

# **Lanna Cooking Recipe on Mobile Software Requirement Specification**

**By**

**Name:** Kantapong Orprayoon    **ID:** 532115008

**Name:** Khomkrib Singh        **ID:** 532115015

**Department of Software Engineering  
College of Arts, Media and Technology  
Chiang Mai University**

**Project Advisor**

---

**Mr. Kittitouch Suteeca**

# Software Requirements Specification

Cross Ref. VSE-29110	Coverage Level:	Version :
	V.3.0	V.3.0

Process Ownership	Approving Authority
CAMT	
Scope	Approved Date
Senior Project	

Document History				
Version Number	Record Date	Prepared/Modified By	Reviewed By	Change Details
1.0	24/04/2013	KO,KS	KO,KS	-Add Introduction -Add Overall description -Add User Requirement -Add System Features
1.1	13/05/2013	KO,KS	KO,KS	-Add Traceability -Edit Overall description -Edit User Requirement -Edit System Features
1.2	4/06/2013	KO,KS	KO,KS	-Edit User Requirement
1.3	25/6/2013	KO,KS	KO,KS	-Edit User Requirement in all of SRS -Edit Use case diagram -Edit Use case description -Add definition
2.0	6/8/2013	KO,KS	KO,KS	-Delete <b>Traceability record</b> and move it to Traceability document
2.1	8/9/2013	KO,KS	KO,KS	-Edit in <b>2.2 Product feature</b> to add more information about feature and add number of each feature. -Edit URS-09
3.0	3/10/2013	KO,KS	KO,KS	- Edit introduction - Edit overall description - Edit mobile activity diagram. - Edit User Requirement - Edit Use case diagram and description

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	2 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

**Document develop by**

.....

**(Kantapong Orprayoon)**

.....

**(Khomkrib Singh)**

**(3 October 2013)**

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	3 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

# Table of Contents

1.	Introduction.....	5
1.1	Objective .....	5
1.2	Intended Audience and Reading Suggestions .....	5
1.3	Project Scope .....	6
1.4	Acronyms and Definitions .....	6
2.	Overall Description.....	8
2.1	Product Perspective.....	8
2.2	Product Features.....	8
2.3	User Classes and Characteristics.....	10
2.4	Operation Environment.....	11
2.5	Design and Implementation Constraints .....	11
3.	User Requirements.....	12
4.	System Features .....	13
4.1	Software Requirements Specification .....	13
4.2	Use Case.....	20
4.2.1	Lanna Cooking Recipe Use Case for User.....	20
4.2.2	Use case Description and Activity Diagram for User Use Case .....	21
4.2.3	Lanna Cooking Recipe Use Case for Administrator .....	47
4.2.4	Use case Description and Activity Diagram for User Use Case .....	48
4.3	Quality Requirement.....	69

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	4 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

# 1. Introduction

## 1.1 Objective

Lanna Cooking Recipe on Mobile is an application run on android operation system; this application is support English language. Which is main purpose to promote Northern Thailand food by providing Lanna recipe as all food menu in our application, save time to prepare food, easy to understand with recipe information's such as food ingredients, cooking, shopping list and the location that any ingredients are sale, synchronize Facebook and Google function to work with our application. This application provides users can be share food information's, and also make interaction with users by shaking for random food recipe.

This Software Requirement Specification has described in more detail of each requirement and each function that the system should have. The document includes the scope of project, product function, user characteristic, Functional Requirement, and Non-Functional Requirement.

## 1.2 Intended Audience and Reading Suggestions

This Software Requirement Specification documentation is intended to be used for anyone that relate with Lanna Cooking Recipe on Mobile system. The documentation will benefit to those who develop the system and those who use the system followed:

### Development team

- The requirement specification can be use to define the scope of the application and help everyone to have the same understanding.
- Help to verify and validate whether the development team follow the requirement specification defined in this documentation or not.
- Help guiding team to right direction or the way that application should do.
- Help achieving the highest quality of the product.
- Useful to be used as a reference for discussion about the system.

### Customer

- Ensure that the development team will understand requirements, achieve the requirement, and satisfy the customer needs.
- Help customer understand the quality, scope, and limitation of the system defined in the document.

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	5 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

## 1.3 Project Scope

The objective of this software requirement specification is to specify requirement to establish the application that:

- The application is Lanna Cooking Recipe on Mobile.
- Lanna Cooking Recipe on Mobile is android application.
- Lanna Cooking Recipe on Mobile supports English language.
- Lanna Cooking Recipe on Mobile provides member system.
- Lanna Cooking Recipe on Mobile provides recipe information management system.
- Lanna Cooking Recipe on Mobile provides location management system.
- Lanna Cooking Recipe on Mobile provides shopping list management system.
- Lanna Cooking Recipe on Mobile can be work with Facebook API to share menu to user account.
- Lanna Cooking Recipe on Mobile can be work with Google Map.
- Lanna Cooking Recipe on Mobile can be make interaction with users by random menu function.
- Lanna Cooking Recipe on Mobile has display recipe information on application.
- Lanna Cooking Recipe on Mobile has finding ingredient store location function.

## 1.4 Acronyms and Definitions

### Acronyms

LCR = Lanna Cooking Recipe  
PMP = Project Management Plan  
SDD = Software Design Document  
SRS = Software Requirement Specification  
KO = Kantapong Orprayoon  
KS = Khomkrib Singh  
URS = User Requirement Specification  
SRS = Software Requirement Specification  
UC = Use Case  
AD = Activity Diagram

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	6 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

## Definitions

**Registration information database** contains e-mail as username, password, and display name.

**Users database** contains information of user which is Email as username, password and display name.

**Recipe Details database** contains recipe name, recipe description and recipe image

**Shopping list database** contains recipe menu name.

**Ingredient item database** contains recipe ID, Ingredient ID, Ingredient Amount and ingredient Unit.

**Ingredient detail database** contains ingredient name, ingredient description and ingredient image

**Ingredient store location database** contains store location, store name, store description and store image.

**Cooking method database** contains recipe id, section, cooking method description text and cooking method image.

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	7 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

## 2. Overall Description

### 2.1 Product Perspective

The Lanna Cooking Recipe is a mobile application base on android OS. So this application helps users save their time to prepare food by providing features such as shopping list feature that is contain list of needed ingredient, ingredient location finding which is feature that using Google map to find where is needed ingredient store location and random menu food system by shaking.

### 2.2 Product Features

The Lanna Cooking Recipe is separated into two parts. The first part is the basic feature and second part is the special features that make Lanna Cooking Recipe become unique. The following list is the description of each part in more detail.

#### First part: Server Features

**These are 3 server features defined in this part, which are**

##### Server Feature 1:

- **Manage recipe detail information**

The system provides administrator can add, edit, and delete recipe detail information.

- **Manage ingredient detail information**

The system provides administrator can add, edit, and delete ingredient detail information.

- **Manage ingredient for each menu**

The system provides administrator can add and delete ingredient for each menu.

- **Manage cooking method information**

The system provides administrator can add, edit, and delete cooking method information.

##### Server Feature 2:

- **User Register Feature**

The system requires to registers to be a member before use this application.

- **User Authentication Feature**

The system provides to login to application and logout from the system for user.

The system provides to login to web service and logout from web service for administrator.

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	8 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013



### **Server Feature 3:**

- **Manage ingredient store location information**

The system provides administrator can add, edit, and delete ingredient store location information.

## **Second part: Mobile Application Features**

**These are 9 mobile application features defined in this part, which are**

### **Mobile Feature 1: User interface for all frame design**

The system provides usability interface to the user. For more comfortable and understanding to use the application

### **Mobile Feature 2: View information of recipe**

The system provides information of recipes which are how to cook and list of needed ingredient.

### **Mobile Feature 3: Share by Facebook feature**

The system provides user can share food menu on user Facebook account.

### **Mobile Feature 4: Ingredient information feature**

The system provides user can view ingredient information and description which are name, description and picture.

### **Mobile Feature 5: Finding Ingredient Store Location Feature**

The system provides user convenience to retrieve ingredient's store location by using Google Map API.

### **Mobile Feature 6: Shopping List Feature**

The system provides shopping list function users can add menu to shopping list that store the list of ingredients in each menu.

### **Mobile Feature 7: Find direction from user to ingredient store location**

The system provides can user can get direction between user and ingredient shop by using Google map API.

### **Mobile Feature 8: Random Menu Feature**

The system provides interaction with user Random Feature that user can random by shaking a device.

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	9 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

## 2.3 User Classes and Characteristics

The system divided users into 2 groups. Information and characteristics of each group are listed below.

### User

This group of person who already register for the system, they can use the application for help to save their time and get more comfortable. The user is able to:

- **User registration feature**
- **View information of recipe**
- **Authentication feature**
- **Finding ingredient store location feature**
- **Shopping list feature**
- **Random menu feature**
- **Share feature**
- **Ingredient information feature**

### Administrator

This group of person who has highest privilege in the system. So they gain the management function for maintain the system. Administrator is able to:

- **Authentication feature**
- **Manage recipe detail information**
- **Manage ingredient detail information**
- **Manage ingredient for each menu**
- **Manage cooking method information**
- **Manage finding ingredient store location information**

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	10 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

## 2.4 Operation Environment

This system operates on web application and android mobile application when customers request information, android mobile application will request to web application.

### Server Environment

This system supports windows server platform which capable of web-server, database-server and internet connection. The system also requires at least 10 gigabytes for a database and at least 4 gigabytes of main memory (RAM) for managing with a lot of customer's session at peak hour.

### Client Environment

The system supports only android platform which capable of internet connection. Customer may need the at least version 2.2 of android in order to make the system can run properly and also require GPS for getting correctly position form Google map API. The system also requires at least 1 gigahertz for processor (CPU), at least 16 gigabytes for hard disk space and at least 2 gigabytes of main memory (RAM) for managing with a lot of customer's session at peak hour.

## 2.5 Design and Implementation Constraints

### List of project constraints:

- The application work on only android version not less than 2.3
- The application is requires the internet connection.
- The application provide to user who is already registering in the system.
- The application has to specify available date (ingredient season) of each ingredient that has been shared

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	11 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

### 3. User Requirements

#### User

**URS-01:** User can use registration to be member to access the application.

**URS-02:** User can use login to access into the application.

**URS-03:** User can use logout to exit from the application.

**URS-04:** User can view list of recipe.

**URS-05:** User can view information of recipe.

**URS-06:** User can add menu to shopping list.

**URS-07:** User can delete menu from shopping list.

**URS-08:** User can view list of menu in shopping list.

**URS-09:** User can view information of recipe in shopping list.

**URS-10:** User can shake a device for random food menu.

**URS-11:** User can sharing menu on Facebook social network.

**URS-12:** User can view ingredient store location around user location on Google map.

**URS-13:** User can view ingredient store location information.

**URS-14:** User can get direction between user and ingredient store location.

**URS-15:** User can view list of ingredient.

**URS-16:** User can view ingredient information.

#### Administrator

**URS-17:** Administrator can use login to access into the web application.

**URS-18:** Administrator can use logout to exit from the web application.

**URS-19:** Administrator can manage recipe detail.

**URS-20:** Administrator can manage ingredient detail.

**URS-21:** Administrator can manage ingredient for each menu.

**URS-22:** Administrator can manage cooking method.

**URS-23:** Administrator can manage finding ingredient store location.

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	12 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

## 4. System Features

### 4.1 Software Requirements Specification

#### Functional Requirements

##### User

**URS-01: User can use registration to be member to access the application.**

**SRS01:** System must be able to perform registration interface to register into the application by receiving registration information which are e-mail as username, password, and display name.

**SRS02:** System shall check validation of registration information for getting correctly registration information.

**SRS03:** System shall access to the users' database.

**SRS04:** System shall store registration information into users' database.

**URS-02: User can use login to access into the application.**

**SRS05:** System must be able to perform login interface to access the application by receiving e-mail and password.

**SRS03:** System shall access to the users' database.

**SRS06:** System shall verify username and password with users' database to give permission user to access to the application.

**SRS07:** System must be able to display home page interface when user access to the application.

**URS-03: User can use logout to exit from the application.**

**SRS08:** System must be able to exit from the application by clicking log out tab from option page.

**SRS09:** System shall back to log in page, after user logout from the application.

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	13 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

#### **URS-04: User can view list of recipe.**

**SRS10:** System shall access to the recipe details database.

**SRS11:** System must be able to retrieve list of information which are recipe image and recipe name text from the recipe details database.

