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| **Software Unit and System Test Documentation (SUSTD)**  **MBP (Meal Budget Plan) Project**  **Document Version Number** – v1.0  **12 April 2024**  **File Location Canvas:** Google Drive  **Computer Science - Biola University** |

**Overview:** First Software Design Description (SDD) for MBP Project.

**Target Audience:** Biola University Professor, Biola University Students.

**Project Team Members:** Miguel N. Oh, Rachel Liu, Johnathon Willey, Oscar Navarro.

**Version Control History:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Date** | **Reason for Changes** | **Version** |
| Miguel N. Oh | 04/01/24 | Initial Draft | Draft v0.1 |
| Rachel Liu | 04/11/24 | Traceability Matrix Chart | Draft v0.2 |
| Rachel Liu | 04/12/24 | Test Case Chart | Draft v0.3 |
| Oscar Navarro | 04/12/24 | Test Case Chart 2 | Draft v0.4 |
| Miguel N. Oh, Johnathon Willey | 04/12/24 | Test Case Log Chart | Draft v0.5 |
| Miguel N. Oh | 04/12/24 | Final Draft | SUSTD v1.0 |
|  |  |  |  |

**Signatures of Approval:**

|  |  |  |
| --- | --- | --- |
| **Organization Responsibility** | **Signature** | **Date** |
| Project Manager |  |  |
| Professor |  |  |
|  |  |  |

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# 1 Introduction

## System Overview

For the presented application MBP Project includes the application for the iOS application that was developed using Swift – Apple Developer that provides a list of ingredients and recipe options depending on the user budget chosen by the user. Interface and component testing include general app design, database consideration, budget options, user account database, create account, meal selection storage, meals entity, meal option based on budget, ingredients cost, weekly meal plan, and user authentication. User interaction with the application will also be tested for usability and accessibility. This document provides a first draft of the software unit and system test documentation for the completed project.

## Test Approach

## Requirements Traceability Matrix

| **Req. ID** | **Type** | **Requirement** | **Source** | **Status** | **Priority** | **Test Case ID** |
| --- | --- | --- | --- | --- | --- | --- |
| MBP-1.0 | Required | General App Design | Initial Meeting 01/11/24 | Done | Mandatory | A.01  A.02  A.03  A.04 |
| MBP- 2.0 | Required | Database Consideration | Brainstorming Session #4  01/22/24 | Done | Mandatory | B.01 |
| UI-1.0 | Required | Budget options | Brainstorming Session #4  01/22/24 | Done | Mandatory | C.01 |
| DB-1.0 | Functional | User Account Database | Initial Meeting 01/11/24 | Done | High | D.01 |
| A -1.0 | Functional | Create Account | Brainstorming Session #6  02/04/24 | Done | High | E.01 |
| DB-1.1 | Functional | Store Meal selection | Brainstorming Session #7  02/06/24 | Done | High | F.01 |
| DB- 2.0 | Functional | Meal’s entity (Ingredients, Recipes, Calories) | Brainstorming Session #4  01/22/24 | Done | High | G.01 |
| A - 3.0 | Functional | Meal options based on budget | Initial Meeting 01/11/24 | Done | High | H.01 |
| DB-2.1 | Functional | Ingredients cost | Initial Meeting 01/11/24 | In progress | High | I.01 |
| UI-2,3 | Functional | Weekly Meal Plan | Initial Meeting 01/11/24 | Done | High | J.01 |
| UI- 2.1 | Functional | Meal Recipe | Initial Meeting 01/11/24 | In Progress | Moderate | K.01 |
| UI-3.0 | Functional | Grocery List | Brainstorming Session #3  01/18/24 | In Progress | Moderate | N.01 |
| A-1.3 | Required | Authenticate User | Brainstorming Session #2 01/16/24 | In Progress | Moderate | I.01 |
| UI-4.0 | Functional | Additional meal options | Initial Meeting 01/11/24 | In Progress | Low | O.01 |
| UI-5.0 | Functional | User Settings | Brainstorming Session #7  02/06/24 | In Progress | Low | P.01 |
| A-1.2 | Functional | Logout | Brainstorming Session #6  02/04/24 | Done | Low | Q.01 |

## Test Approach Types

* Functional – Testing functional features in the application.
* Usability Test – Testing usability and accessibility features in the application.
* Security Test – Testing security of user log in and password features.
* Interface Test – UI test for visual bugs and aesthetics as well as accessibility of the application.

