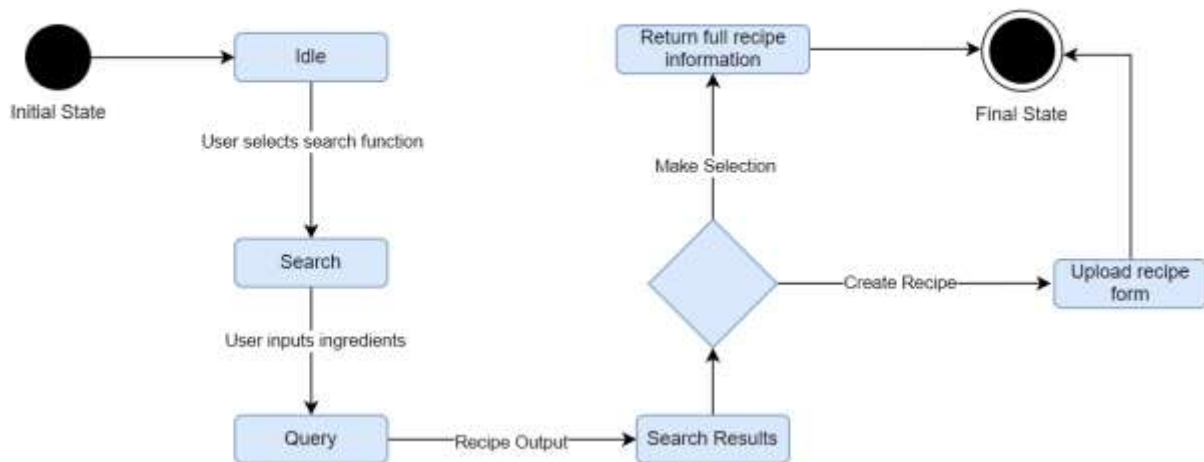
7.1 subdomain one

User Login State Machine Diagram



7.2 Subdomain two

Recipe Search State Machine Diagram



Section 8: Technologies

8.1 Web Based Mobile Application

Front-end GUI:

AngularJS (HTML, CSS, JS)

Back-end Database:
MongoDB

Business Logic:
Java (JetBrains IntelliJ IDE)

Section 9: Project Management (Gantt Chart)

CookUp SRS

COMP 346 003 Team 10