**SRS12:** System shall display list of recipe menu. In each label shall display recipe name text and recipe picture on recipe list.

**SRS13:** System must be able to view information of recipe by click on any label on list of recipe.

#### **URS-05: User can view information of recipe.**

**SRS10:** System shall access to the recipe details database.

**SRS14:** System shall retrieve recipe information which is recipe name, recipe description text and recipe image from the recipe details database.

**SRS15:** System shall display recipe information which is recipe name, recipe description text and recipe image on view information of recipe page.

**SRS16:** System shall provide share button to sharing this menu on Facebook social network.

**SRS17:** System shall provide ingredient button to view ingredient description of this menu.

**SRS18:** System shall provide how to cook button to view how to cook of this menu.

**SRS19:** System shall provide add to shopping list button for adding this menu into shopping list.

#### **URS-06: User can add menu to shopping list.**

**SRS20:** System shall provide to add menu from recipe information pages to shopping list.

**SRS21:** System shall access to the shopping list database.

**SRS22:** System shall store shopping list information which is recipe menu name.

**SRS23:** System shall display successful message for adding menu to shopping list.

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	14 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

**URS-07: User can delete menu from shopping list.**

**SRS21:** System shall access to the shopping list database.

**SRS24:** System shall provide delete button for deleting menu from shopping list.

**SRS25:** System shall delete menu from shopping list in the shopping list database.

**SRS26:** System shall display list of menu in shopping list.

**URS-08: User can view list of menu in shopping list**

**SRS21:** System shall access to the shopping list database.

**SRS27:** System shall display list of menu in shopping list. In each label shall display recipe id.

**SRS28:** System must be able to view information of ingredient for each menu by click on any label in shopping list.

**URS-09: User can view information of recipe in shopping list.**

**SRS29:** System shall access to shopping list database and ingredient details database.

**SRS30:** System shall retrieve ingredient information which is recipe name and needed ingredient for each menu from the ingredient details database.

**SRS31:** System shall display ingredient information which is recipe name and needed ingredient for each menu on view information of recipe page.

**SRS32:** System shall provide delete button for deleting menu from shopping list.

**URS-10: User can shake a device for random a food menu.**

**SRS33:** System can use accelerometer to detect interaction from user.

**SRS34:** System random a food menu when get interaction from user.

**SRS10:** System shall access to the recipe details database.

**SRS14:** System shall retrieve recipe information which is recipe name, recipe description text, recipe category and recipe picture from the recipe detail database.

**SRS35:** System shall display a random result for user.

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	15 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

**URS-11: User can sharing menu on Facebook social network.**

**SRS10:** System shall access to the recipe details database.

**SRS14:** System shall retrieve recipe information which is recipe description text and recipe picture from the recipe detail database.

**SRS36:** System shall provide share button on information of recipe page.

**SRS37:** System shall provide user to input status text that user want to share.

**SRS38:** System shall share a selected menu on user Facebook account.

**SRS39:** System shall display user status text, name of recipe, picture of recipe and short text description on user Facebook account.

**URS-12: User can view ingredient store location around user location on Google map.**

**SRS40:** System can get permission to use Google map API to show Google map.

**SRS41:** System shall access to shop database.

**SRS42:** System shall retrieve position of ingredient store location around user location from shop database and show by using Google map API.

**SRS43:** System shall display position of ingredient store location around user location.

**SRS44:** System shall provide user to see more information of ingredient shop by tapping on marker in Google map.

**URS-13: User can view ingredient store location information.**

**SRS41:** System shall access to shop database.

**SRS45:** System shall retrieve ingredient store information which is shop name, shop description, shop image, shop sell description and shop address from shop database.

**SRS46:** System shall display ingredient store information which is shop name, shop description, shop image, shop sell description and shop address.

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	16 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013



#### **URS-14: User can get direction between user and ingredient store location.**

**SRS40:** System can get permission to use Google map API to show Google map.

**SRS41:** System shall access to shop database.

**SRS47:** System shall retrieve ingredient store information which is shop latitude and shop longitude from shop database.

**SRS48:** System shall display direction between current location of user and location of ingredient store by using Google Map.

#### **URS-15: User can view list of ingredient**

**SRS49:** System shall access to ingredient detail database.

**SRS50:** System shall retrieve ingredient detail information which is ingredient name and ingredient category from ingredient detail database.

**SRS51:** System shall display list of ingredient. In each label shall display ingredient name text and ingredient category on recipe list.

**SRS52:** System must be able to view information of ingredient by click on any label on list of ingredient.

#### **URS-16: User can view ingredient information**

**SRS41:** System shall access to ingredient detail database.

**SRS53:** System shall retrieve ingredient detail information which is ingredient name, ingredient description, ingredient image from ingredient detail database.

**SRS54:** System shall display ingredient information which is ingredient name, ingredient description text, ingredient category and ingredient image on view information of ingredient page.

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	17 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

## **Administrator**

### **URS-17: Administrator can use login to access into the web application.**

**SRS55:** System must be able to perform login interface to access the web application by receiving e-mail and password.

**SRS56:** System shall access to the admin database.

**SRS57:** System shall verify username and password with admin database to give permission user to access to the web application.

**SRS58:** System shall provide user to access to the web application when login is success.

### **URS-18: Administrator can use logout to exit from the web application.**

**SRS59:** System must be able to exit from the web application by clicking on logout button.

**SRS60:** System shall back to log in page, after user logout from the web application.

### **URS-19: Administrator can manage recipe detail.**

**SRS10:** System shall access to the recipe detail database.

**SRS61:** The system must allow the user to add recipe details.

**SRS62:** The system must allow the user to edit recipe details.

**SRS63:** The system must allow the user to delete recipe details.

**SRS64:** System shall update data in recipe detail database following administrator do add, edit or delete.

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	18 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

**URS-20: Administrator can manage ingredient detail.**

**SRS65:** System shall access to the ingredient details database.

**SRS66:** The system must allow the user to add ingredient details.

**SRS67:** The system must allow the user to edit ingredient details.

**SRS68:** The system must allow the user to delete ingredient details.

**SRS69:** System shall update data in ingredient detail database following administrator do add, edit or delete.

**URS-21: Administrator can manage ingredient for each menu.**

**SRS70:** System shall access to the ingredient item database.

**SRS71:** The system must allow the user to add ingredient item for each menu.

**SRS72:** The system must allow the user to delete ingredient item for each menu.

**SRS73:** System shall update data in ingredient item database following administrator do add or delete.

**URS-22: Administrator can manage cooking method.**

**SRS74:** System shall access to the cooking method database.

**SRS75:** The system must allow the user to add cooking method.

**SRS76:** The system must allow the user to edit cooking method.

**SRS77:** The system must allow the user to delete cooking method.

**SRS78:** System shall update data in cooking method database following administrator do add, edit or delete.

**URS-23: Administrator can manage finding ingredient store location.**

**SRS79:** System shall access to the ingredient store location database.

**SRS80:** The system must allow the user to add ingredient store location.

**SRS81:** The system must allow the user to edit ingredient store location.

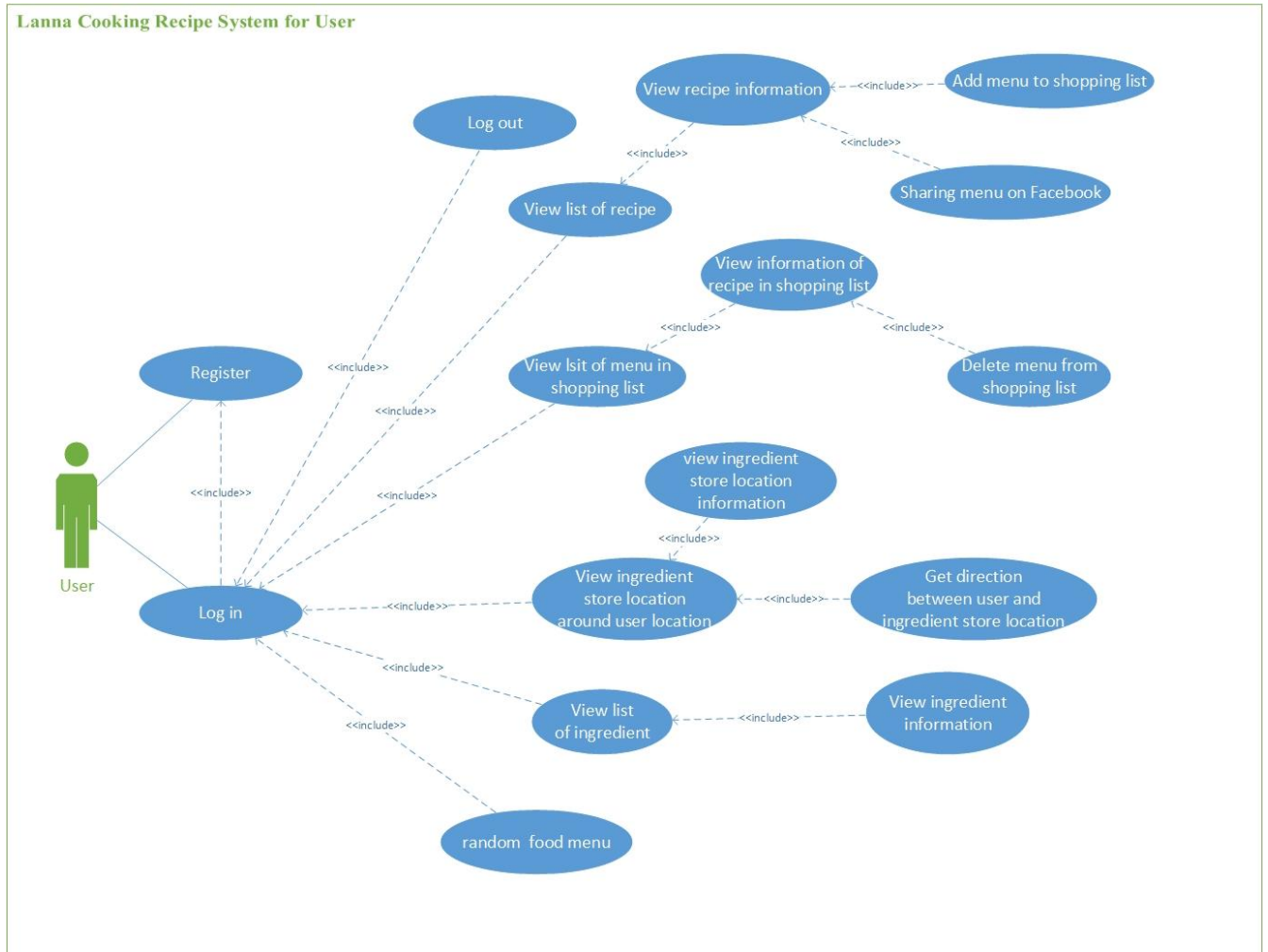
**SRS82:** The system must allow the user to delete ingredient store location.

**SRS83:** System shall update data in ingredient store location database following administrator do add, edit or delete.