# Test Plan

## Features to be Tested

* Welcome Options – To Evaluate how easily users select the create account button when waiting to create an account.
* Create Account – To evaluate how easily users can fill out the form with correct credentials to create an account.
* Account Set Up – To evaluate how easily users can select their budget preference.
* View Meal Plan – To evaluate how easily users can know what meals are planned for the day.
* Navigate Tab Bar – Test how easily users can navigate the screens using navigation bar.
* Create Account – Test validation and accessibility of account creation.
* Log in – Test Log in button and features.
* Log in User – Validate log in user works.
* Authenticate User – Validate that the security measures are applied for valid login.
* Budget Select UI Components – To ensure that budget category capsule toggles color on click.
* Select Budget – Budget selection tests.
* Options based on budget – Ensure all budget selections work as intended.
* User Account – To test the working status of the user in the database.
* Selection in Database – Ensure database meal selection works.
* Melas in Database – Test if meals can be accessed by the user in database.
* Ingredients in Database – Check if meal details of necessary ingredients work.
* Budget select – Ensure the budget selection of user is stored in the database.

## Features not to be Tested

* Performance – No stress test tools available currently.
* Additional meal options – low priority / time restraint.
* User settings – low priority / time restraint.
* Grocery list – feature planned for future implementation, currently not working.
* Meal recipe – moderate priority, have functional recipe / time restraint for additional features.

## Testing Tools and Environment

* Swift – Apple Developer IDE
* Firebase – Database
* Code-X – Apple Developer IDE for application
* Excel – Microsoft Software

# Test Cases

## 3.1.1 Welcome Options

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **MBP** | **Requirement ID:** | **MBP-1.0** | **Test Designed by:** | **Rachel Liu** |
| **Test Case ID:** | **A.01** | **Test Designed date:** | 4/11/24 |
| **Test Description:** | **Welcome Options** | **Test Executed by:** | 4/12/24 |
| **Release Version:** | **1** | **Test Execution date:** | 4/12/24 |
| **Pre-condition:** User opens the app and welcome screen is loaded | | | | |
|  |

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Description automatically generated

## 3.1.2 Create Account

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **MBP** | **Requirement ID:** | **MBP-1.0** | **Test Designed by:** | **Rachel Liu** |
| **Test Case ID:** | **A.02** | **Test Designed date:** | 4/11/24 |
|  | **Test Description:** | **Create Account** | **Test Executed by:** | 4/12/24 |
|  | **Release Version:** | **1** | **Test Execution date:** | 4/12/24 |
| **Pre-condition: User pressed create account button on welcome screen** | | | | |
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## 3.1.3 Account Set Up

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **MBP** | **Requirement ID:** | **MBP-1.0** | **Test Designed by:** | **Rachel Liu** |
| **Test Case ID:** | **A.03** | **Test Designed date:** | 4/11/24 |
|  | **Test Description:** | **Account Set Up** | **Test Executed by:** | 4/12/24 |
|  | **Release Version:** | **1** | **Test Execution date:** | 4/12/24 |
| **Pre-condition:** User pressed 'CREATE ACCOUNT' button and navigated to budget select screen | | | | |
|  |

A screenshot of a test

Description automatically generated

## 3.1.4 View Meal Plan

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **MBP** | **Requirement ID:** | **MBP-1.0** | **Test Designed by:** | **Rachel Liu** |
| **Test Case ID:** | **A.04** | **Test Designed date:** | 4/11/24 |
|  | **Test Description:** | **View meal plan** | **Test Executed by:** | 4/12/24 |
|  | **Release Version:** | **1** | **Test Execution date:** | 4/12/24 |
| **Pre-condition:** User selected 3 dinner preferences and pressed the button to navigate to Home Screen | | | | |
|  |

