

BLG 411E
Software Engineering
BrewDay
Requirements Specification

Group No: 28

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1. Introduction

1.1. Goal

Our goal is creating a web application for home-brewers to keep track of their recipes, ingredients and brews. There are many people who try to make his/her own brews because of high taxes on alcohol, political reasons etc. We will provide a robust system for these people. Our users will be able to keep track of their available ingredients, add tasting notes to their different brews and store their recipes in a safe place. Our system will also recommend a recipe to the user according to his/her available ingredients and recipes.

1.2. Content

This document has three sections which are usage scenario, early system models and user stories. Usage scenario section describes the user types and use cases with diagrams and models. In early system models section, conceptual model and flow diagrams of use cases are provided. At the end, user stories are determined.

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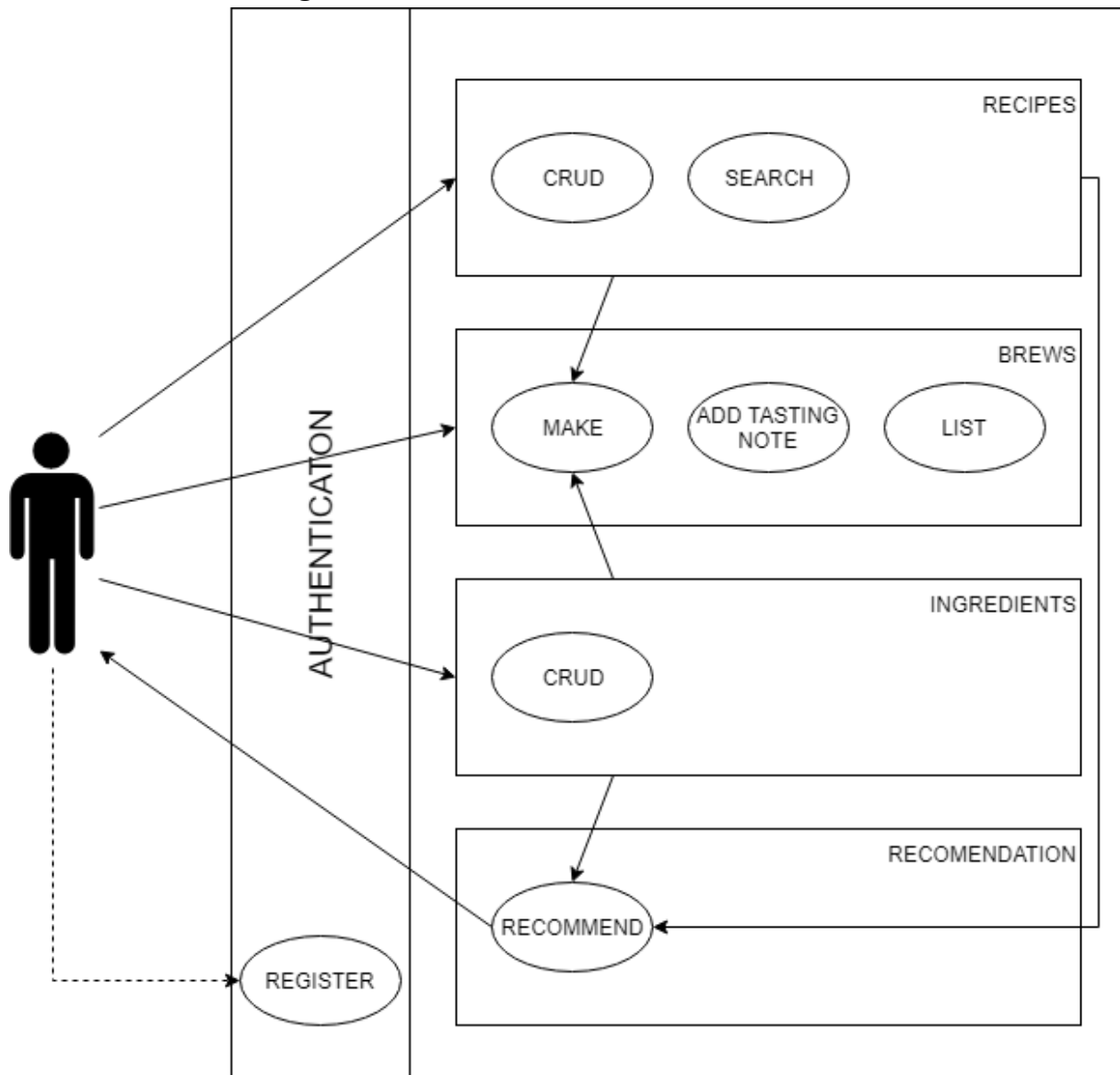
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2. Usage Scenario

2.1. User Types

Registered User:	Users known by the system Can use all functionalities in the system
Visitor:	Can only see landing page Cannot use any of the functionalities except registering

2.2. Use Case Diagram



- User has to be authenticated before accessing the system
- If the user did not register yet, he/she can
- User can add, list, update, delete and search his/her recipes
- User can make brews, add them tasting notes and list his/her brews
- Making a brew requires a recipe and enough ingredients
- User can add, list, update and delete his/her ingredients
- Recommendation service recommends a recipe to the user according to his/her current recipes and ingredients

2.3. Use Cases

Add recipe	Search recipes	Registration	List ingredients
Modify recipe	List brews	Logging in	Recommendation
Delete recipe	Make brew	Add ingredient	
List recipes	Add note to a brew	Delete ingredient	

2.3.1. Add Recipe

Primary Actor:	Registered user
Scope:	BrewDay system
Level:	User goal
Brief:	User can add a recipe by giving a name and state necessary ingredients
Basic Flow:	<ol style="list-style-type: none">1. The system provides a simple addition box2. User specifies a name for this new recipe3. User adds desired ingredients to the recipe4. User submits the recipe5. System adds the recipe to the user
Alternative Flow:	<ol style="list-style-type: none">1. The system provides a simple addition box2. User presses cancel button3. No new recipe is added to user

2.3.2. Modify Recipe

Primary Actor:	Registered user
Scope:	BrewDay system
Level:	User goal
Brief:	User can modify a recipe to change its name or ingredients
Basic Flow:	<ol style="list-style-type: none">1. The system provides a recipe edit box2. User modifies the recipe3. User submits the modified recipe4. System changes previously added recipe with the new one
Alternative Flow:	<ol style="list-style-type: none">1. The system provides a recipe edit box2. User presses cancel button3. No changes made, recipe remains the same

2.3.3. Delete Recipe

Primary Actor:	Registered user
Scope:	BrewDay system
Level:	User goal
Brief:	User can remove a recipe from his/her recipes
Basic Flow:	<ol style="list-style-type: none">1. The system asks the user whether he/she is sure or not2. Yes button is pressed3. Recipe deleted from the system
Alternative Flow:	<ol style="list-style-type: none">1. The system asks the user whether he/she is sure or not2. No button is pressed3. Recipe stays on the system