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	19 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

## 4.2 Use Case

### 4.2.1 Lanna Cooking Recipe Use Case for User



**Figure 1: User Use Case**

**Figure 1 shows activities that user can use in**

**Lanna Cooking Recipe on Mobile application.**

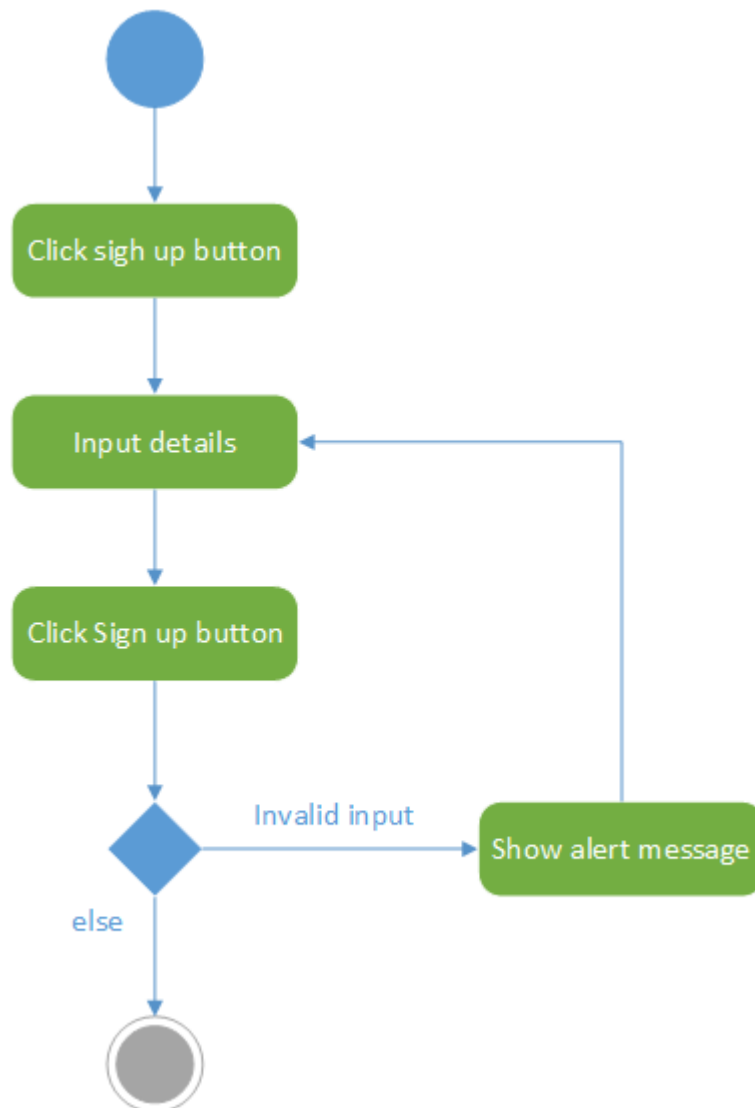
Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	20 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

## 4.2.2 Use case Description and Activity Diagram for User Use Case

### UC01: Use case description for Register

Use Case ID:	UC01
Use Case Name:	Register
Short Description:	The function provides the user can register for using the service of the application.
Related Use Cases:	-
Actors:	User
Pre conditions:	1. Stay on login page
Flow of Events:	<ol style="list-style-type: none"><li>1. User taps on sign up button</li><li>2. System provide registration interface to enter user information which are E-mail as username, password and display name.</li><li>3. User input your user information</li><li>4. System checks validation of user information.</li><li>5. Activate user's account.</li></ol>
Alternative and Exceptional:	4.1 If user input incorrect user information, System will show alert message to input correct user information.

## AD-01 Registration



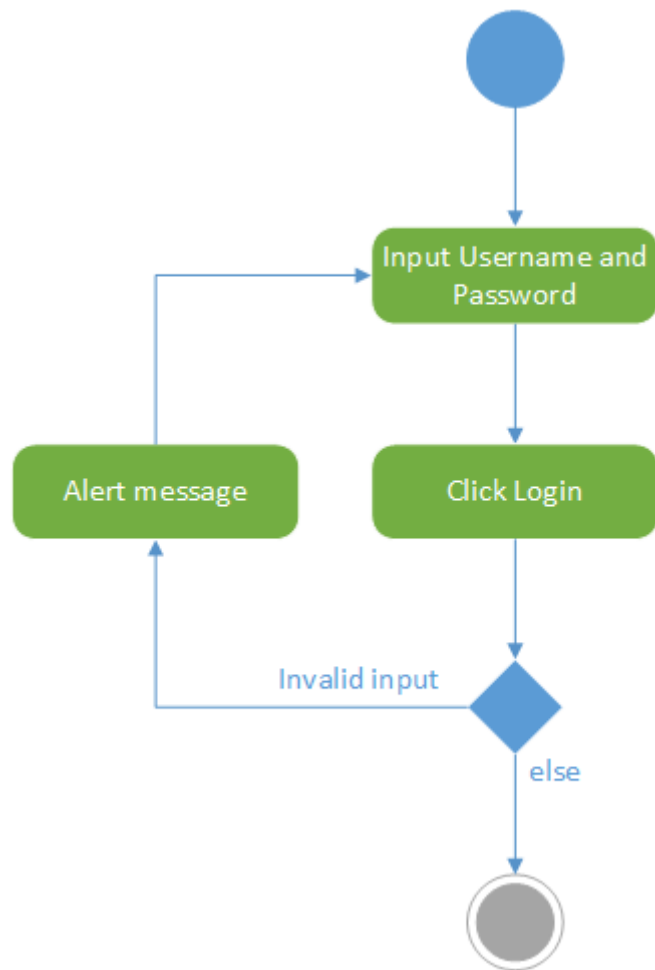
**Figure 4 AD-01 Registration**

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	22 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

**UC02: Use case description for Log in**

Use Case ID:	UC02
Use Case Name:	Log in
Short Description:	To login into the application after registered.
Related Use Cases:	<Include> UC01
Actors:	User
Pre conditions:	<ol style="list-style-type: none"><li>1. User must have username and password and not login to the system yet.</li><li>2. Stay on login page.</li></ol>
Flow of Events:	<ol style="list-style-type: none"><li>1. The system display login page.</li><li>2. User enters username and password in the login form.</li><li>3. User taps on login button.</li><li>4. The system will verify username and password from database.</li><li>5. System shows successful message.</li><li>6. User logged in to the system.</li></ol>
Alternative and Exceptional:	2.1 If username and password are invalid. System show alert message.

## AD-02 Login



**Figure 5 AD-02 Login**

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	24 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013



### UC03: Use case description for Log out

Use Case ID:	UC03
Use Case Name:	Log out
Short Description:	To logout from the application after login to the application.
Related Use Cases:	<Include> UC02
Actors:	User
Pre conditions:	1. User must login to LCR mobile application. 2. User stays on setting page.
Flow of Events:	1. User taps on log out button. 2. System shows log out status message. 3. User logged out of the system.
Alternative and Exceptional:	-

### AD-03 Log out

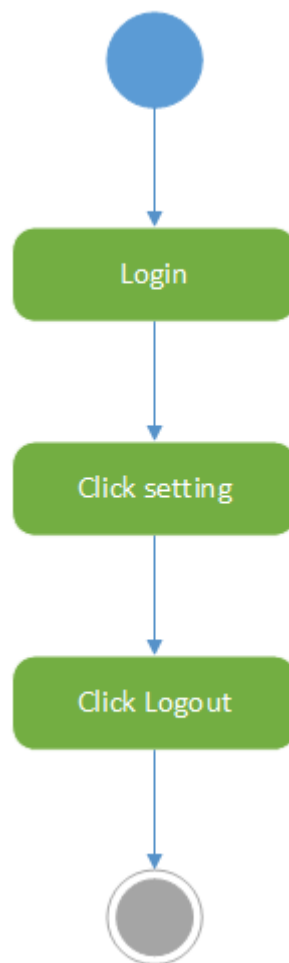


Figure 6 AD-03 Logout

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	25 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

#### UC04: Use case description for view list of recipe

Use Case ID:	UC04
Use Case Name:	View list of recipe
Short Description:	To view list of recipe
Related Use Cases:	<Include> UC02
Actors:	User
Pre conditions:	<ol style="list-style-type: none"><li>1. User must login to LCR mobile application.</li><li>2. User has to stay in home page.</li></ol>
Flow of Events:	<ol style="list-style-type: none"><li>1. User select “see all recipes” button to view list of recipe.</li><li>2. System retrieves recipe information from the recipe detail database.</li><li>3. System display all list of recipe menu with recipe name, small recipe image and short description text.</li></ol>
Alternative and Exceptional:	2.1 if database has no information, the system will show message that “No recipe Now”

#### AD-04 View list of recipe

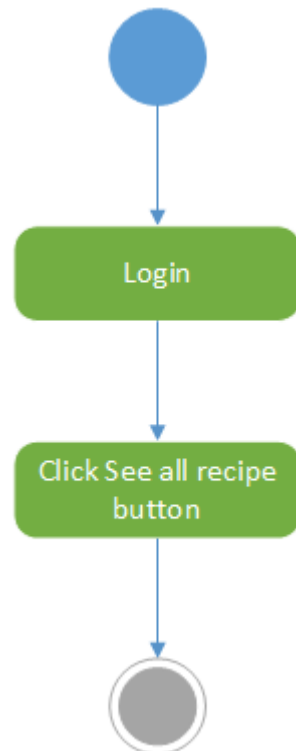


Figure 7 AD-04 View list of recipe

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	26 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

### UC05: Use case description for view recipe information

Use Case ID:	UC05
Use Case Name:	View recipe information
Short Description:	To view information of recipe about how to cook and needed ingredients in each menu. Moreover, it also provides short description text and picture in each ingredient.
Related Use Cases:	<Include> UC02,UC04
Actors:	User
Pre conditions:	<ol style="list-style-type: none"><li>1. User must login to LCR mobile application.</li><li>2. User has to stay in recipe list page.</li></ol>
Flow of Events:	<ol style="list-style-type: none"><li>1. User selects recipe menu by tapping on any menu on recipe list.</li><li>2. System retrieves recipe information from the recipe detail database, ingredient detail database and cooking method database.</li><li>3. System display recipe detail interface that contain recipe name, short description text and recipe picture.</li><li>4. System provides button to view how to cook description by tap on how to cook button.</li><li>5. System provides button to view ingredient detail description by tap on how to cook button.</li></ol>
Alternative and Exceptional:	-

### AD-05 View recipe information



**Figure 8 AD-05 View recipe information**

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	27 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

### UC06: Use case description for add menu to shopping list

Use Case ID:	UC06
Use Case Name:	Add menu to shopping list
Short Description:	To add menu that user selected into Shopping List.
Related Use Cases:	<Include> UC02,UC05
Actors:	User
Pre conditions:	<ol style="list-style-type: none"><li>1. User must access to LCR mobile application.</li><li>2. User has stay on recipe detail page of LCR mobile application.</li></ol>
Flow of Events:	<ol style="list-style-type: none"><li>1. System display recipe detail page interface.</li><li>2. User has selected menu recipe that need.</li><li>3. User taps on “add to shopping list button”.</li><li>4. System add selected menu into shopping list.</li><li>5. System store data into shopping list database.</li></ol>
Alternative and Exceptional:	3.1 If shopping list is full (limit by 3 menu), it will show alert message to user.

### AD-06 Add menu to shopping list



Figure 9 AD-06 Add menu to shopping list

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	28 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

**UC07: Use case description for delete menu from shopping list**

Use Case ID:	UC07
Use Case Name:	Delete menu from shopping list
Short Description:	To delete menu that user selected from Shopping List.
Related Use Cases:	<Include> UC02,UC09
Actors:	User
Pre conditions:	<ol style="list-style-type: none"><li>1. User must access to LCR mobile application.</li><li>2. User has stay on shopping list information page of LCR mobile application.</li></ol>
Flow of Events:	<ol style="list-style-type: none"><li>1. User has selected menu recipe that want to delete.</li><li>2. User taps on “delete menu” button for deleting recipe.</li><li>3. System will delete selected menu from shopping list.</li><li>4. System will delete data from shopping list database.</li><li>5. System display shopping list page.</li></ol>
Alternative and Exceptional:	-

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	29 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

### AC-07 Delete menu from shopping list



Figure 10 AD-07 Delete menu from shopping list

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	30 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

**UC08: Use case description for View list of menu in shopping list**

Use Case ID:	UC08
Use Case Name:	View list of menu in shopping list
Short Description:	To view list of menu in shopping List.
Related Use Cases:	<Include> UC02
Actors:	User
Pre conditions:	<ol style="list-style-type: none"><li>1. User must access to LCR mobile application.</li><li>2. User has to stay in home page.</li></ol>
Flow of Events:	<ol style="list-style-type: none"><li>1. User has tap on “shopping list” image button.</li><li>2. System retrieves shopping list information which is recipe ID from shopping list database.</li><li>3. System display all list of recipe in shopping list with recipe ID.</li><li>4. System provides user to tap on any label in shopping list to view shopping list information.</li></ol>
Alternative and Exceptional:	-

#### AD-08 View list of menu in shopping list



Figure 11 AD-08 View list of menu in shopping list

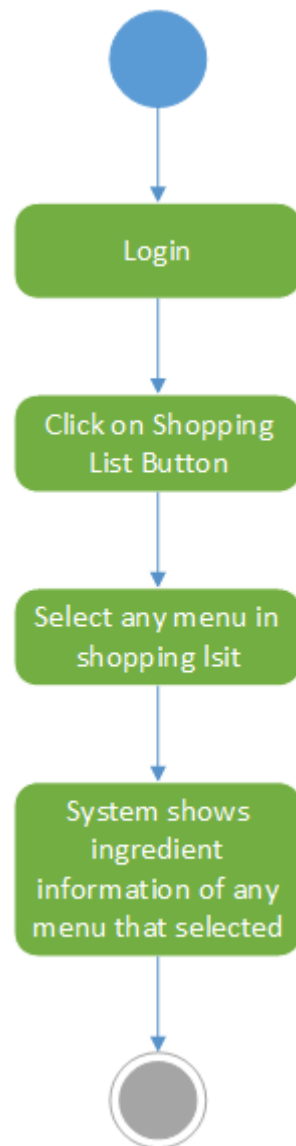
Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	32 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013