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Description automatically generated

## 3.1.5 Navigate Tab Bar

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **MBP** | **Requirement ID:** | **MBP-1.0** | **Test Designed by:** | **Rachel Liu** |
| **Test Case ID:** | **A.05** | **Test Designed date:** | 4/11/24 |
|  | **Test Description:** | **Navigate tab bar** | **Test Executed by:** | 4/12/24 |
|  | **Release Version:** | **1** | **Test Execution date:** | 4/12/24 |
| **Pre-condition:** User has created an account/ logged in and clicked the corresponding buttons to navigate to Home Screen | | | | |
|  |

A screenshot of a computer

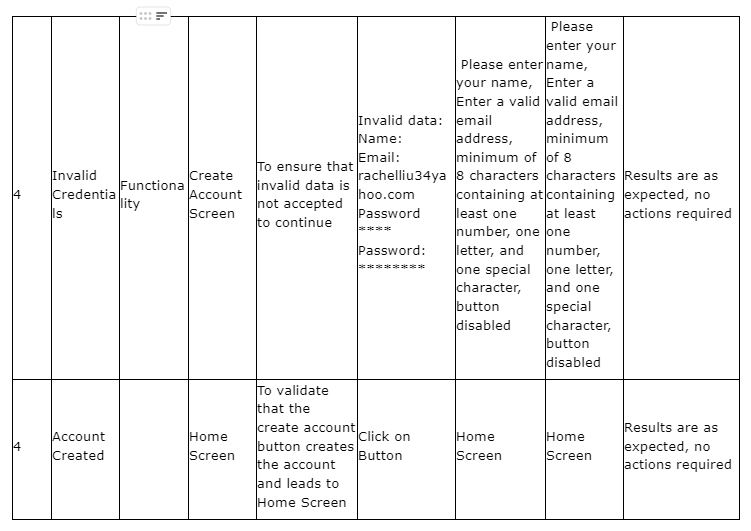
Description automatically generated

## 3.1.6 Create Account

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **MBP** | **Requirement ID:** | **A-1.0** | **Test Designed by:** | **Rachel Liu** |
| **Test Case ID:** | **E.01** | **Test Designed date:** | 4/11/24 |
|  | **Test Description:** | **Create Account** | **Test Executed by:** | 4/12/24 |
|  | **Release Version:** | **1** | **Test Execution date:** | 4/12/24 |
| **Pre-condition: App launched, Welcome screen loaded** | | | | |
|  |