2.3.4. List Recipes

Primary Actor:	Registered user
Scope:	BrewDay system
Level:	User goal
Brief:	User can list his/her all recipes
Basic Flow:	<ol style="list-style-type: none">1. User clicked to recipes page2. Recipes for the user fetched by the system3. Recipes listed for user
Alternative Flow:	<ol style="list-style-type: none">1. User clicked to recipes page2. There are no recipes for the user3. "You haven't got any recipe" message showed to the user

2.3.5. Search Recipe

Primary Actor:	Registered user
Scope:	BrewDay system
Level:	User goal
Brief:	User can search for a recipe in his/her recipes
Basic Flow:	<ol style="list-style-type: none">1. Search box provided by the system is filled2. Search button is clicked3. Matched results will be shown to the user
Alternative Flow:	<ol style="list-style-type: none">1. Search box did not filled2. Search button is clicked3. System remains same, no search is made

2.3.6. List Brews

Primary Actor:	Registered user
Scope:	BrewDay system
Level:	User goal
Brief:	User can see his/her previous brews
Basic Flow:	<ol style="list-style-type: none">1. User clicked to brews page2. Brews for the user fetched by the system3. Brews listed for user
Alternative Flow:	<ol style="list-style-type: none">1. User clicked to brews page2. There are no previous brews for the user3. "You haven't got any brew" message showed to the user

2.3.7. Make Brew

Primary Actor:	Registered user
Scope:	BrewDay system
Level:	User goal
Brief:	User can make brews according to his/her recipes and ingredients
Basic Flow:	<ol style="list-style-type: none">1. Brewing box displayed by system2. User select a recipe and enters a brew size3. User enters a brew name and submits4. New brew added to brews and remaining ingredients are updated according to brew size
Alternative Flow:	<ol style="list-style-type: none">1. Brewing box displayed by system2. User select a recipe and enters a brew size3. User enters a brew name and submits4. User does not have enough ingredients to make this brew5. An alert stating the problem displayed to the user6. No brew is made

2.3.8. Add Note to a Brew

Primary Actor:	Registered user
Scope:	BrewDay system
Level:	User goal
Brief:	User can add a note to his/her brew
Basic Flow:	<ol style="list-style-type: none">1. A note box is showed to the user2. User fills the box with a note and submits3. Note is added to the brew
Alternative Flow:	<ol style="list-style-type: none">1. A note box is showed to the user2. User submits an empty note box3. No changes made in the brew

2.3.9. Registration

Primary Actor:	Visitor(Unregistered User)
Scope:	BrewDay system
Level:	User goal
Brief:	A visitor can register for BrewDay in order to use it
Basic Flow:	<ol style="list-style-type: none">1. Visitor directed to register page2. Necessary information fields are filled and submitted3. System creates a new user in the system4. Visitor becomes a user and redirected to main page
Alternative Flow:	<ol style="list-style-type: none">1. Visitor redirected to register page2. None of the fields are filled3. Submit button clicked4. System displays an alert about empty fields

2.3.10. Logging In

Primary Actor:	Registered user
Scope:	BrewDay system
Level:	User goal
Brief:	Registered users can enter the system by providing their credentials
Basic Flow:	<ol style="list-style-type: none">1. User directed to login page2. Requested credentials supplied by user and submitted3. System validates the credentials and redirects the user to main page
Alternative Flow:	<ol style="list-style-type: none">1. User directed to login page2. Requested credentials supplied by user and submitted3. System couldn't validate the credentials4. An alert stating the error displayed to user

2.3.11. Add Ingredient

Primary Actor:	Registered user
Scope:	BrewDay system
Level:	User goal
Brief:	User can add his/her existing ingredients to the system
Basic Flow:	<ol style="list-style-type: none">1. Ingredient box is displayed by the system2. User selects ingredient type, states the quantity for it and submits3. Ingredient is added to the system
Alternative Flow:	<ol style="list-style-type: none">1. Ingredient box is displayed by the system2. User directly submit without selecting a type3. An alert is displayed by the system

2.3.12. Delete Ingredient

Primary Actor:	Registered user
Scope:	BrewDay system
Level:	User goal
Brief:	User can remove an added ingredient from the system
Basic Flow:	<ol style="list-style-type: none">1. The system asks the user whether he/she is sure or not2. Yes button is pressed3. Ingredient deleted from the system
Alternative Flow:	<ol style="list-style-type: none">1. The system asks the user whether he/she is sure or not2. No button is pressed3. Ingredient stays on the system

2.3.13. List Ingredients

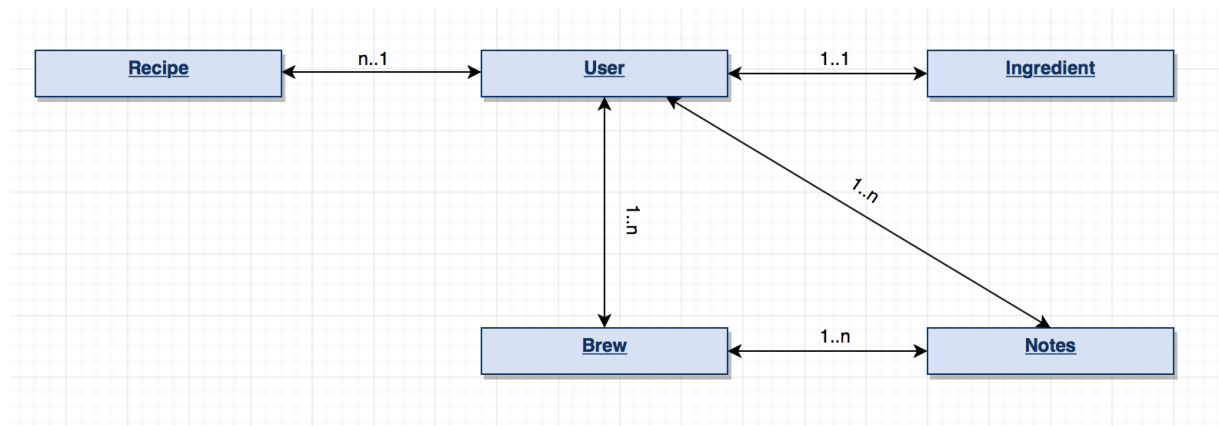
Primary Actor:	Registered user
Scope:	BrewDay system
Level:	User goal
Brief:	User can see his/her added ingredients
Basic Flow:	<ol style="list-style-type: none">1. User clicked to ingredients page2. Ingredients for the user fetched by the system3. Ingredients listed for user
Alternative Flow:	<ol style="list-style-type: none">1. User clicked to ingredients page2. There are no added ingredients for the user3. "You haven't got any ingredient" message showed to the user