**UC09: Use case description for View information of recipe in shopping list**

Use Case ID:	UC09
Use Case Name:	View information of recipe in shopping list
Short Description:	To view information of ingredient for each recipe in shopping list.
Related Use Cases:	<Include> UC02
Actors:	User
Pre conditions:	<ol style="list-style-type: none"><li>1. User must access to LCR mobile application.</li><li>2. User has stay on shopping list page of LCR mobile application.</li></ol>
Flow of Events:	<ol style="list-style-type: none"><li>1. User select recipe menu by tapping on any recipe ID on shopping list.</li><li>2. System retrieves ingredient information which is recipe name and needed ingredient for each menu from the ingredient details database.</li><li>3. System display ingredient information which is recipe name and needed ingredient for each menu on view information of recipe page.</li><li>4. System provide “delete menu” button for user to delete menu from shopping list.</li></ol>
Alternative and Exceptional:	-

#### AD-09 View information of recipe in shopping list



**Figure 12 AD-09 View information of recipe in shopping list**

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	34 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

### UC10: Use case description for random food menu

Use Case ID:	UC10
Use Case Name:	Random food menu
Short Description:	To random food menu recipe by shacking a device.
Related Use Cases:	<Include> UC02
Actors:	User
Pre conditions:	<ol style="list-style-type: none"><li>1. User must access to LCR mobile application.</li><li>2. User has to stay in random menu page.</li></ol>
Flow of Events:	<ol style="list-style-type: none"><li>1. User taps on “ready to random” button.</li><li>2. System display random action page for user to shake a device to random food menu.</li><li>3. User shakes a device to random food menu.</li><li>4. System use accelerometer to detect interaction from user.</li><li>5. System random food menu from recipe detail database.</li><li>6. System display result of food random menu to user in term of recipe name, recipe category, recipe picture and short recipe description text.</li></ol>
Alternative and Exceptional:	-

### AD-10 Random food menu

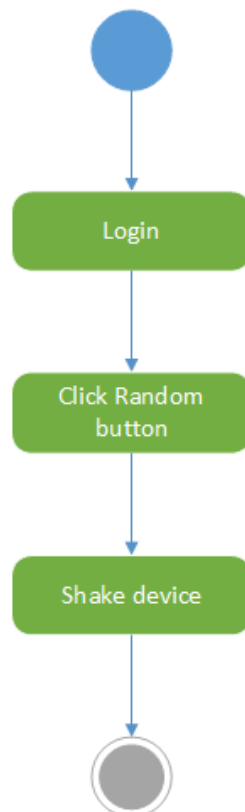


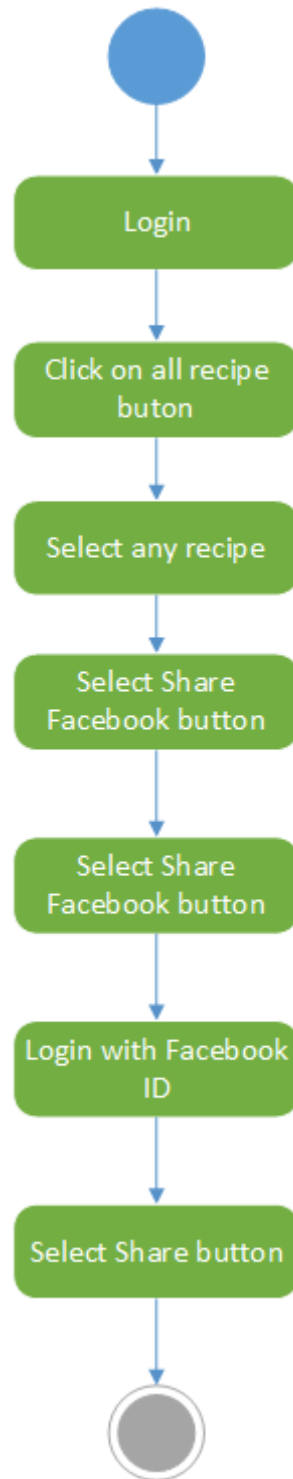
Figure 13 AD-10 Random food menu

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	35 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

**UC11: Use case description for sharing menu on Facebook**

Use Case ID:	UC11
Use Case Name:	Sharing menu on Facebook
Short Description:	To share food menu recipe in the application to other user via Facebook account.
Related Use Cases:	<Include> UC02,UC05
Actors:	User
Pre conditions:	<ol style="list-style-type: none"><li>1. User must access to LCR mobile application.</li><li>2. User has to stay in recipe detail page.</li><li>3. User has to connect with Facebook account.</li></ol>
Flow of Events:	<ol style="list-style-type: none"><li>1. User taps on “Share” button to share food menu.</li><li>2. System provide user to input status text that user want to share with selected menu.</li><li>3. User input own text and tap on “Post status” button to share own status text and selected menu on Facebook.</li><li>4. System share user status and selected menu recipe on own Facebook account in term of name of recipe, picture of recipe and short text description.</li></ol>
Alternative and Exceptional:	1.1 If user doesn’t connect with Facebook account, system will show message for login to Facebook account.

### AD-11 Sharing menu on Facebook



**Figure 14 AD-11 Sharing menu on Facebook**

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	37 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

## UC12: Use case description for view ingredient store location around user location

Use Case ID:	UC12
Use Case Name:	View ingredient store location around user location
Short Description:	The function that provides user to retrieve ingredient's store location by using Google Map API.
Related Use Cases:	<Include> UC02
Actors:	User
Pre conditions:	<ol style="list-style-type: none"> <li>1. User must access to LCR mobile application.</li> <li>2. User has to stay in find ingredient page.</li> </ol>
Flow of Events:	<ol style="list-style-type: none"> <li>1. System retrieves position of ingredient store location around user location from shop database.</li> <li>2. System display position of ingredient store location around user location in Google map.</li> <li>3. System provide user to see more information of ingredient shop by tapping on marker in Google map.</li> </ol>
Alternative and Exceptional:	-

## AD-12 View ingredient store location around user location

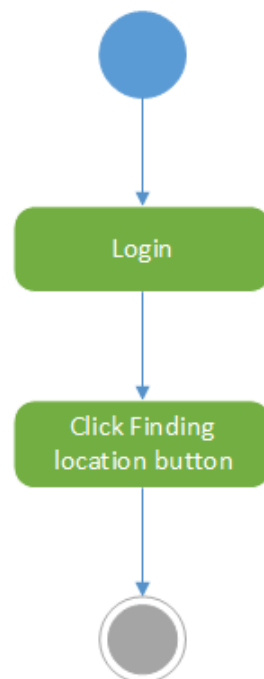


Figure 15 AD-12 View ingredient store location around user location

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	38 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

**UC13: Use case description for view ingredient store location information**

Use Case ID:	UC13
Use Case Name:	View ingredient store location information
Short Description:	To view ingredient store location information
Related Use Cases:	<Include> UC02,UC12
Actors:	User
Pre conditions:	<ol style="list-style-type: none"><li>1. User must access to LCR mobile application.</li><li>2. User has to stay in find ingredient page.</li></ol>
Flow of Events:	<ol style="list-style-type: none"><li>1. User selects ingredient shop on Google map by tapping on marker of each ingredient shop.</li><li>2. System retrieves ingredient store information which is shop name, shop description, shop image, shop sell description and shop address from shop database.</li><li>3. System display ingredient store information which is shop name, shop description, shop image, shop sell description and shop address.</li></ol>
Alternative and Exceptional:	-

### AD-13 View ingredient store location information



Figure 16 AD-13 View ingredient store location information

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	40 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013



**UC14: Use case description for Get direction between user and ingredient store location.**

Use Case ID:	UC14
Use Case Name:	Get direction between user and ingredient store location.
Short Description:	To get direction between user and ingredient store location.
Related Use Cases:	<Include> UC02,UC13
Actors:	User
Pre conditions:	<ol style="list-style-type: none"><li>1. User must access to LCR mobile application.</li><li>2. User has to stay on ingredient shop description page.</li></ol>
Flow of Events:	<ol style="list-style-type: none"><li>1. User taps on “Get Direction” button on the bottom of the screen.</li><li>2. System retrieves ingredient store information which is shop latitude and shop longitude from shop database.</li><li>3. System displays direction between current location of user and location of ingredient store by using Google Map.</li></ol>
Alternative and Exceptional:	-

#### AD-14 Get direction between user and ingredient store location

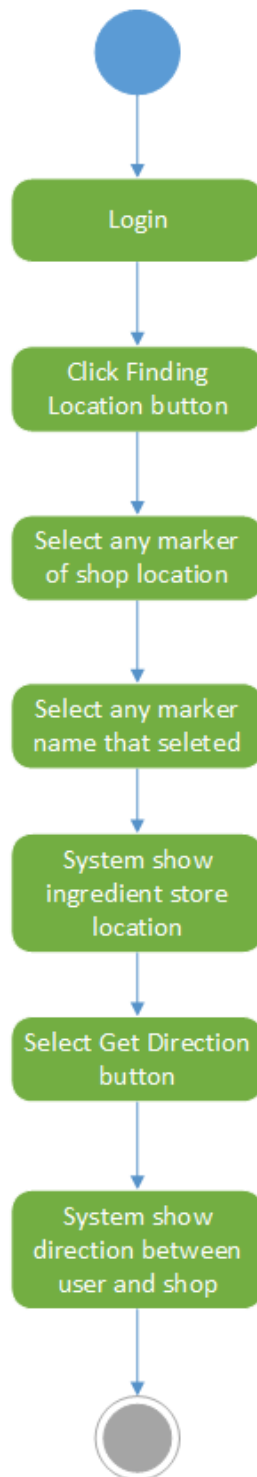


Figure 17 AD-14 Get direction between user and ingredient store location

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	42 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

**UC15: Use case description for view list of ingredient**

Use Case ID:	UC15
Use Case Name:	View list of ingredient
Short Description:	To View list of ingredient.
Related Use Cases:	<Include> UC02
Actors:	User
Pre conditions:	<ol style="list-style-type: none"><li>1. User must access to LCR mobile application.</li><li>2. User has to stay on home page.</li></ol>
Flow of Events:	<ol style="list-style-type: none"><li>1. User taps on “ingredient” button</li><li>2. System retrieves ingredient detail information which is ingredient name and ingredient category from ingredient detail database.</li><li>3. System display list of ingredient. In each label shall display ingredient name text and ingredient category on recipe list.</li><li>4. System provides user able to view information of ingredient by tapping on any label on list of ingredient.</li></ol>
Alternative and Exceptional:	-

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	<b>43 / 69</b>
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

## AD-15 View list of ingredient

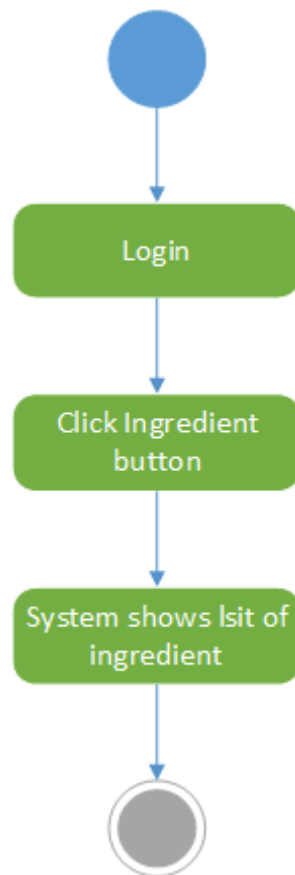


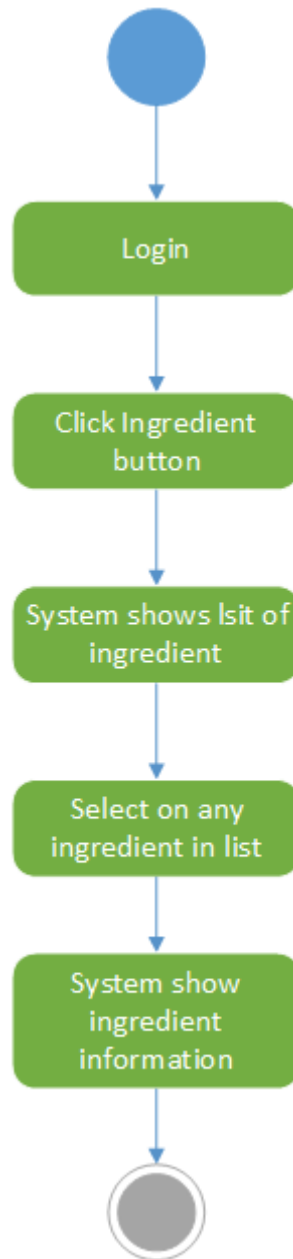
Figure 18 AD-15 View list of ingredient

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	44 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

