

**ÇANKAYA UNIVERSITY**

**FACULTY OF ENGINEERING**

**COMPUTER ENGINEERING DEPARTMENT**

**Test Plan, Test Design Specifications and Test Cases**

**Version 1**

**CENG 408**

Innovative System Design and Development II

**SUMMER TRAINING**

**INFORMATION SYSTEM**

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# INTRODUCTION

## Version Control

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| --- | --- | --- |
| **Version No** | **Description of Changes** | **Date** |
| 1.0 | First Version | May 5, 2020 |
|  |  |  |
|  |  |  |

## Overview

Recommendation system of Cookhub will be tested for the recommended recipes are consistent to the users taste.

## Scope

This document encapsulates the test plan of the use cases, test design specifications and the test cases correspond to test plan.

## Terminology

| **Acronym** | **Definition** |
| --- | --- |
| A.I. | Artificial Intelligence |
| U.I. | User Interface |
|  |  |
|  |  |

# FEATURES TO BE TESTED

This section lists and gives a brief description of all the major features to be tested. For each major feature there will be a Test Design Specification added at the end of this document.

## Artificial İntelligence (AI)

Artificial intelligence is used in Cookhub recommendations of recipes hence recommended data will be coherent.

## User Interface (UI)

This part includes the test cases and test plan of user interface. User interface includes home page, search screen that divides to three, virtual fridge.

# FEATURES NOT TO BE TESTED

The database will not be tested. The database includes all recipes and tags that is connected to the artificial intelligence.

# ITEM PASS/FAIL CRITERIA

## Exit Criteria

* 100% of the test cases are executed
* 90% of the test cases passed
* All High and Medium Priority test cases passed

# REFERENCES

1. <https://github.com/CankayaUniversity/ceng-407-408-2019-2020-Cook-Hub/tree/master/Documents> , March 05, 2020

# TEST DESIGN SPECIFICATIONS

## User Interface (UI)

### Subfeatures to be tested

#### Profile Image Button (UI.PIB\_BTN)

User can click to image button to connect the profile page.

#### Recommended Food Image Buttons (UI.RFI\_BTN)

User can see the ten most popular recipes. User can click any button to reach detail of that recipe.

**6.1.1.3 Existing Ingredient Text Box (UI.EI\_TEXT)**

This text box shows existing ingredients in database.

**6.1.1.4 Add Ingredient Drop Down List (UI.AI\_DDL)**

This drop down list shows all ingredients that can be added.

**6.1.1.5 Add Ingredient Button (UI.AI\_BTN)**

This button adds the selected ingredient to the data base.

#### 6.1.1.6 Search Panel (UI.SP)

User can choose from 3 different search methods which were : Search by Ingredient, Search by Tag, Search by Recipe.

**6.1.1.6.1 Search by Ingredient Panel(UI.SP.SIP)**

If user chooses the “Search by Ingredient”, users will encounter two search methods.

**6.1.1.6.2 Enter Ingredients Button (UI.SP.SIP.EI)**

If user chooses the “Enter Ingredients Button”, user will type the material name by hand. S/he will choose the materials s/he finds. Multisearch can be done here.

**6.1.1.6.3 Virtual Fridge Button(UI.SP.STP.VF)**

If user chooses the “Virtual Fridge Button”, drop down list will be opened below. This list shows the ingredients already exist in the refrigerator. Multisearch can be done here.

**6.1.1.6.4 Search by Recipe Panel(UI.SP.SRP)**

If user chooses the “Search by Recipe”, with the name of the meal s/he can reach the recipe directly.

**6.1.1.6.5Search by Tag Panel(UI.SP.STP)**

If user chooses the “Search by Tag”, users will encounter an eye symbol.

**6.1.1.7 Main Panel**

**6.1.1.7.1 Home Page Button ( UI.HP\_BTN)**

User can click that button to connect homepage of Cookhub.

**6.1.1.7.2 Search Page Button ( UI.SP\_BTN)**

User can click that button to connect Search Page of Cookhub.

**6.1.1.7.3 Virtual Fridge Page Button ( UI.VF\_BTN)**

User can click that button to connect Virtual Fridge page of Cookhub.

**6.1.1.7.4 Shopping List Page Button ( UI.SL\_BTN)**

User can click that button to connect Shopping List page of Cookhub.

**6.1.1.7.5 Favourites Page Button ( UI.FP\_BTN)**

User can click that button to connect Favourites Page of Cookhub.