2.3.14. Recommendation

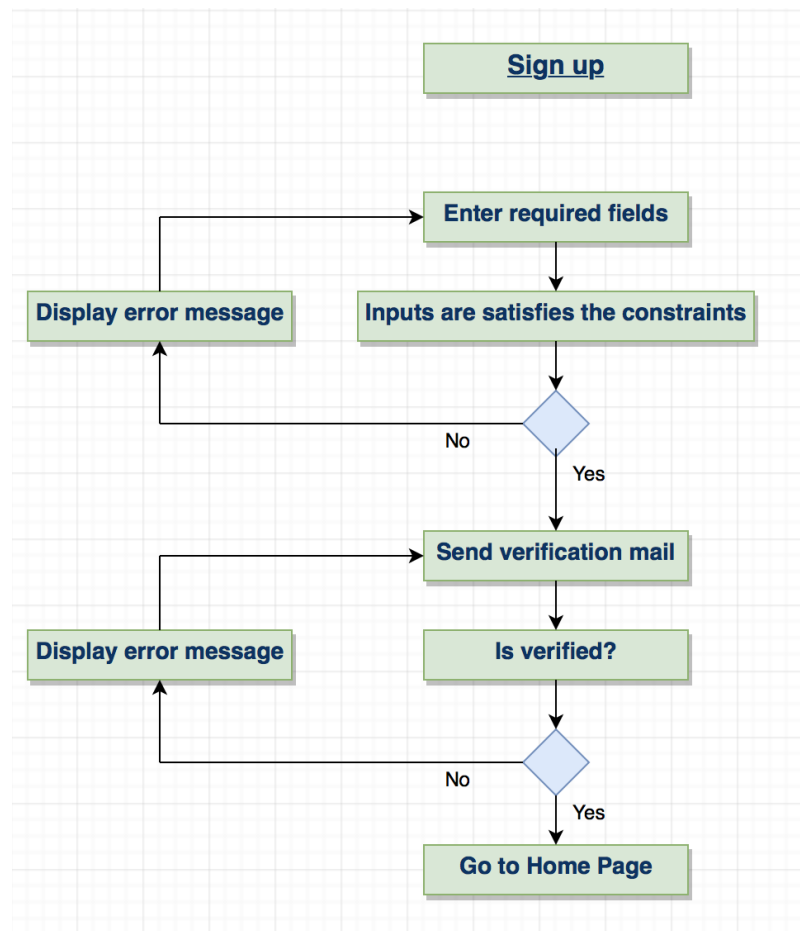
Primary Actor:	System
Scope:	BrewDay system
Level:	User goal
Brief:	An existing recipe can be recommended to user
Basic Flow:	<ol style="list-style-type: none">1. System uses a recommendation algorithm2. System evaluates current ingredients and existing recipes3. System shows some recipes to the user than he/she can brew
Alternative Flow:	<ol style="list-style-type: none">1. System tries to evaluate ingredients and recipes2. There is not enough ingredient3. System does not recommends any recipe