### UC16: Use case description for view ingredient information

Use Case ID:	UC16
Use Case Name:	View ingredient information
Short Description:	To view ingredient information from list of ingredient.
Related Use Cases:	<Include> UC02,UC15
Actors:	User
Pre conditions:	<ol style="list-style-type: none"><li>1. User must access to LCR mobile application.</li><li>2. User has to stay on list of ingredient page.</li></ol>
Flow of Events:	<ol style="list-style-type: none"><li>1. User select any ingredient that user want by tapping on ingredient label on list of ingredient page.</li><li>2. System retrieves ingredient detail information which is ingredient name, ingredient description, ingredient image from ingredient detail database.</li><li>3. System displays ingredient information which is ingredient name, ingredient description text, ingredient category and ingredient image on view information of ingredient page.</li></ol>
Alternative and Exceptional:	-

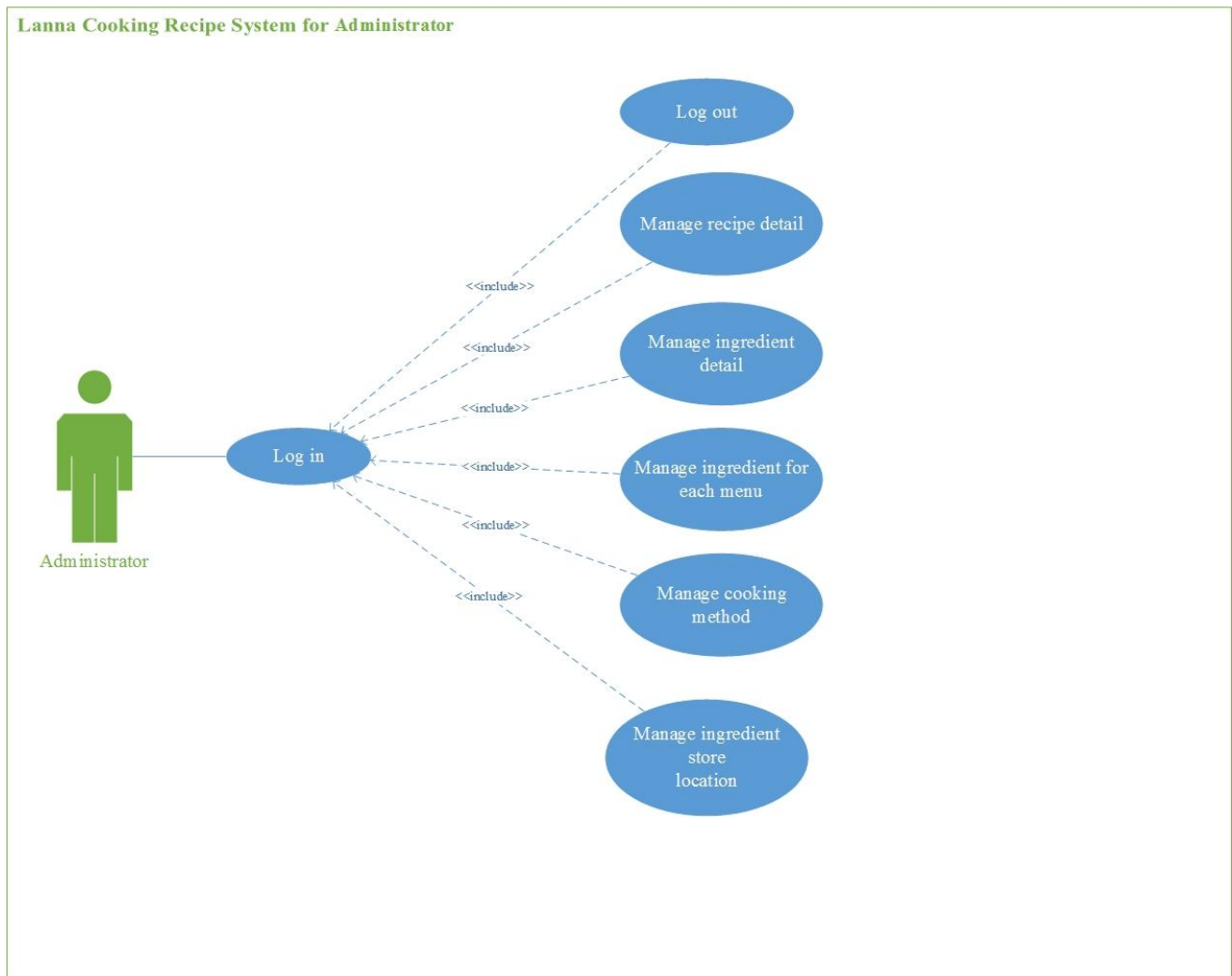
## AD-16 View ingredient information



**Figure 19 AD-16 View ingredient information**

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	46 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

### 4.2.3 Lanna Cooking Recipe Use Case for Administrator



**Figure 2: Administrator Use Case**

Figure 2 shows activities that administrator can use in  
Lanna Cooking Recipe on Mobile application.

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	47 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

## 4.2.4 Use case Description and Activity Diagram for User Use Case

### UC17: Use case description for Log in

Use Case ID:	UC17
Use Case Name:	Log in
Short Description:	To login into the web service by generated username and password.
Related Use Cases:	-
Actors:	Administrator
Pre conditions:	1. Administrator has Username and password that can use to access the application.
Flow of Events:	1. Administrator has to log in the application by inputting correctly username and password. 2. The system will verify username and password from database. 3. System will show message user status. 4. Then Administrator can log in web service.
Alternative and Exceptional:	1.1 If username and password are invalid. System show alert message.



## AD-17 Admin login

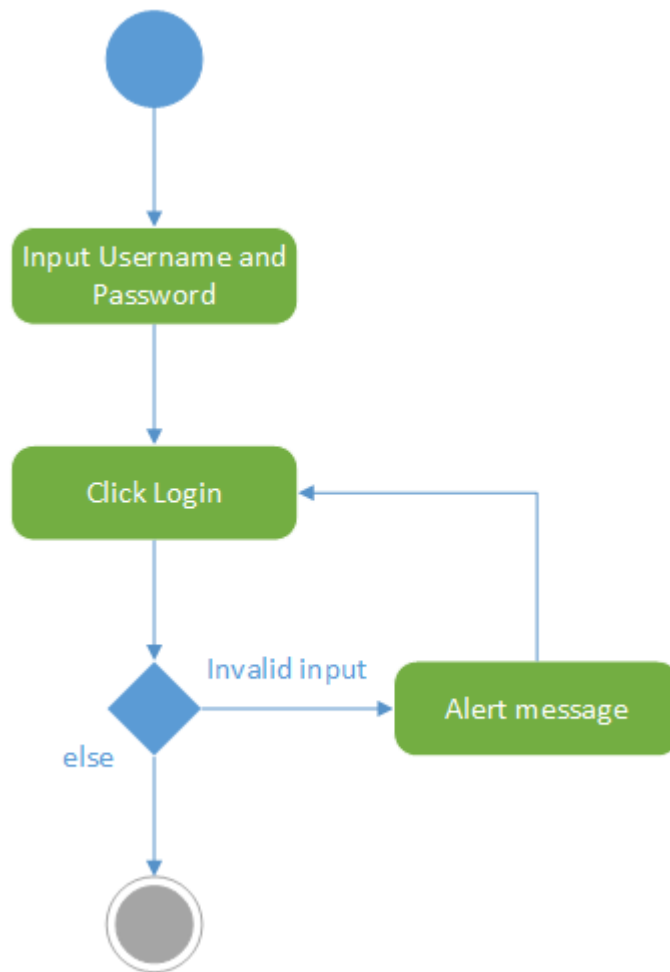


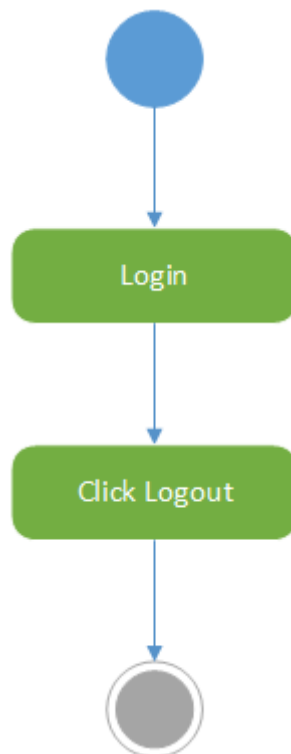
Figure 20 AD-17 Admin login

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	49 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

### UC18: Use case description for Log out

Use Case ID:	UC18
Use Case Name:	Log out
Short Description:	To logout from the web service, after login to the web service.
Related Use Cases:	<Include> UC17
Actors:	Administrator
Pre conditions:	1. Administrator must access to LCR mobile application. 2. Administrator has to stay in option page.
Flow of Events:	1. Click on log out button. 2. Show log out status message. 3. Go back to log in page of web service.
Alternative and Exceptional:	-

### AD-18 Admin logout



**Figure 21 AD-18 Admin logout**

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	50 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

**UC19: Use case description for manage recipe detail.**

Use Case ID:	UC19
Use Case Name:	Manage recipe detail
Short Description:	To provide recipe detail management interface for administrator to add, edit or delete recipe details which are recipe id, recipe name text, recipe's description text and recipe image.
Related Use Cases:	<Include> UC17
Actors:	Administrator
Pre conditions:	<ol style="list-style-type: none"><li>1. User must login to LCR management web server.</li><li>2. User must stay on recipe detail page.</li></ol>
Flow of Events:	<ol style="list-style-type: none"><li><b>1. Add new recipe detail</b><ol style="list-style-type: none"><li>1.1 User has to input information about recipe including recipe id, recipe name text, recipe's description text and recipe image.</li><li>1.2 The system will receive input from user.</li><li>1.3 System will add new recipe detail to database.</li></ol></li><li><b>2. Edit a recipe detail</b><ol style="list-style-type: none"><li>2.1 User click on edit button.</li><li>2.2 User select product that want to edit.</li><li>2.3 User has to edit recipe detail about recipe name text, recipe's description text and recipe image.</li><li>2.4 The system will receive input from user.</li><li>2.5 System will update new food recipe information to the database.</li></ol></li><li><b>3. Delete a recipe detail</b><ol style="list-style-type: none"><li>3.1 Select delete button.</li><li>3.2 User select product that want to delete.</li><li>3.3 User has to confirm to delete the selected recipe menu.</li><li>3.4 System will delete recipe menu information from the database.</li></ol></li></ol>
Alternative and Exceptional:	<ol style="list-style-type: none"><li><b>1.Add new recipe detail</b><ol style="list-style-type: none"><li>1.1 If user input invalid type in recipe detail, system will be show message that "Please input valid values type".</li><li>1.2 If user doesn't input all of require information box, system will show message that "Please input required information".</li></ol></li><li><b>2.Edit a recipe detail</b><ol style="list-style-type: none"><li>2.1 If user input invalid type in recipe detail, system will be show message that "Please input valid values type".</li><li>2.2 If user doesn't input all of require information box, system will show message that "Please input required information".</li></ol></li></ol>

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	51 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