A table with text on it

Description automatically generated

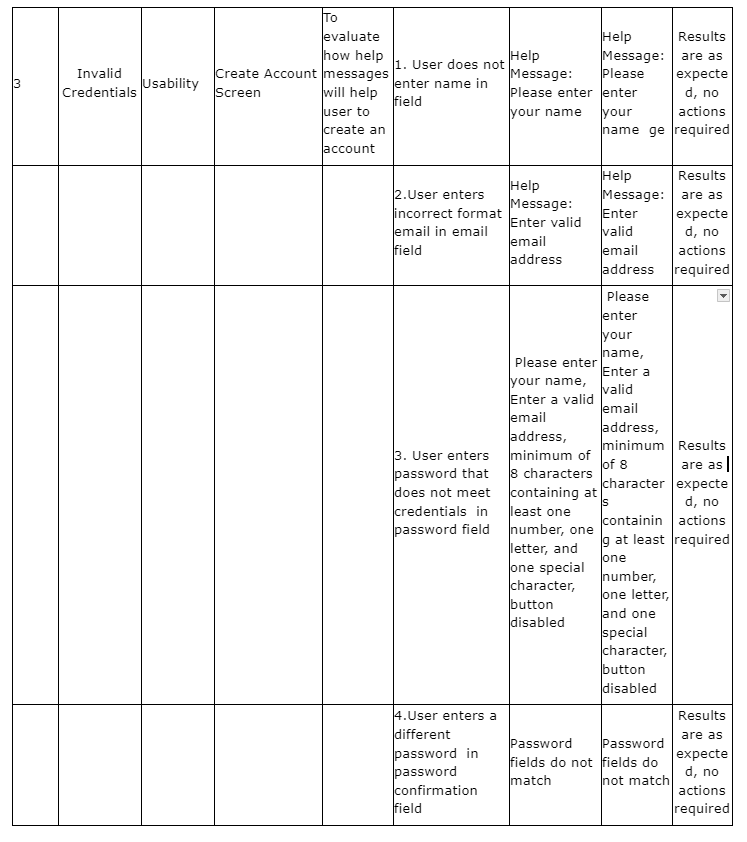


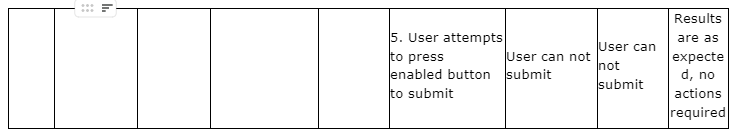
## 3.1.7 Create Account 2

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **MBP** | **Requirement ID:** | **MBP-1.0** | **Test Designed by:** | **Rachel Liu** |
| **Test Case ID:** | **E.02** | **Test Designed date:** | 4/11/24 |
|  | **Test Description:** | **Create Account** | **Test Executed by:** | 4/12/24 |
|  | **Release Version:** | **1** | **Test Execution date:** | 4/12/24 |
| **Pre-condition:** App launched and opened to welcome screen. Get Started Button Pressed, Create Account screen loaded | | | | |
|  |

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## 3.1.8 Login

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **MBP** | **Requirement ID:** | **A-1.2** | **Test Designed by:** | **Rachel Liu** |
| **Test Case ID:** | **N.01** | **Test Designed date:** | 4/11/24 |
|  | **Test Description:** | **UI Log in** | **Test Executed by:** | 4/12/24 |
|  | **Release Version:** | **1** | **Test Execution date:** | 4/12/24 |
| **Pre-condition:** User has navigated to the Welcome Screen | | | | |
|  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test #** | **Test Name** | **Test Type** | **Target Screen** | **Test Purpose** | **Test Data / Situation** | **Expected Results** | **Actual Result** | **Outcome and Actions Required** |
| 1 | Button to go to Login | UI | Welcome Screen | Verify that welcome screen contains button to log in | Login Screen | Log in Screen | Log in Screen | Results are expected, no actions required |
| 2 | Submit Log in | UI | Home Screen | To validate that button to log in will lead to Home Screen | Sign in Button | Home Screen | Home Screen | Results are expected, no action required |
| 3 | Enable Button | UI | Welcome Screen | Verify that button is enabled if required input | Sign in Button | Email: name@example.com  Password: \*\*\*\*\*\* | Email: rachelliu34@yahoo.com  Password: \*\*\*\*\*\* | Results are expected, no action required |
|  | Disable Button | UI | Welcome Screen | Verify that button is disabled if missing input | Sign in Button | Email:  Password:  Sign in Button | Email:  Password:  Sign in Button | Results are expected, no actions required |
| 3 | Placeholders | Ui | Login Screen | Verify that input fields for email and password have placeholders | Login Screen | Email: name@example.com  Password: Enter your password | Email: name@example.com  Password: Enter your password | Results are expected, no actions required |