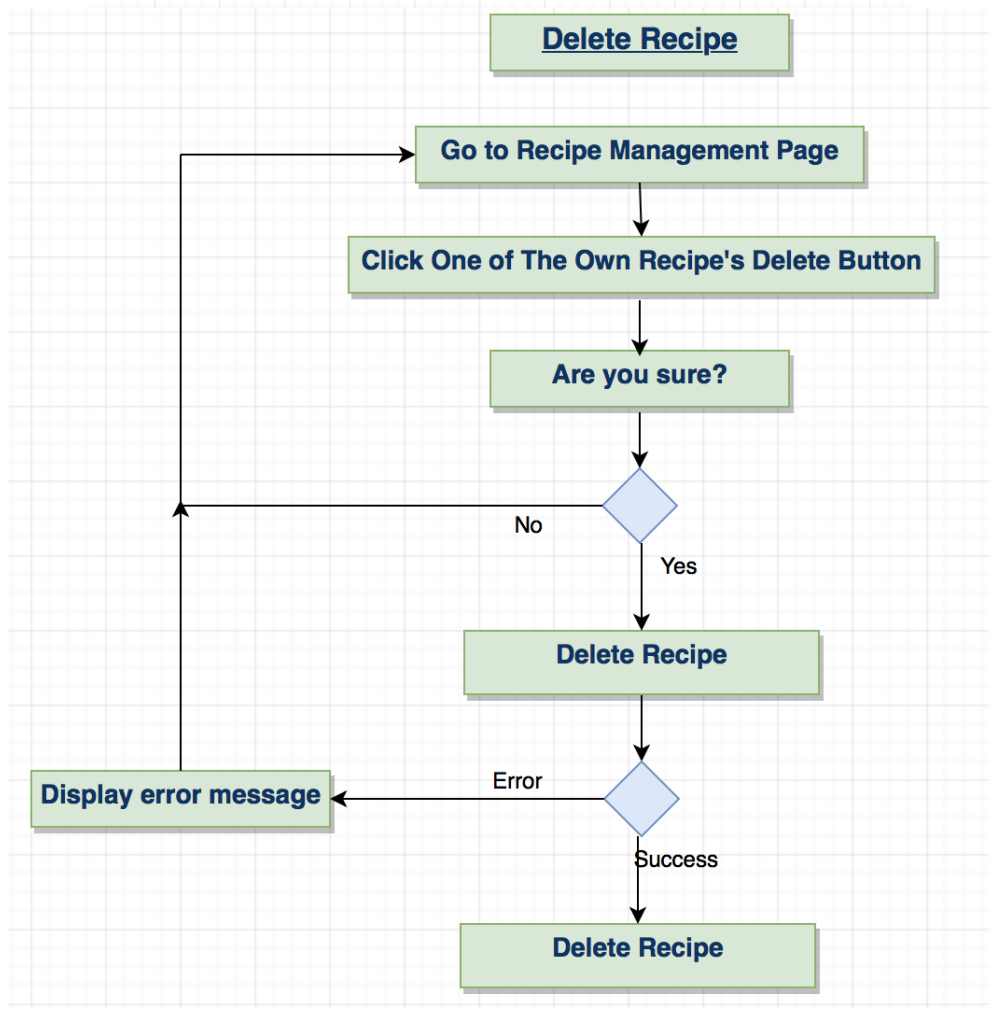
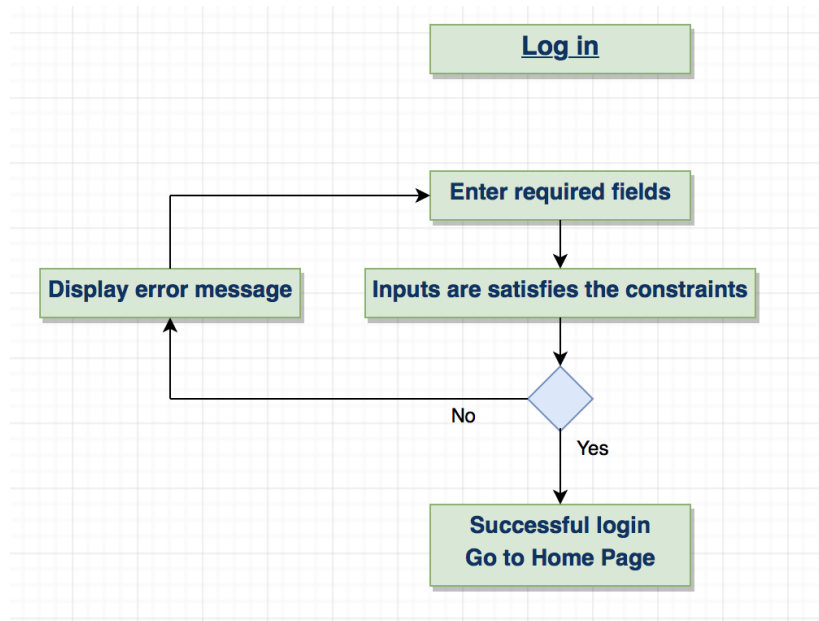
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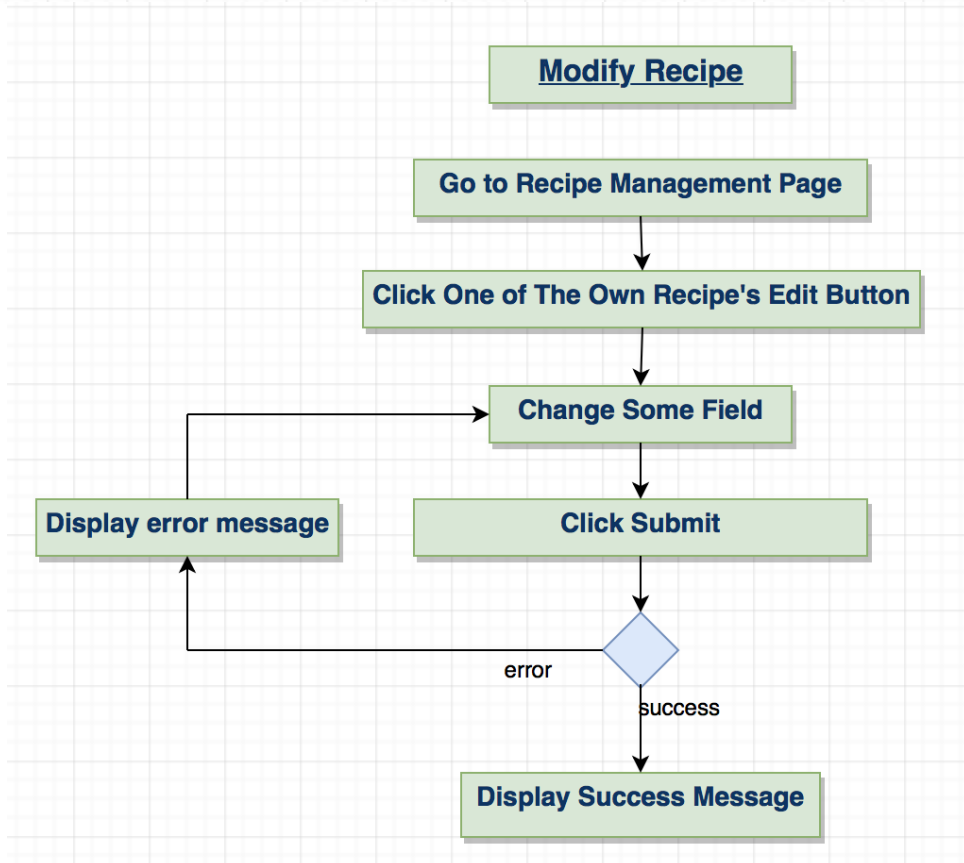
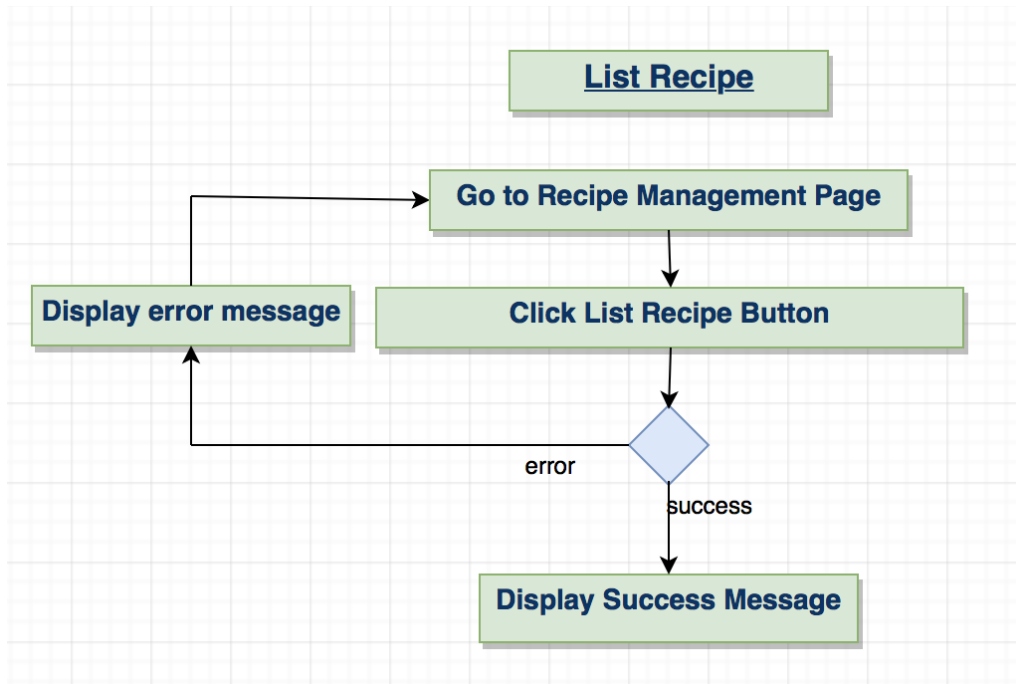
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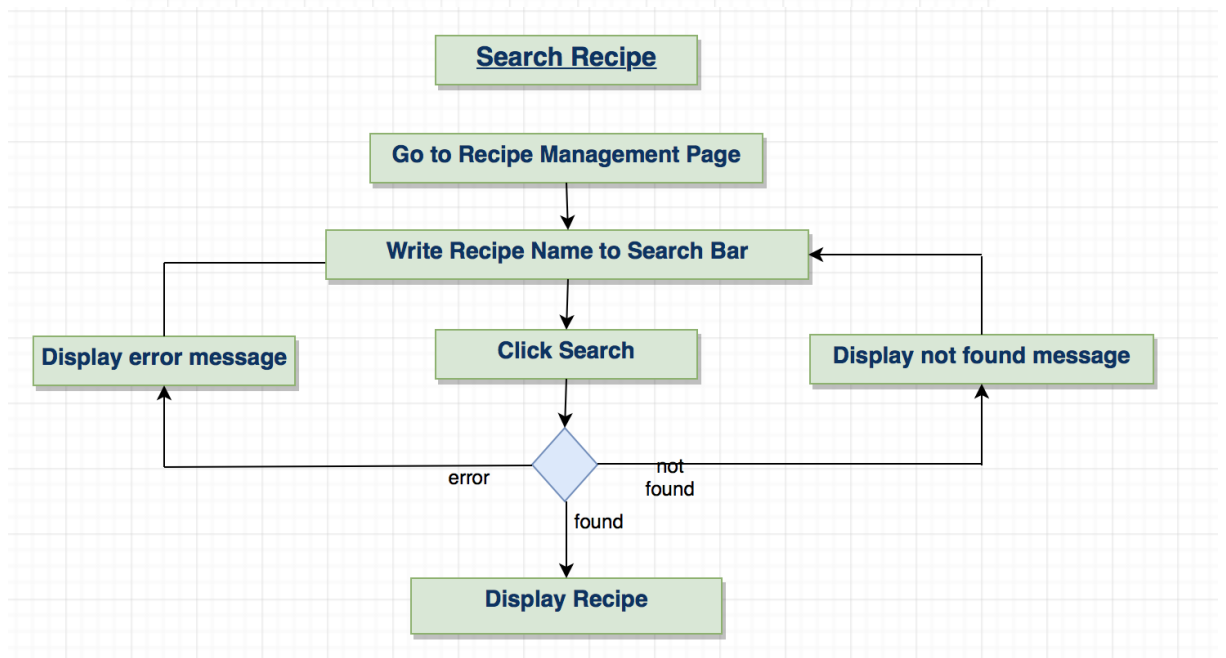
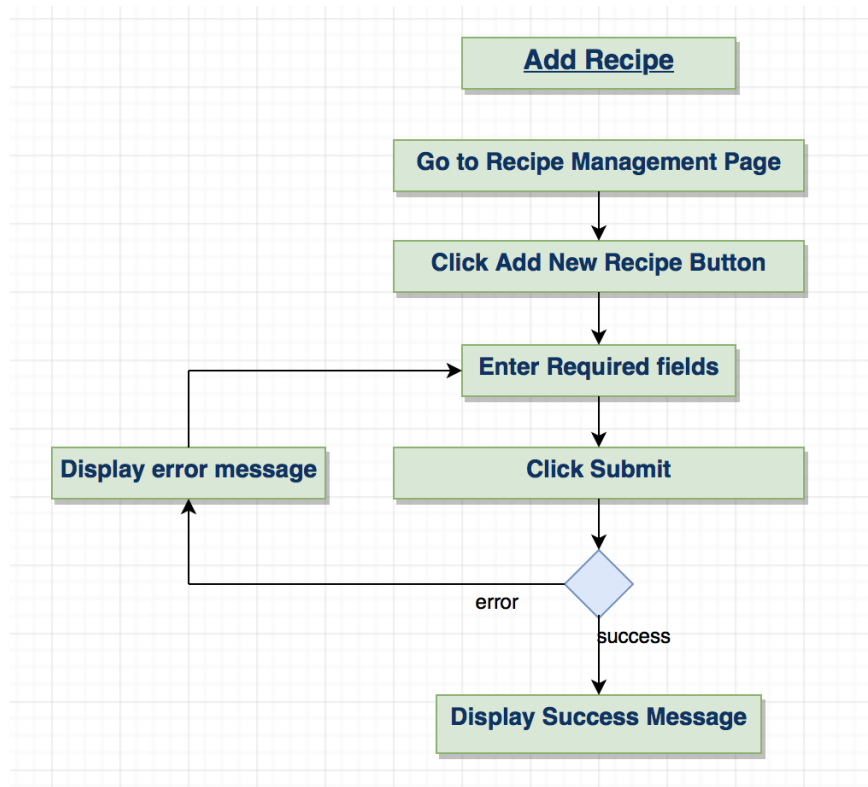