## AD-19 Admin add recipe detail

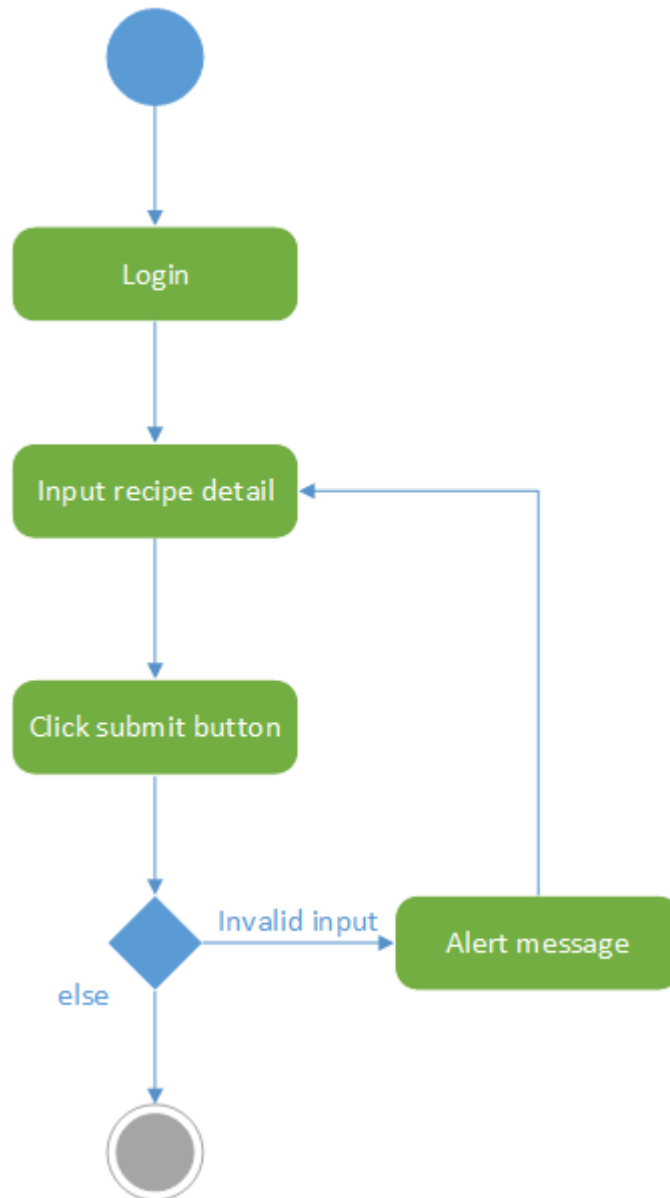


Figure 22 AD-19 Admin add recipe detail

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	52 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

## AD-20 Admin edit recipe detail

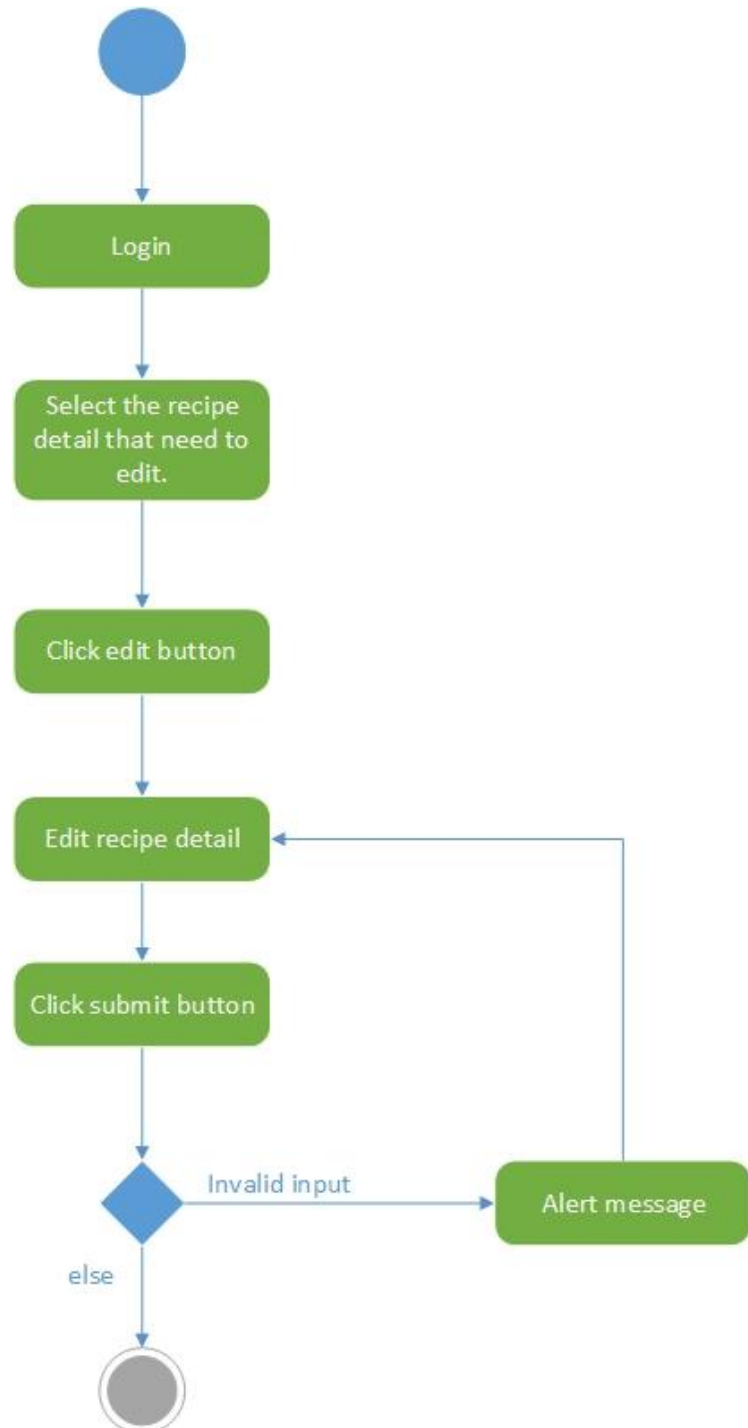
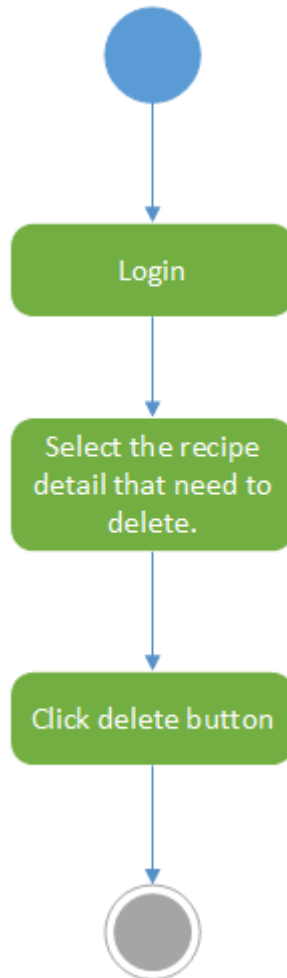


Figure 23 AD-20 Admin edit recipe detail

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	53 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

## AD-21 Admin delete recipe detail



**Figure 24 AD-21 Admin delete recipe detail**

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	54 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

## UC20: Use case description for ingredient detail

Use Case ID:	UC20
Use Case Name:	Manage ingredient detail
Short Description:	To provide ingredient detail management interface for administrator to add, edit or delete ingredient details which are ingredient id, ingredient name text, ingredient description text, ingredient's image and remark text.
Related Use Cases:	<Include> UC17
Actors:	Administrator
Pre conditions:	<ol style="list-style-type: none"> <li>1. User must login to LCR management web server.</li> <li>2. User must stay on ingredient detail page.</li> </ol>
Flow of Events:	<p><b>1. Add new ingredient detail</b></p> <ol style="list-style-type: none"> <li>1.1 User has to input information about ingredient detail including ingredient id, ingredient name text, ingredient description text, ingredient's image and remark text.</li> <li>1.2 The system will receive input from user.</li> <li>1.3 System will add new ingredient detail to database.</li> </ol> <p><b>2. Edit a ingredient detail</b></p> <ol style="list-style-type: none"> <li>2.1 User clicks on edit button.</li> <li>2.2 User select product that want to edit.</li> <li>2.3 User has to edit ingredient detail about ingredient name text, ingredient description text, ingredient's image and remark text.</li> <li>2.4 The system will receive input from user.</li> <li>2.5 System will update new ingredient detail information to the database.</li> </ol> <p><b>3. Delete a ingredient detail</b></p> <ol style="list-style-type: none"> <li>3.1 Select delete button.</li> <li>3.2 User select ingredient detail that want to delete.</li> <li>3.3 User has to confirm to delete the selected ingredient detail.</li> <li>3.4 System will delete ingredient detail menu information from the database.</li> </ol>
Alternative and Exceptional:	<p><b>1. Add new ingredient detail</b></p> <ol style="list-style-type: none"> <li>1.1 If user input invalid type in ingredient detail, system will be show message that "Please input valid values type".</li> <li>1.2 If user doesn't input all of require information box, system will show message that "Please input required information".</li> </ol> <p><b>2. Edit a ingredient detail</b></p> <ol style="list-style-type: none"> <li>2.1 If user input invalid type in ingredient detail, system will be show message that "Please input valid values type".</li> <li>2.2 If user doesn't input all of require information box, system will show message that "Please input required information".</li> </ol>

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	55 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

## AD-22 Admin add ingredient detail

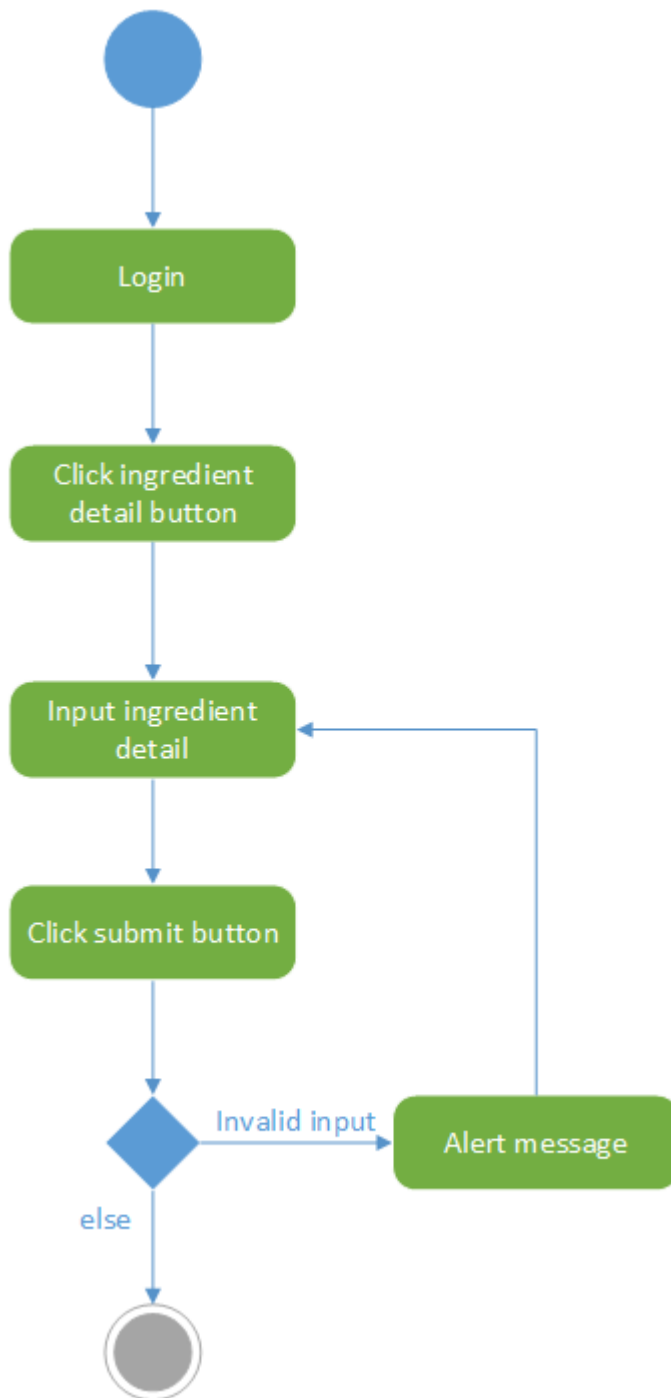


Figure 25 AD-22 Admin add ingredient detail

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	56 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013