### Test Cases

|  |  |  |  |
| --- | --- | --- | --- |
| **TC ID** | **Requirements** | **Priority** | **Scenario Description** |
| UI.PIB\_BTN.01 | 3.2 | M | Click to image button to connect the profile page. |
| UI.RFI\_BTN.01 | 3.2 | H | Click any button to reach detail of recommended recipe. |
| UI.EI\_TEXT.01 | 3.2 | H | Program should shows the existing ingredients in database. |
| UI.AI\_DDL.01 | 3.2 | H | Drop down list shows all ingredients that can be added. |
| UI.AI\_BTN.01 | 3.2 | H | Button adds the selected ingredient to the data base |

|  |  |  |  |
| --- | --- | --- | --- |
| **TC ID** | **Requirements** | **Priority** | **Scenario Description** |
| UI.SP.SIP.01 | 3.2 | H | If user chooses the “Search by Ingredient”, users will encounter two search methods |
| UI.SP.SIP.EI.01 | 3.2 | H | If user chooses the “Enter Ingredients Button”, user will type the material name by hand. S/he will choose the materials s/he finds. Multisearch can be done here. |
| UI.SP.STP.VF.01 | 3.2 | H | If user chooses the “Virtual Fridge Button”, drop down list will be opened below. This list shows the ingredients already exist in the refrigerator. Multisearch can be done here. |
| UI.SP.SRP.01 | 3.2 | H | If user chooses the “Search by Recipe”, with the name of the meal s/he can reach the recipe directly. |
| UI.SP.STP.01 | 3.2 | H | If user chooses the “Search by Tag”, users will encounter an eye symbol. |

|  |  |  |  |
| --- | --- | --- | --- |
| **TC ID** | **Requirements** | **Priority** | **Scenario Description** |
| **UI.HP\_BTN** | 3.2 | H | User can click that button to connect homepage of Cookhub. |
| **UI.SP\_BTN** | 3.2 | H | User can click that button to connect Search Page of Cookhub. |
| **UI.VF\_BTN** | 3.2 | H | User can click that button to connect Virtual Fridge page of Cookhub. |
| **UI.SL\_BTN** | 3.2 | H | User can click that button to connect Shopping List page of Cookhub. |
| **UI.FP\_BTN** | 3.2 | H | User can click that button to connect Favourites Page of Cookhub. |

# Detailed Test Cases

## UI.PIB\_BTN.01

|  |  |
| --- | --- |
| **TC\_ID** | UI.PIB\_BTN.01 |
| **Purpose** | Click to image button to connect the profile page. |
| **Requirements** | 3.2 |
| **Priority** | High. |
| **Estimated Time Needed** | Less than 1 minute |
| **Dependency** | User should be registered. |
| **Setup** | An admin user should be created. |
| **Procedure** | [A01] Go to home page. |
| [A02] Click to “Image” button. |
| [V01] Observe that user’s profile page. |
| - |
| - |
| - |
| **Cleanup** | Go back to previous page (Home Page). |

## UI.RFI\_BTN.01

|  |  |
| --- | --- |
| **TC\_ID** | UI.RFI\_BTN.01 |
| **Purpose** | Click any button to reach detail of that recommended recipes. |
| **Requirements** | 3.2 |
| **Priority** | High. |
| **Estimated Time Needed** | 45 sec. |
| **Dependency** | User should chose tags. |
| **Setup** | User should chose some tags for find a recipe. |
| **Procedure** | [A01] Chose any attributes from tag list for define the food. |
| [A02] Click a food image from recommendations (results of elimination by tag filtering) |
| [V01] Observe that the detail of recipe. |
| - |
| - |
| - |
| **Cleanup** | Exit from the page. |

## 7.3 UI.EI.TEXT.01

|  |  |
| --- | --- |
| **TC\_ID** | UI.EI.TEXT.01 |
| **Purpose** | See the existing ingredients in database. |
| **Requirements** | 3.2 |
| **Priority** | High |
| **Estimated Time Needed** | 1 minute |
| **Dependency** | Ingredients successfully added in database. |
| **Setup** | Find the ingredients from database. |
| **Procedure** | [A01] Go to virtual fridge page. |
| [V01] Observe that the added ingredients is successfully opened and appears |
| **Cleanup** | Exit |