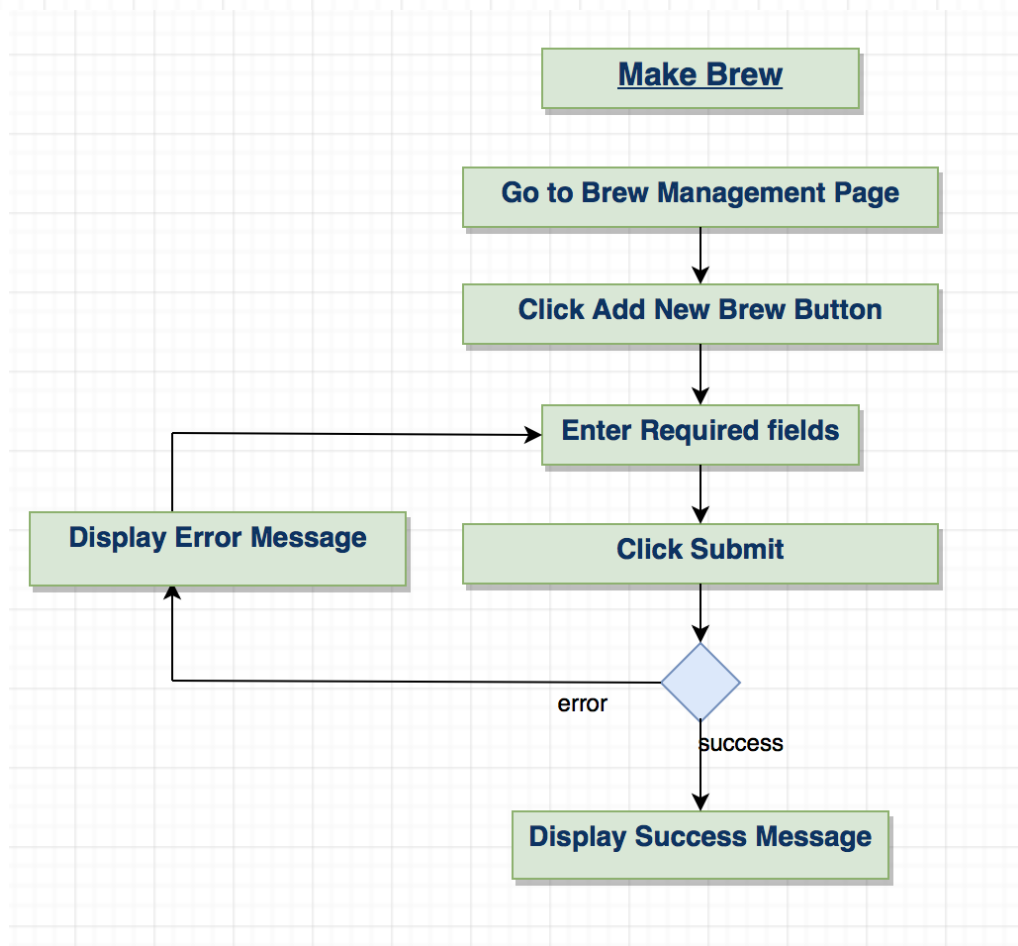
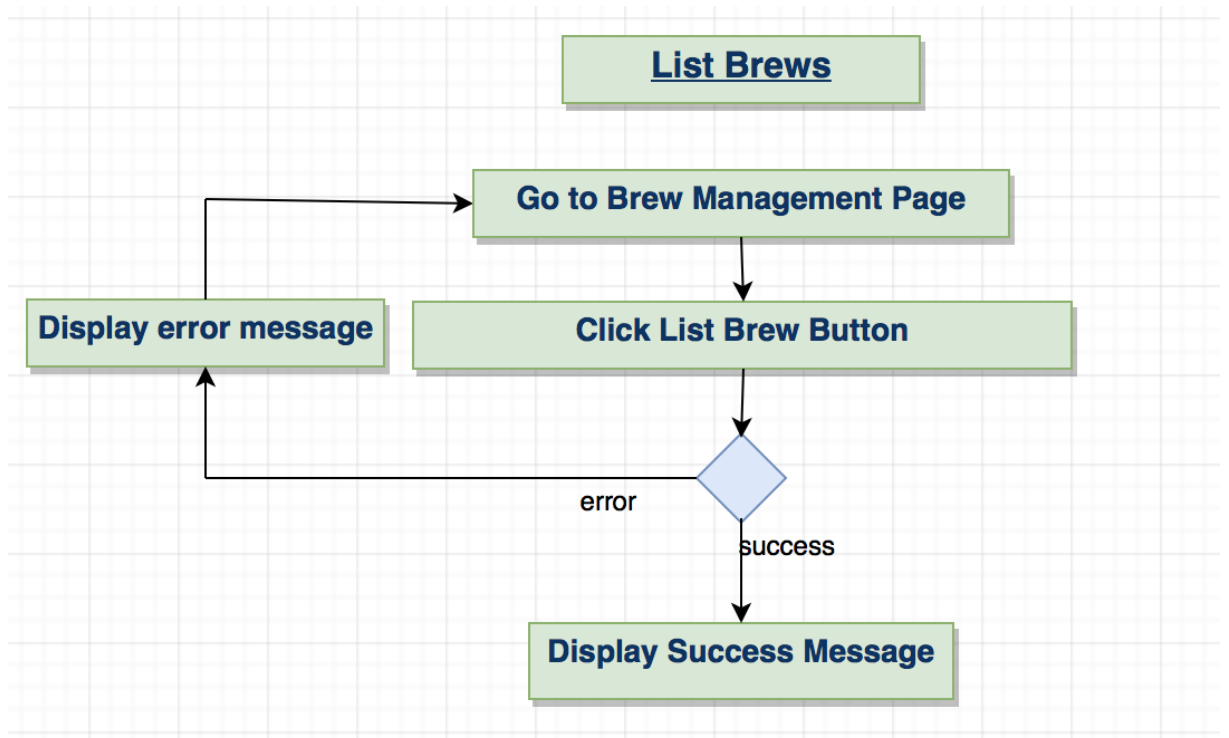
3.2. Flow Diagrams