### AD-23 Admin edit ingredient detail

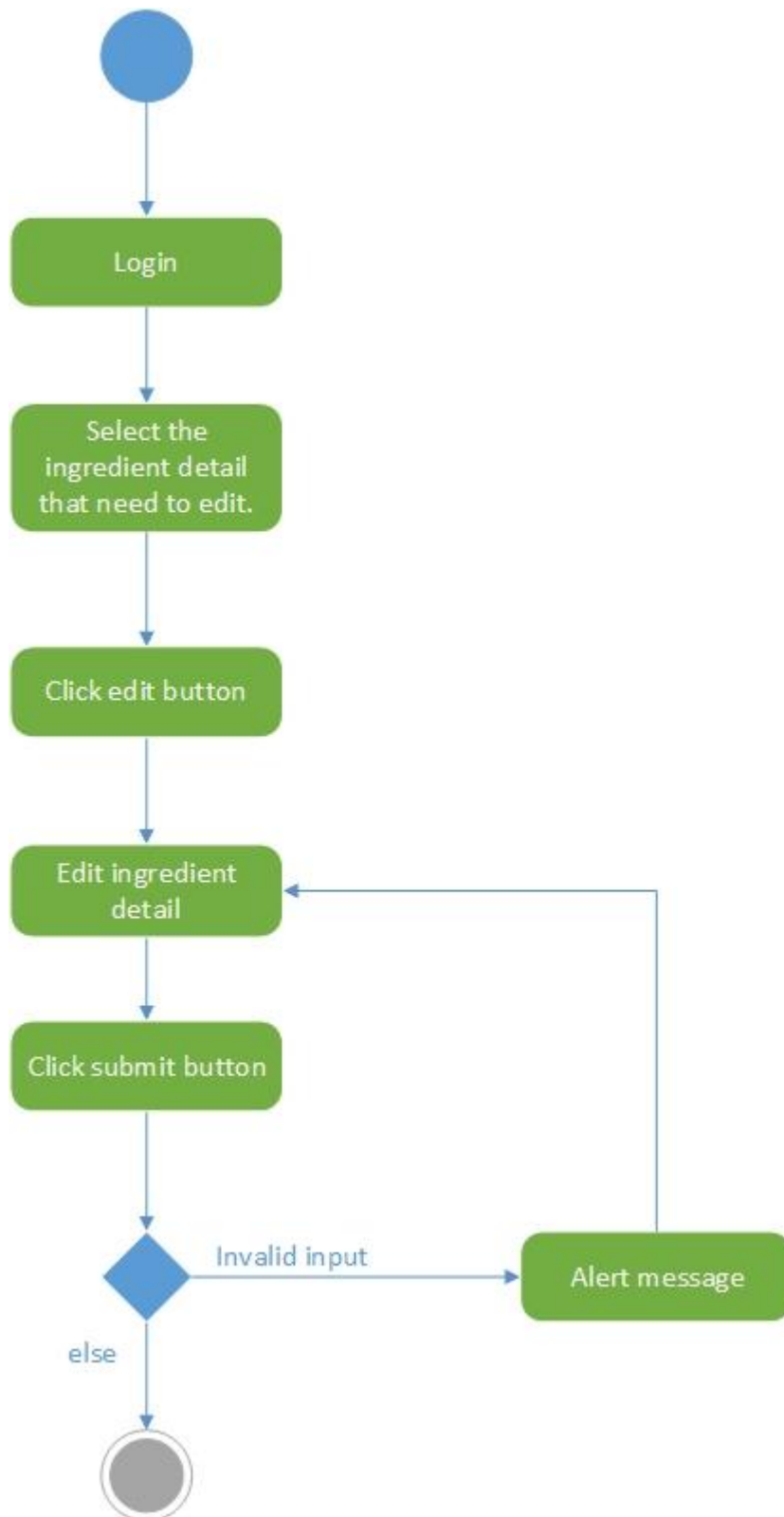


Figure 26 AD-23 Admin add edit detail

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	57 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

#### AD-24 Admin delete ingredient detail



Figure 27 AD-24 Admin delete ingredient detail

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	58 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

**UC21: Use case description for manage ingredient for each menu**

Use Case ID:	UC21
Use Case Name:	Manage ingredient for each menu
Short Description:	To provide ingredient for each menu management interface for administrator to add or delete recipe ingredient into each menu which are recipe id, ingredient id, ingredient amount and unit.
Related Use Cases:	<Include> UC17
Actors:	Administrator
Pre conditions:	<ol style="list-style-type: none"><li>1. User must login to LCR management web server.</li><li>2. User must stay on ingredient for each menu page.</li></ol>
Flow of Events:	<p><b>1. Add new ingredient for each menu</b></p> <p>1.1 User has to input information about ingredient for each menu including recipe id, ingredient id, ingredient amount and unit.</p> <p>1.2 The system will receive input from user.</p> <p>1.3 System will add new ingredient for each menu to database.</p> <p><b>2. Delete a ingredient for each menu</b></p> <p>2.1 Select delete button.</p> <p>2.2 User select product that want to delete.</p> <p>2.3 User has to confirm to delete the selected ingredient in menu.</p> <p>2.4 System will delete ingredient in menu from the database.</p>
Alternative and Exceptional:	<p><b>1. Add new ingredient detail</b></p> <p>1.1 If user input invalid type in ingredient for each menu, system will be show message that “Please input valid values type”.</p> <p>1.2 If user doesn’t input all of require information box, system will show message that “Please input required information”.</p>

## AD-25 Admin add ingredient for each menu

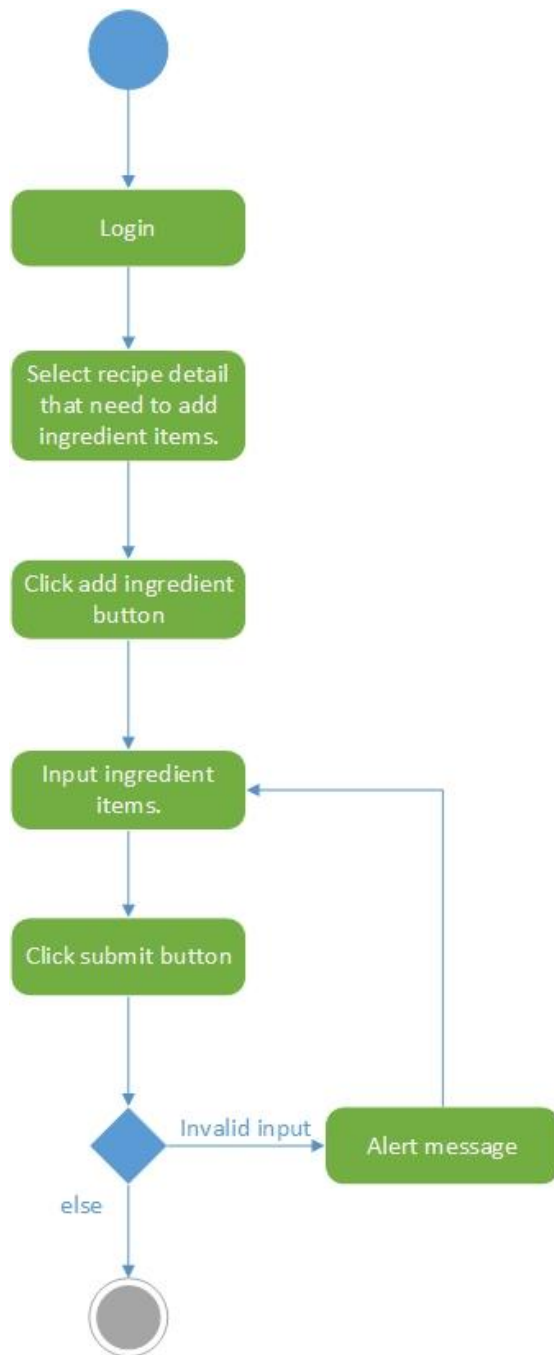


Figure 28 AD-25 Admin add ingredient for each menu

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	60 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

## AD-26 Admin delete ingredient for each menu



Figure 29 AD-26 Admin delete ingredient for each menu

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	61 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

**UC22: Use case description for manage cooking method**

Use Case ID:	UC22
Use Case Name:	Manage cooking method
Short Description:	To provide cooking method management interface for administrator to add, edit or delete recipe details which are recipe id, section, cooking method description text and cooking method image.
Related Use Cases:	<Include> UC17
Actors:	Administrator
Pre conditions:	1. User must login to LCR management web server. 2. User must stay on cooking method page.
Flow of Events:	<b>1. Add new cooking method</b> 1.1 User has to input information about cooking method including recipe id, section, cooking method description text and cooking method image. 1.2 The system will receive input from user. 1.3 System will add new ingredient detail to database.  <b>2. Delete a cooking method</b> 2.1 Select delete button. 2.2 User select cooking method that want to delete. 2.3 User has to confirm to delete the selected cooking method. 2.4 System will delete cooking method information from the database.
Alternative and Exceptional:	<b>1. Add new cooking method</b> 1.1 If user input invalid type in cooking method, system will be show message that "Please input valid values type". 1.2 If user doesn't input all of require information box, system will show message that "Please input required information".

#### AD-27 Admin add ingredient for each menu

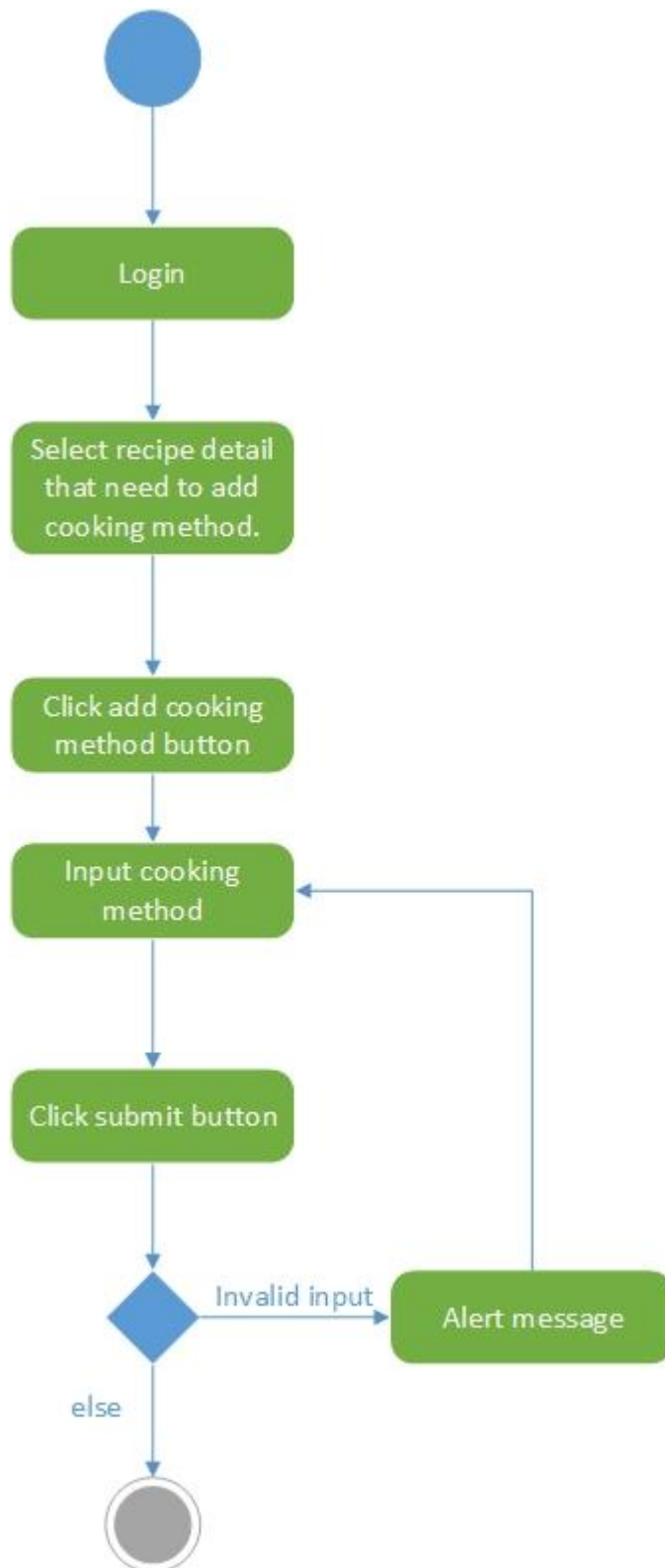


Figure 30 AD-27 Admin delete ingredient for each menu

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	63 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