## 3.1.9 Log-in User

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **MBP** | **Requirement ID:** | **A-1.2** | **Test Designed by:** | **Rachel Liu** |
| **Test Case ID:** | **N.02** | **Test Designed date:** | 4/11/24 |
|  | **Test Description:** | **Log in User** | **Test Executed by:** | 4/12/24 |
|  | **Release Version:** | **1** | **Test Execution date:** | 4/12/24 |
| **Pre-condition:** User must have created an account, (user info stored in database) | | | | |
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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test #** | **Test Name** | **Test Type** | **Target File or Screen** | **Test Purpose** | **Test Data / Situation** | **Expected Results** | **Actual Result** | **Outcome and Actions Required** |
| 1 | Successful Login | Input Validation | Log in Screen | To validate that button to log in will be enabled given entry of all required fields | Valid data:  Email: rachelliu34@yahoo.com  Password: \*\*\*\*\*\*\*\* | Button activated | Button activated | Results are expected, no action required |
| 2 | Unsuccessful Login | Input Validation | Log in Screen | To validate that button to log in will be disabled given missing entry of required fields | Invalid data:  Name:  Email: rachelliu34yahoo.com  Password: | Button deactivated | Button deactivated | Results are expected, no action required |
| 3 | Submit Log in | Functional | Home Screen | To validate that button to log in will lead to Home Screen | Sign in Button | Home Screen | Home Screen | Results are expected, no action required |
| 3 | Submit Log in | Functional | Home Screen | To validate that button to log in will lead to Home Screen | Sign in Button | Home Screen | Home Screen | Results are expected, no action required |

## 3.1.10 Authenticate User

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **MBP** | **Requirement ID:** | **A-1.3** | **Test Designed by:** | **Rachel Liu** |
| **Test Case ID:** | **F.01** | **Test Designed date:** | 4/11/24 |
|  | **Test Description:** | **Authenticate User during Log in** | **Test Executed by:** | 4/12/24 |
|  | **Release Version:** | **1** | **Test Execution date:** | 4/12/24 |
| **Pre-condition:** User account with valid credentials exists in the system. | | | | |
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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test #** | **Test Name** | **Test Type** | **Target Screen** | **Test Purpose** | **Test Data / Situation** | **Expected Results** | **Actual Result** | **Outcome and Actions Required** |
| 1 | Successful Login | Positive | Log in Screen | To validate that the security measures are applied for valid login | Valid data:  Email: rachelliu34@yahoo.com  Password: \*\*\*\*\*\*\*\* | Home Screen | Home Screen but not associated to account | Results are not as expected, action to add security measures required |
| 2 | Unsuccessful Login | Negative | Log in Screen | To validate that the security measures are applied for valid login | Invalid data:  Email: rachelliu34@yahoo.com  Password: \*\*\*\*\*\*\*\* | Home Screen | Home Screen but not associated to account | Results are not as expected, action to add security measures required |

## 3.1.11 Budget Select UI Components

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **MBP** | **Requirement ID:** | **UI-1.0** | **Test Designed by:** | **Rachel Liu** |
| **Test Case ID:** | **C.01** | **Test Designed date:** | 4/11/24 |
|  | **Test Description:** | **Select Budget  UI Components** | **Test Executed by:** | 4/12/24 |
|  | **Release Version:** | **1** | **Test Execution date:** | 4/12/24 |
| **Pre-condition:** | | | | |
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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test #** | **Test Name** | **Test Type** | **Target File or Screen** | **Test Purpose** | **Test Data / Situation** | **Expected Results** | **Actual Result** | **Outcome and Actions Required** |
| 1 | Selectable Budget Category | UI | Budget Select Screen | To ensure that budget category capsule toggles color on click | 1.Click $75 capsule | 75 capsule toggle gray to pink | 75 capsule toggle gray to pink | Expected outcome, no actions necessary |
|  |  |  |  |  | 2. Click $100 capsule | 75 capsule toggle pink to gray 100 capsule toggle gray to pink | 75 capsule toggle pink to gray 100 capsule toggle gray to pink | Expected outcome, no actions necessary |
|  |  |  |  |  | 3. Click $125 capsule | 100 capsule toggle pink to gray 125 capsule toggle gray to pink | 100 capsule toggle pink to gray 125 capsule toggle gray to pink | Expected outcome, no actions necessary |
|  |  |  |  |  | 4. Click $150 capsule | 125 capsule toggle pink to gray 150 capsule toggle gray to pink | 125 capsule toggle pink to gray 150 capsule toggle gray to pink | Expected outcome, no actions necessary |
| 2 | Submit Selection Button | UI | Budget Select Screen | To verify that button is disabled until 1 option is selected | 1.Click $75 capsule | Let's Go Button enabled | Let's Go Button enabled | Expected outcome, no actions necessary |
|  |  |  |  |  | 2. Click $100 capsule | Let's Go Button enabled | Let's Go Button enabled | Expected outcome, no actions necessary |
|  |  |  |  |  | 3. Click $125 capsule | Let's Go Button enabled | Let's Go Button enabled | Expected outcome, no actions necessary |
|  |  |  |  |  | 4. Click $150 capsule | Let's Go Button enabled | Let's Go Button enabled | Expected outcome, no actions necessary |