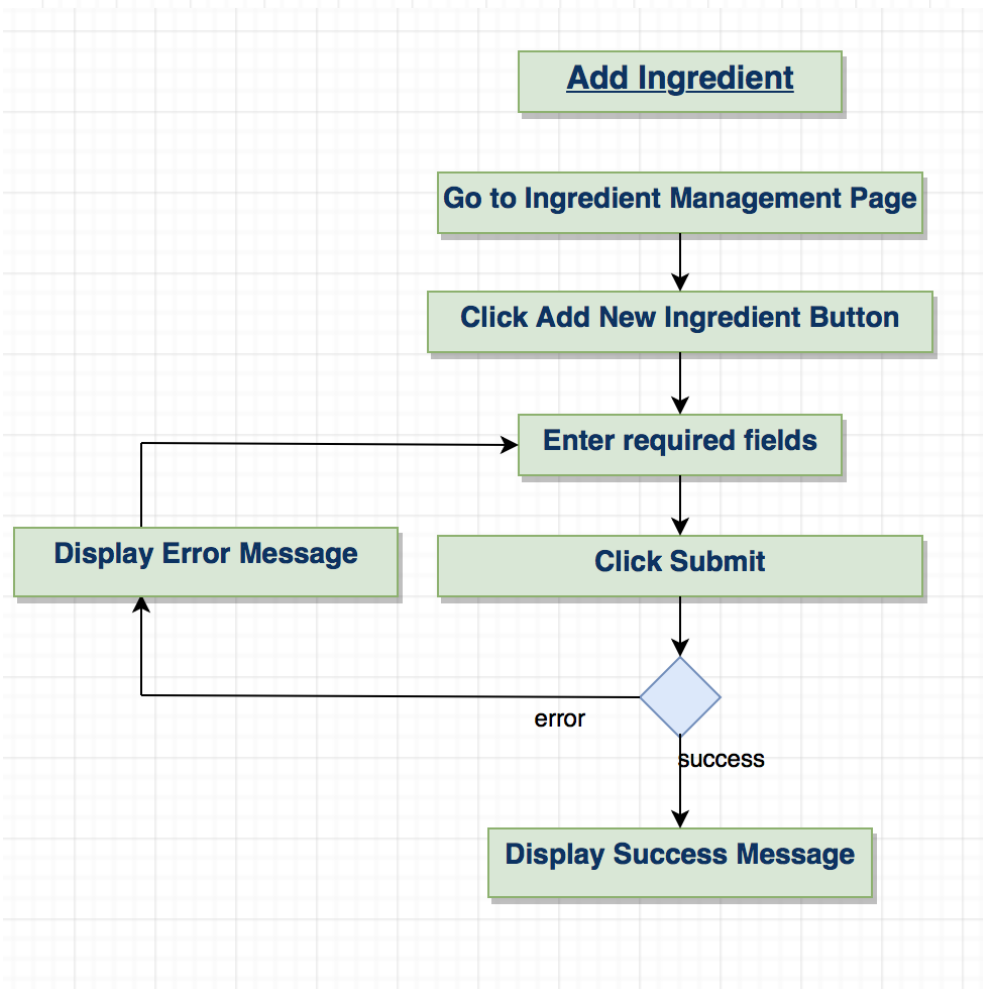
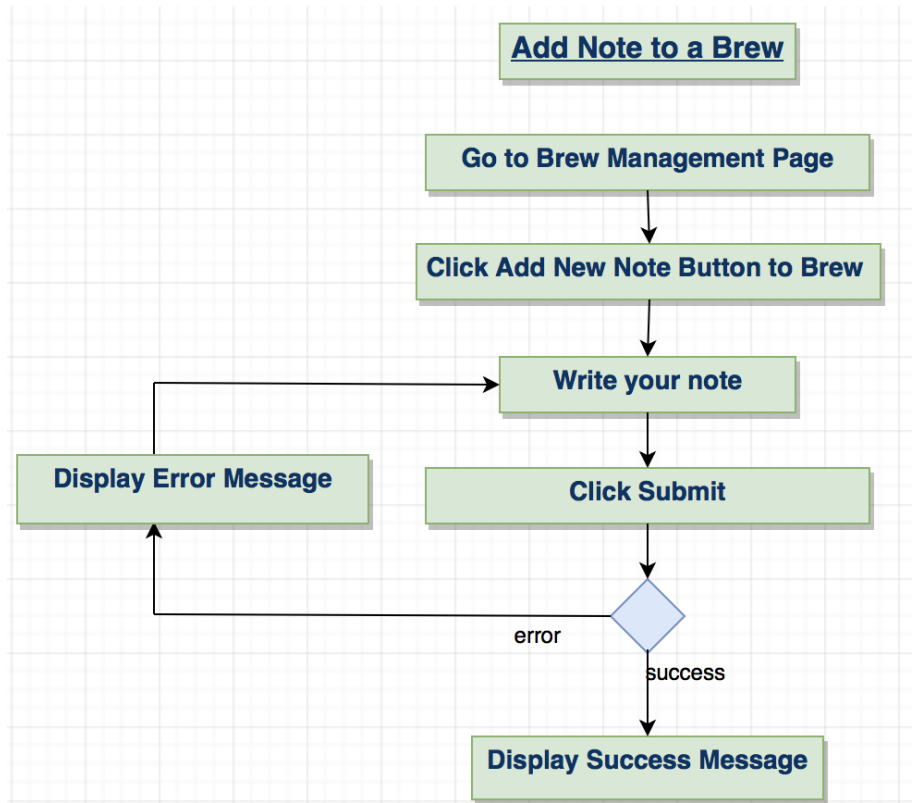