## 7.4 UI\_AI\_DDL.01

|  |  |
| --- | --- |
| **TC\_ID** | UI\_AI\_DDL.01 |
| **Purpose** | See the drop down list shows all ingredients that can be added. |
| **Requirements** | 3.2 |
| **Priority** | High |
| **Estimated Time Needed** | 1 minute |
| **Dependency** | Ingredients successfully added in database. |
| **Setup** | Find the ingredients from database. |
| **Procedure** | [A01] Go to virtual fridge page. |
| [A02] Click the drop down list |
| [V01] Observe that the added ingredients is successfully opened and appears |
| **Cleanup** | Exit |

## 7.5 UI.AI\_BTN.01

|  |  |
| --- | --- |
| **TC\_ID** | UI.AI\_BTN.01 |
| **Purpose** | Button adds the selected ingredient to the data base |
| **Requirements** | 3.2 |
| **Priority** | High |
| **Estimated Time Needed** | 1 minute |
| **Dependency** | UI\_AI\_DDL.01 and UI.EI.TEXT.01 test cases should pass. |
| **Setup** | Select the ingredients from drop down list. |
| **Procedure** | [A01] Go to virtual fridge page. |
| [A02] Click the drop down list |
| [A03] Select the ingredients |
| [A04] Click the Add Ingredient button |
| [V01] Observe that the selected ingredients is successfully added to database |
| **Cleanup** | Exit |

## 7.6 UI.SP.SIP.01

|  |  |
| --- | --- |
| **TC\_ID** | UI.SP.SIP.01 |
| **Purpose** | Search food by selecting ingredients |
| **Requirements** | 3.2 |
| **Priority** | High |
| **Estimated Time Needed** | Less than 1 minute |
| **Dependency** | Ingredients successfully added in database. |
| **Setup** | Click Search Page (magnifying glass image) button |
| **Procedure** | [A01] Go to search page. |
| [A02] Select Search by Ingredient. |
| [A03] Select the ingredients |
| [A04] Click the search button |
| [V01] Observe that the recipes appears according to selecting ingredients. |
| - |
| **Cleanup** | Exit |

## 7.7 UI.SP.SIP.EI.01

|  |  |
| --- | --- |
| **TC\_ID** | UI.SP.SIP.EI.01 |
| **Purpose** | The user can select the ingredients that s/he wants by entering manually. |
| **Requirements** | 3.2 |
| **Priority** | High |
| **Estimated Time Needed** | 30 sec. |
| **Dependency** | The ingredients that the user searches for must be in the database. |
| **Setup** | Click “Enter Ingredients” button. |
| **Procedure** | [A01] Click Search by Ingredient Page. |
| [V01] Observe that two search methods on this page. |
| [A02] Click “Enter Ingredients” button. |
| [A03] Type any ingredients by hand. |
| [A04] If they exist, chose them by clicking. |
| [A05] Click Search button. |
| **Cleanup** | Go to the previous page. |

## 7.8 UI.SP.STP.VF.01

|  |  |
| --- | --- |
| **TC\_ID** | UI.SP.STP.VF.01 |
| **Purpose** | This page shows the ingredients already exist in the refrigerator. |
| **Requirements** | 3.2 |
| **Priority** | High |
| **Estimated Time Needed** | 1 minute |
| **Dependency** | Successful connection between databases that named “Virtual Fridge” at background. |
| **Setup** | Click “Virtual Fridge” button. |
| **Procedure** | [A01] Click Search by Ingredient Page. |
| [V01] Observe that two search methods on this page. |
| [A02] Click “Virtual Fridge” button. |
| [V02] Observe that a drop down list that shows ingredients already exist in refrigerator. |
| [A03] Chose ingredients. |
| [V03] Observe that recipe recommendations that include these ingredients. |
| **Cleanup** | Go to the previous page. |

## 7.9 UI.SP.SRP.01

|  |  |
| --- | --- |
| **TC\_ID** | UI.SP.SRP.01 |
| **Purpose** | User can search a recipe with the name of the meal s/he can reach directly. |
| **Requirements** | 3.2 |
| **Priority** | High |
| **Estimated Time Needed** | 30 sec. |
| **Dependency** | The recipe the user searched for should be in the database. |
| **Setup** | Click “Search by Recipe” button. |
| **Procedure** | [A01] Click Search Page. |
| [A02] Select “Search by Recipe” page. |
| [A03] Type a recipe name by hand. |
| [A04] If it is exist, chose it by clicking. |
| [V01] Observe that recipe details. |
| - |
| **Cleanup** | Exit |