## 3.1.12 Select Budget

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **MBP** | **Requirement ID:** | **UI-1.0** | **Test Designed by:** | **Rachel Liu** |
| **Test Case ID:** | **C.02** | **Test Designed date:** | 4/11/24 |
|  | **Test Description:** | **Select Budget** | **Test Executed by:** | 4/12/24 |
|  | **Release Version:** | **1** | **Test Execution date:** | 4/12/24 |
| **Pre-condition:   Test Case C.01- Select Budget UI Components** | | | | |
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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test #** | **Test Name** | **Test Type** | **Target File or Screen** | **Test Purpose** | **Test Data / Situation** | **Expected Results** | **Actual Result** | **Outcome and Actions Required** |
| 1 | Select Budget Option | Functional | Budget Select Screen | To ensure that only one selection is submitted | 1. Selected Budget 75 | Varia | 75 capsules selected | Expected outcome, no actions necessary |
|  |  |  |  |  | 2. Select 100 Budget | 75 capsule deselected, 100 Capsule selected | 75 capsule deselected, 100 Capsule selected | Expected outcome, no actions necessary |
|  |  |  |  |  | 3. Select 125 | 100 capsule deselected, 125 Capsule selected | 100 capsule deselected, 125 Capsule selected | Expected outcome, no actions necessary |
|  |  |  |  |  | 4. Select 150 | 125 capsule deselected, 150 Capsule selected | 125 capsule deselected, 150 Capsule selected | Expected outcome, no actions necessary |
|  |  |  |  |  | 5. Submit selection click Let's Go button | 150 stored to int variable budget in User Database | 150 stored to int variable budget in User Database | Expected outcome, no actions necessary |