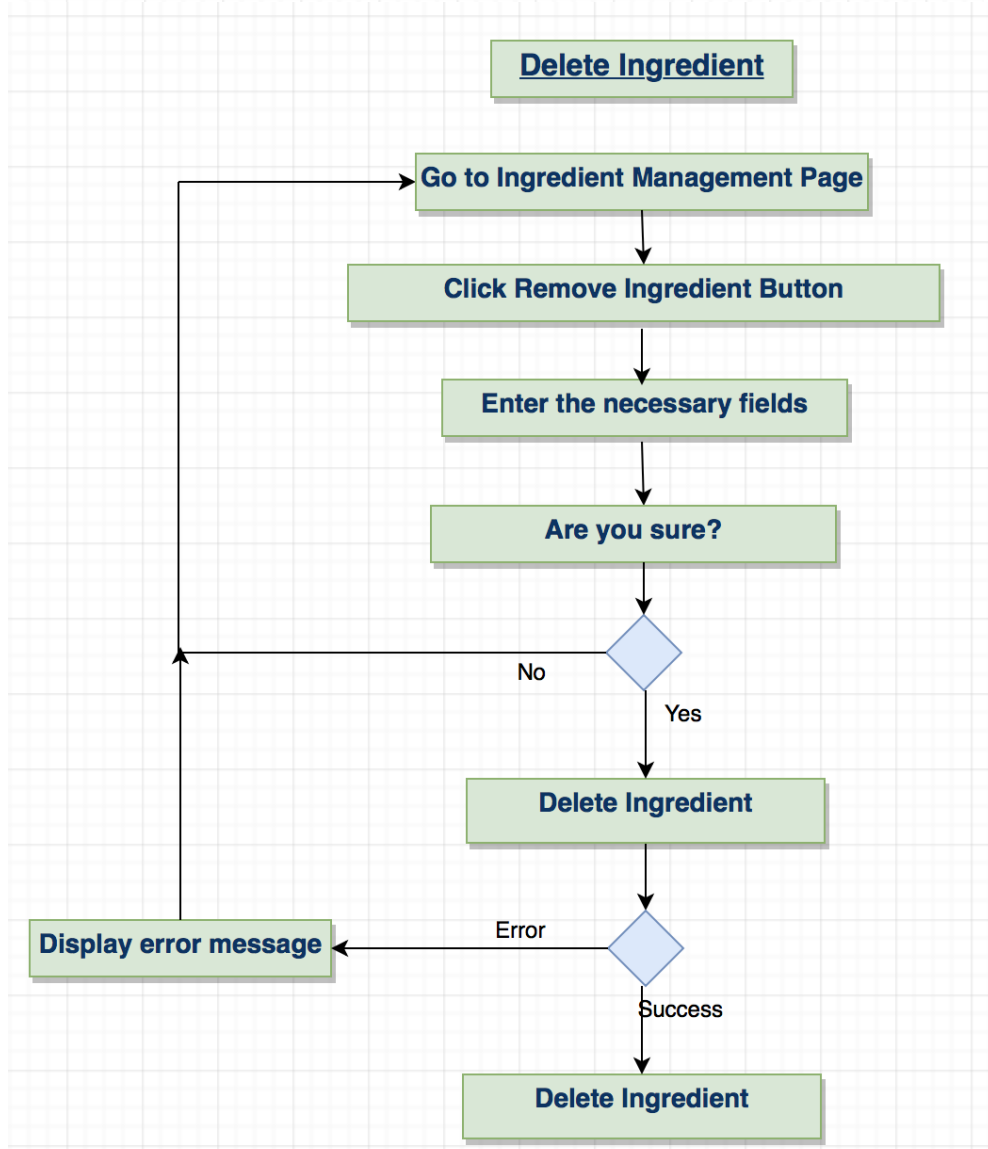
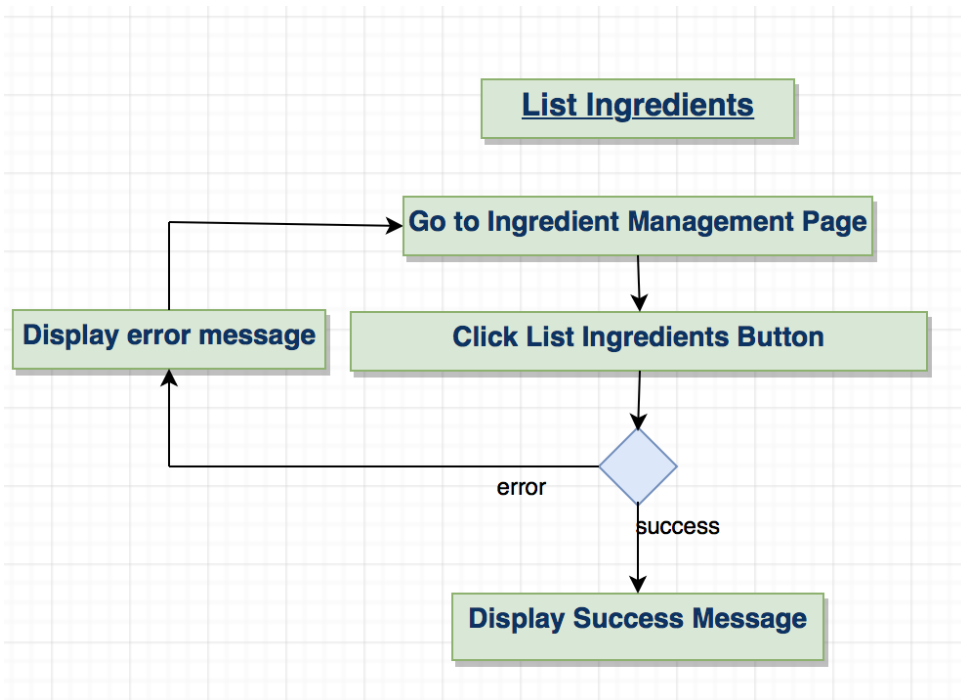