## AD-28 Admin delete ingredient for each menu

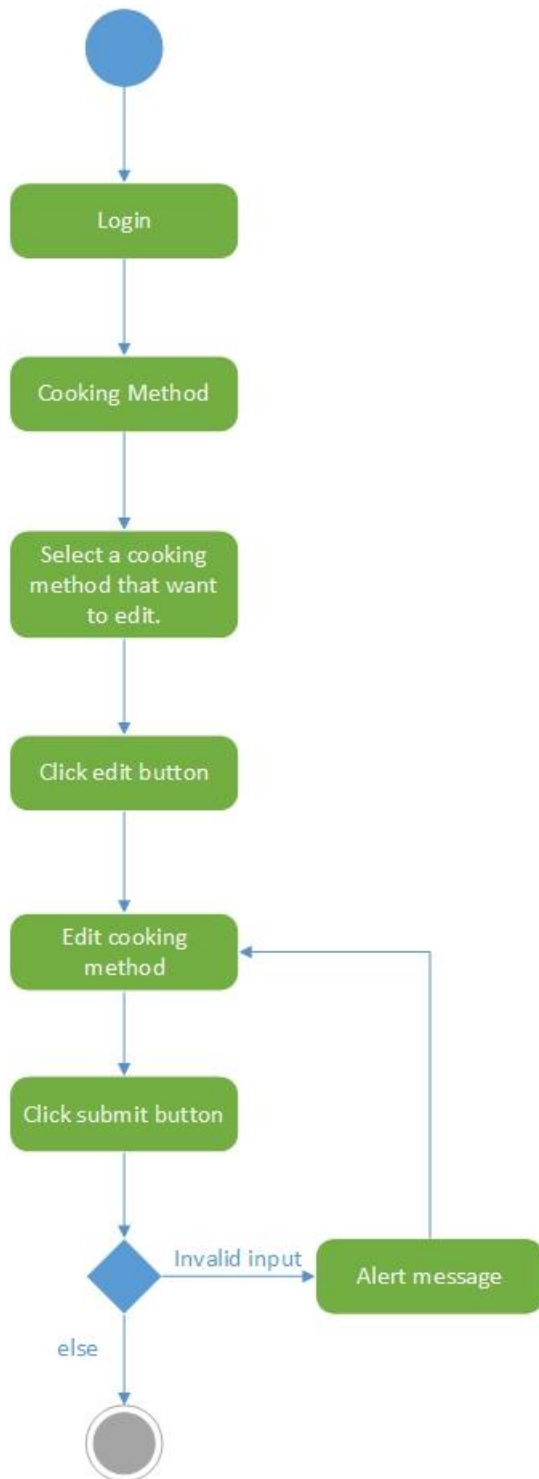


Figure 31 AD-28 Admin delete ingredient for each menu

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	64 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

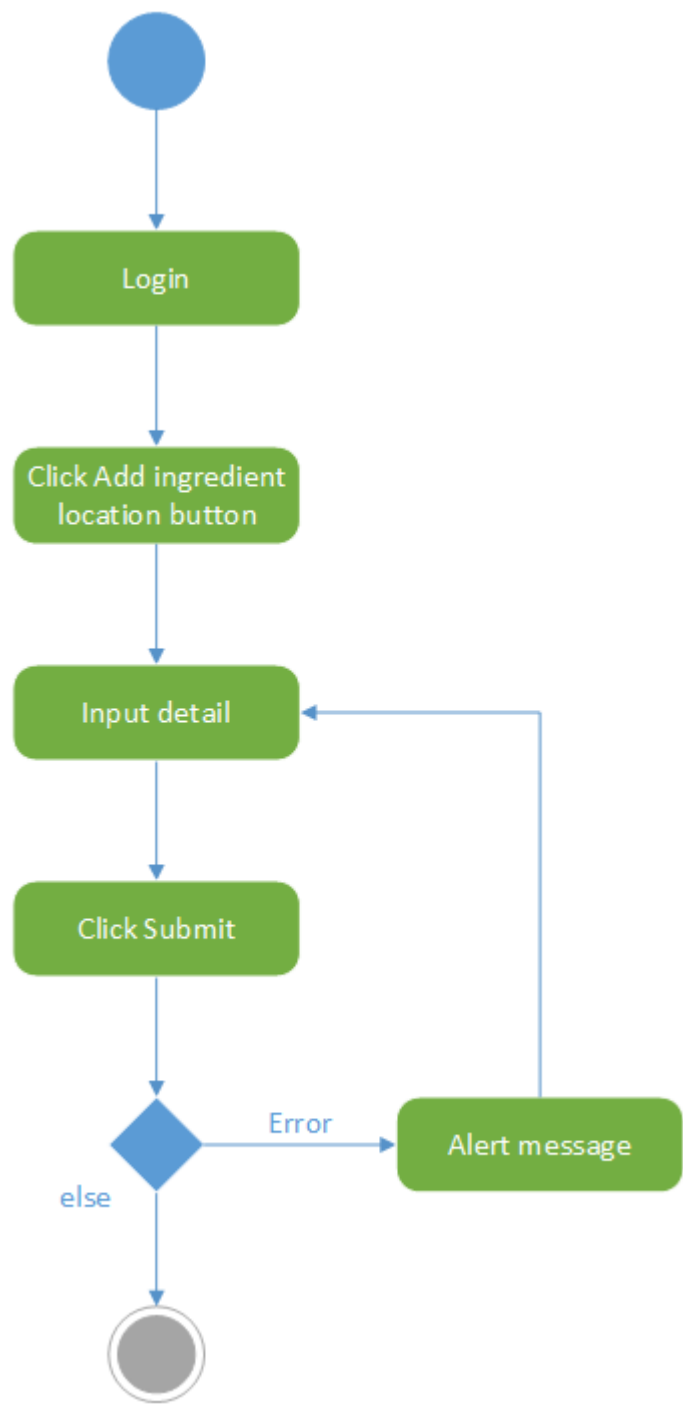


**UC23: Use case description for manage ingredient store location**

Use Case ID:	UC23
Use Case Name:	Manage ingredient store location
Short Description:	To provide the administrator can add, edit, and delete ingredient store location information in database.
Related Use Cases:	<Include> UC17
Actors:	Administrator
Pre conditions:	1. User must login to LCR management web server.
Flow of Events:	<p><b>1. Add new ingredient store location information</b></p> <p>1.1 User has to input information about ingredient store location including store picture, store name, store location and store review.</p> <p>1.2 The system will receive input from user.</p> <p>1.3 System will add new food recipe information to database.</p> <p><b>2. Edit a ingredient store location information</b></p> <p>2.1 User click on edit product button.</p> <p>2.2 User select product that want to edit.</p> <p>2.3 User has to information about ingredient store location including store picture, store name, store location and store review.</p> <p>2.4 The system will receive input from user.</p> <p>2.5 System will update new food recipe information to the database.</p> <p><b>3. Delete a ingredient store location information</b></p> <p>3.1 Select delete product button.</p> <p>3.2 User select product that want to delete.</p> <p>3.3 User has to confirm to delete the selected ingredient store location,</p> <p>3.4 System will delete ingredient store location information from the database.</p>
Alternative and Exceptional:	<p><b>1.Add new recipe information</b></p> <p>1.1 If user input invalid type in product information, system will be show message that "Please input valid values type".</p> <p>1.2 If user doesn't input all of require information box, system will show message that "Please input required information".</p> <p><b>2.Edit a recipe information</b></p> <p>2.1 If user input invalid type in product information, system will be show message that "Please input valid values type".</p> <p>2.2 If user doesn't input all of require information box, system will show message that "Please input required information".</p>

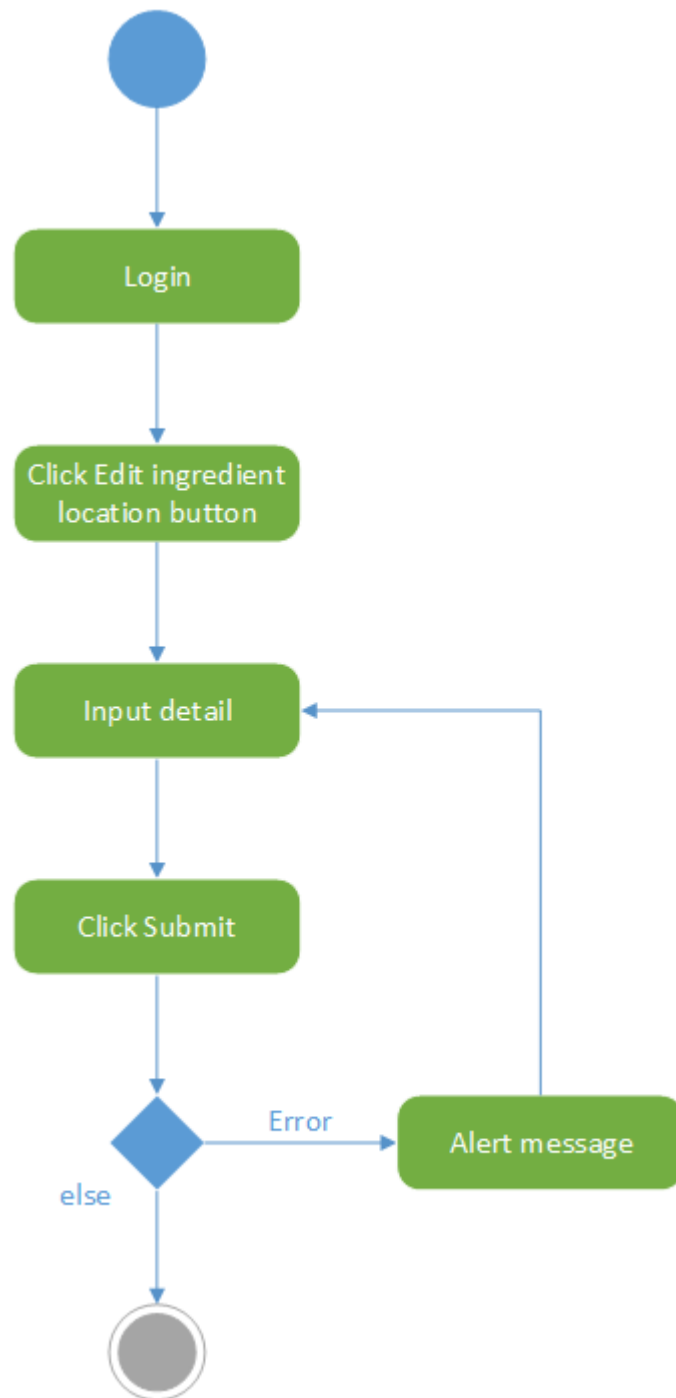
Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	65 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

**AD-29 Admin add ingredient store location**



**Figure 32 AD-29 Admin add ingredient store location**

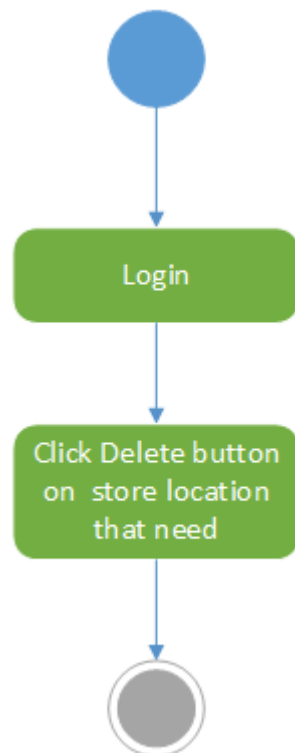
### AD-30 Admin edit ingredient store location



**Figure 33 AD-30 Admin edit ingredient store location**

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	67 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

### AD-31 Admin delete ingredient store location



**Figure 34 AD-31 Admin delete ingredient store location**

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	68 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013

### 4.3 Quality Requirement

According to McCall's factor model, the Lanna Cooking Recipe android application should meet these following factors:

#### 4.1.1 Product operation factors

##### **-Correctness**

- The software should able to provide more than 80% correctness of data from user traditional request.

##### **-Reliability**

- The software should able to handle more than 80% of traditional activity with less than 10% of software's failure.

##### **-Integrity**

- The software should able identify between authorized and unauthorized person.
- The software should able to limit a group of person who can modify the data.

#### 4.1.2 Product revision factors

##### **-Maintainability**

- The software should have 20-30% of comment comparing with the whole LOC to support the future maintenance activity.

##### **-Testability**

- The software should able to be tested 100% of it defined routine and functionality.

#### 4.1.3 Product transition factors

##### **-Reusability**

- More than 20% part of finished software should able to be reused in future development.

##### **Remark**

All of following quality factors is complete when program is in final progress.

Document Name	LCR -SRS-V.3.0.docx	Owner	KO	Page	69 / 69
Document Type	Software Requirement Specification	Release Date	3 October 2013	Print Date	3 October 2013