## 3.1.13 Meals based on Budget

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **MBP** | **Requirement ID:** | **A-3.0** | **Test Designed by:** | **Rachel Liu** |
| **Test Case ID:** | **I.01** | **Test Designed date:** | 4/11/24 |
|  | **Test Description:** | **75 Budget** | **Test Executed by:** | 4/12/24 |
|  | **Release Version:** | **1** | **Test Execution date:** | 4/12/24 |
| **Pre-condition:  User Account is created with valid credentials in Database through Create Account View. Budget option 75 is selected and stored in user info database** | | | | |
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|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test #** | **Test Name** | **Test Type** | **Target File or Screen** | **Test Purpose** | **Test Data / Situation** | **Expected Results** | **Actual Result** | **Outcome and Actions Required** |
| 1 | 75 Breakfast Meals | functional | Breakfast Select Screen | validate if Database Meals Budget 75 correspond with breakfast options display | Selected 75 Budget | List of Budget 75 Breakfast Meals | List of Budget 75 Breakfast Meals | Expected outcome, no actions necessary |
| 2 | 75 lunch meals | functional | Lunch Select Screen | validate if Budget 75 meals in database corresponding lunch options display | Selected 75 Budget | List of Budget 75 Lunch Meals | List of Budget 75 Lunch Meals | Expected outcome, no actions necessary |
| 3 | 75 dinner meals | functional | Dinner Select Screen | validate if Budget 75 meals in database corresponding dinner options display | Selected 75 Budget | List of Budget 75 Dinner Meals | List of Budget 75 Dinner Meals | Expected outcome, no actions necessary |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **MBP** | **Requirement ID:** | **A-3.0** | **Test Designed by:** | **Rachel Liu** |
| **Test Case ID:** | **I.02** | **Test Designed date:** | 4/11/24 |
|  | **Test Description:** | **100 Budget** | **Test Executed by:** | 4/12/24 |
|  | **Release Version:** | **1** | **Test Execution date:** | 4/12/24 |
| **Pre-condition:  User Account is created with valid credentials in Database through Create Account View. Budget option 100 is selected and stored in user info database** | | | | |
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| **Test #** | **Test Name** | **Test Type** | **Target File or Screen** | **Test Purpose** | **Test Data / Situation** | **Expected Results** | **Actual Result** | **Outcome and Actions Required** |
| 1 | 100 Breakfast Meals | functional | Breakfast Select Screen | validate if Budget 100 Meals in DB match breakfast options display | Selected 100 Budget | List of Budget 100 Breakfast Meals | List of Budget 75 Breakfast Meals | Expected outcome, no actions necessary |
| 2 | 100 Lunch meals | functional | Lunch Select Screen | validate if Budget 100 Meals in DB match lunch options display | Selected 100 Budget | List of Budget 100 Lunch Meals | List of Budget 100 Lunch Meals | Expected outcome, no actions necessary |
| 3 | 100 Dinner meals | functional | Dinner Select Screen | validate if Budget 100 Meals in DB match dinner options display | Selected 100 Budget | List of Budget 100 Dinner Meals | Selected 100 Budget | Expected outcome, no actions necessary |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **MBP** | **Requirement ID:** | **A-3.0** | **Test Designed by:** | **Rachel Liu** |
| **Test Case ID:** | **I.03** | **Test Designed date:** | 4/11/24 |
|  | **Test Description:** | **125 Budget** | **Test Executed by:** | 4/12/24 |
|  | **Release Version:** | **1** | **Test Execution date:** | 4/12/24 |
| **Pre-condition:  User Account is created with valid credentials in Database through Create Account View. Budget option 125 is selected and stpred in database** | | | | |
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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test #** | **Test Name** | **Test Type** | **Target File or Screen** | **Test Purpose** | **Test Data / Situation** | **Expected Results** | **Actual Result** | **Outcome and Actions Required** |
| 1 | 125 Breakfast Meals | functional | Breakfast Select Screen | validate if Budget 125 Meals in DB match breakfast options display | Selected 125 Budget | List of Budget 125 Breakfast Meals | List of Budget 125 Breakfast Meals | Expected outcome, no actions necessary |
| 2 | 125 lunch meals | functional | Lunch Select Screen | validate if Budget 125 Meals in DB match lunch options display | Selected 125 Budget | List of Budget 125 Lunch Meals | List of Budget 125 Lunch Meals | Expected outcome, no actions necessary |
| 3 | 125 dinner meals | functional | Dinner Select Screen | validate if Budget 125 Meals in DB match dinner options display | Selected 125 Budget | List of Budget 125 Dinner Meals | List of Budget 125 Dinner Meals | Expected outcome, no actions necessary |

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| **MBP** | **Requirement ID:** | **A-3.0** | **Test Designed by:** | **Rachel Liu** |
| **Test Case ID:** | **I.04** | **Test Designed date:** | 4/11/24 |
|  | **Test Description:** | **150 Budget** | **Test Executed by:** | 4/12/24 |
|  | **Release Version:** | **1** | **Test Execution date:** | 4/12/24 |