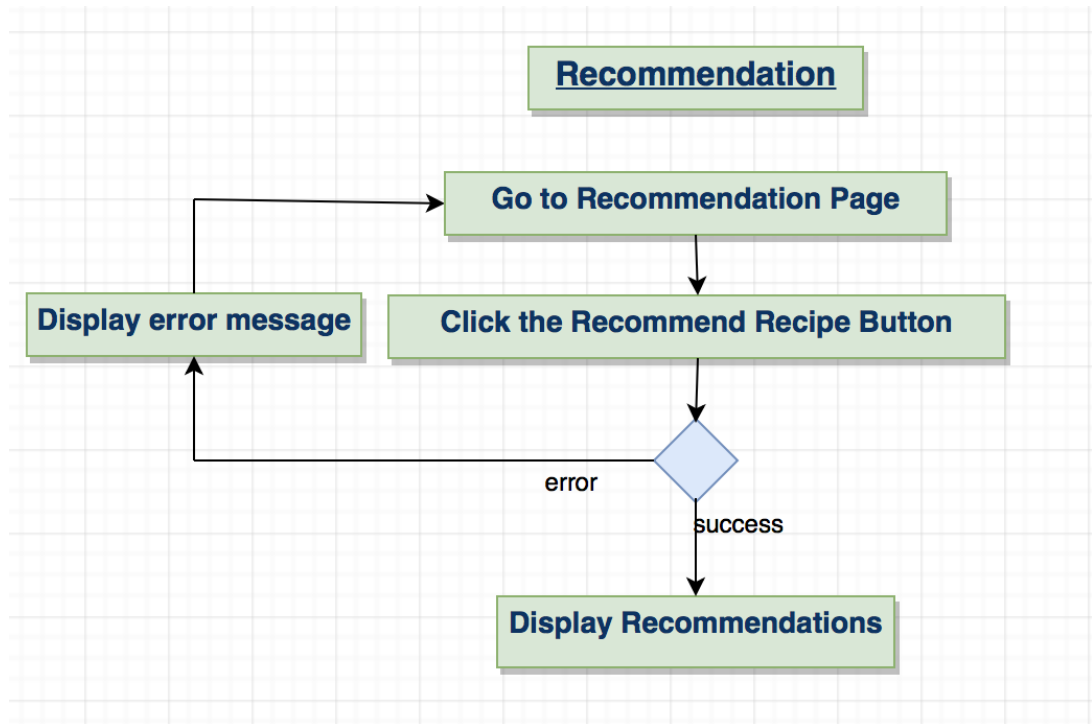












4. User Stories

4.1. User authentication

4.1.1. User Login

Feature: User is able to login the system

Scenario: User is on login page

When user enters his/her username and password

Given his/her username and password is correct

Then user is authenticated and use the site normally.

4.1.2. User Logout

Feature: User is able to logout from the system

Scenario: User logouts from the system

When user presses logout button

Then user is no longer authenticated and redirected to login page

4.1.3. User Registration

Feature: User is able to register to the system

Scenario: User wants to register to site

When user enters username and password

Given entered username does not exists

Then user is registered

4.2. Ingredient Management

4.2.1. List Ingredients

Feature: User can list his/her ingredients

Scenario: User wants to see his/her ingredients

When user goes to ingredients page

Then ingredients of the user is fetched and shown on the page

4.2.2. Add Ingredients

Feature: User can add ingredients

Scenario: User wants to add an ingredient

When user clicks add ingredient button

And fills the form

Given user fills the form correctly

Then ingredients added to the user

4.2.3. Remove Ingredients

Feature: Ingredients can be removed

Scenario: User wants to remove his/her ingredients

When user clicks the delete ingredient button

Then ingredient is removed

Scenario: A brew has been made with user's ingredients

When a brew has been made

Then the amount required by the brew is reduced from user's ingredients.

4.3. Recipe Management

4.3.1. Adding Recipes

Feature: User can add recipes

Scenario: User wants to add a recipe

When user clicks the add recipe button

And fills the recipe information

Given the form is filled correctly

Then a recipe is added

4.3.2. Deleting Recipes

Feature: User can delete recipes

Scenario: User wants to delete a recipe

When user clicks delete recipe button

Then the recipe is deleted

4.3.3. List Recipes

Feature: User can list recipes

Scenario: User wants to list recipes

When user clicks list recipes button

Then all recipes are fetched and shown on the page

4.3.4. Modify Recipes

Feature: User can modify recipes

Scenario: User wants to modify a recipe

When user clicks the modify button

And fills the form

Given the form is filled correctly

Then the recipe is updated

4.3.5. Search Recipes

Feature: User can search recipes

Scenario: User wants to search recipes

When user enters name to the search field

And clicks the search button

Given the searched recipes exist in the database

Then database is searched and requested recipes are shown on the page

4.4. Brew Management

4.4.1. List Brews

Feature: User can list the brews

Scenario: User wants to list all brews

When user clicks list brew button

Then brews are fetched and shown on the page

4.4.2. Make Brew

Feature: User can make a brew

Scenario: User wants to make a brew

When user clicks make brew button

And selects a recipe from list

And fills the form

Given user has enough ingredients for brew

Then a brew is added to the user

4.4.3. Add Note to Brew

Feature: User can add note to brew

Scenario: User wants to add a note to a brew

When user clicks add note button of the brew

And writes his/her comment

Then a brew note is added to the brew

4.5. Recommendation

4.5.1. Making Recommendation

Feature: System can recommend user a brew

Scenario: User wants a recommendation

When user clicks recommend brew button

Then system finds recipes that can be made with the user's
current available ingredients

And selects one or more recipes to show to the user

And the results are shown to the user