## 7.10 UI.SP.STP.01

|  |  |
| --- | --- |
| **TC\_ID** | UI.SP.STP.01 |
| **Purpose** | It makes it easier for the user to find recipes in the desired features. |
| **Requirements** | 3.2 |
| **Priority** | High |
| **Estimated Time Needed** | 1 minute |
| **Dependency** | The recipe the user searched for should be in the database. |
| **Setup** | Click “Search by Tag” button. |
| **Procedure** | [A01] Select “Search by Tag” page. |
| [A02] Click “Enter Tag” button. |
| [V01] Observe that a text box to enter a tag by hand. |
| [A03] Click “Eye” icon to see all tags. |
| [A04] Click “Search” button. |
| [V02] Observe that recipe recommendations that include these tags. |
| **Cleanup** | Exit |

## 7.11 UI.HP\_BTN.01

|  |  |
| --- | --- |
| **TC\_ID** | UI.HP\_BTN.01 |
| **Purpose** | Click that button to connect homepage. |
| **Requirements** | 3.2 |
| **Priority** | High |
| **Estimated Time Needed** | 20 sec |
| **Dependency** |  |
| **Setup** | Click “Home Page” button (house icon) |
| **Procedure** | [A01] Select “Home Page” button. |
| [V01] Observe that a profile picture and top ten recipe recommendations. |
| - |
| - |
| - |
| - |
| **Cleanup** | Select another page button from main panel. |

## 7.12 UI.SP\_BTN.01

|  |  |
| --- | --- |
| **TC\_ID** | UI.SP\_BTN.01 |
| **Purpose** | Click that button to connect Search Page. |
| **Requirements** | 3.2 |
| **Priority** | High |
| **Estimated Time Needed** | 20 sec |
| **Dependency** |  |
| **Setup** | Click “Search” button (magnifying glass icon) |
| **Procedure** | [A01] Select “Search Page” button. |
| [V01] Observe that three searching methods. |
| - |
| - |
| - |
| - |
| **Cleanup** | After selecting a search method, a new page will be opened. |

## 7.13 UI.VF\_BTN.01

|  |  |
| --- | --- |
| **TC\_ID** | UI.VF\_BTN.01 |
| **Purpose** | Click that button to connect Virtual Fridge Page. |
| **Requirements** | 3.2 |
| **Priority** | High |
| **Estimated Time Needed** | 20 sec |
| **Dependency** |  |
| **Setup** | Click “Virtual Fridge” button (box icon) |
| **Procedure** | [A01] Select “Virtual Fridge” button. |
| [V01] Observe that a list that contains existing ingredients and a button to add new ingredients to fridge. |
|  |
|  |
|  |
| - |
| **Cleanup** | Select another page button from main panel. |

## 7.14 UI.SL\_BTN.01

|  |  |
| --- | --- |
| **TC\_ID** | UI.SL\_BTN.01 |
| **Purpose** | Click that button to connect Shopping List Page. |
| **Requirements** | 3.2 |
| **Priority** | High |
| **Estimated Time Needed** | 20 sec |
| **Dependency** |  |
| **Setup** | Click “Shopping List” button (supermarket trolley icon) |
| **Procedure** | [A01] Select “Shopping List” button. |
| [V01] Observe that a check list that contains missing ingredients. |
| [A02] Click “Add Ingredients” button to add missing ingredients of recipe. |
| [A03] Click “Apply the Virtual Fridge” to complete shopping list and confirm new virtual fridge with purchased materials. |
| [A03] Click “Delete Shopping List” to complete process or to quit. |
| - |
| **Cleanup** | Exit |

## 7.15 UI.FP\_BTN.01

|  |  |
| --- | --- |
| **TC\_ID** | UI.FP\_BTN.01 |
| **Purpose** | Click that button to connect Favorite Recipes Page. |
| **Requirements** | 3.2 |
| **Priority** | High |
| **Estimated Time Needed** | 20 sec |
| **Dependency** | User must have already cook the recipe or s/he chose the recipes as favorite to cook it later.. |
| **Setup** | User should create a tab that contains a list of favorite recipes. |
| **Procedure** | [A01] Click “Create a Tab” button (User can rename this tab later). |
| [A02] Add recipes that have already cooked ones (or designed to cook later) to list as favorites. |
| [V01] Observes that a favorite recipes list. |
|  |
|  |
| - |
| **Cleanup** | Select another page button from main panel. |