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| **Test #** | **Test Name** | **Test Type** | **Target File or Screen** | **Test Purpose** | **Test Data / Situation** | **Expected Results** | **Actual Result** | **Outcome and Actions Required** |
| 1 | 150 Breakfast Meals | functional | Breakfast Select Screen | validate if Budget 150 Meals in DB match breakfast options display | Selected 150 Budget | List of Budget 150 Breakfast Meals | List of Budget 150 Breakfast Meals | Expected outcome, no actions necessary |
| 2 | 150 lunch meals | functional | Lunch Select Screen | validate if Budget 150 Meals in DB match lunch options display | Selected 150 Budget | List of Budget 150 Lunch Meals | List of Budget 150 Lunch Meals | Expected outcome, no actions necessary |
| 3 | 150 dinner meals | functional | Dinner Select Screen | validate if Budget 150 Meals in DB match dinner options display | Selected 150 Budget | List of Budget 150 Dinner Meals | List of Budget 150 Dinner Meals | Expected outcome, no actions necessary |

## 3.1.14 User in DB

|  |  |  |  |  |
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| **MBP** | **Requirement ID:** | DB-1.0 | **Test Designed by:** | **Oscar Navarro** |
| **Test Case ID:** | **D.01** | **Test Designed date:** | 4/12/24 |
| **Test Description:** | **User in DB** | **Test Executed by:** | 4/12/24 |
| **Release Version:** | **1** | **Test Execution date:** | 4/12/24 |
| **Pre-condition:** There is an existing database for the user information to be stored. Connection between database and app has been established successfully | | | | |
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| **Test #** | **Test Name** | **Test Type** | **Target Screen** | **Test Purpose** | **Test Data / Situation** | **Expected Results** | **Actual Result** | **Outcome and Actions Required** |
| 1 | Create User | Functional | Create Account | To test working status of the user creation in DB | Enter credentials | New User with unique ID created in DB with the information entered | Result as expected when data is valid new user is Added | Outcome valid. No actions required |
| 2 | Create Bad Use | Functiona | Create Account | Test whether invalid information will be stored in DB | Enter and Submit information | A new user will not be created. User will be notified | Result as expected when data is valid new user is not Added | Outcome valid. No actions required |
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## 3.1.15 Selection in DB

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| **MBP** | **Requirement ID:** | DB-1.1 | **Test Designed by:** | **Oscar Navarro** |
| **Test Case ID:** | **G.01** | **Test Designed date:** | 4/12/24 |
| **Test Description:** | **Selection in DB** | **Test Executed by:** | 4/12/24 |
| **Release Version:** | **1** | **Test Execution date:** | 4/12/24 |
| **Pre-condition:** There is an existing database for the user information to be stored. Connection between database and app has been established successfully | | | | |
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| **Test #** | **Test Name** | **Test Type** | **Target Screen** | **Test Purpose** | **Test Data / Situation** | **Expected Results** | **Actual Result** | **Outcome and Actions Required** |
| 1 | Select Breakfast | Functional | Breakfast, Lunch, Dinner Select Screen | To test working status of the meal selection | Select valid meals | In the database the 3 selected meals are stored with the user information | Result as expected Meals stored in DB | Outcome valid. No actions required |
| 2 | Create Bad Use | Functional | Breakfast, Lunch, Dinner Select Screen | To test whether database changes will be made | Select invalid meals | Selections will not be stored in DB it will instead selection will remain empty | Result as expected Meals not stored in DB | Outcome valid. No actions required |
| 3 | Change Selection | Functional | Breakfast, Lunch, Dinner Select Screen | To test whether when clicking back user can change selection | Meals changed | When going back user will reselect their meals and changes will be reflected in DB | Result as expected Meals selected altered in DB | Outcome valid. No actions required |

## 3.1.16 Meals in DB

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| **MBP** | **Requirement ID:** | DB-2.0 | **Test Designed by:** | **Oscar Navarro** |
| **Test Case ID:** | **H.01** | **Test Designed date:** | 4/12/24 |
| **Test Description:** | **Meals in DB** | **Test Executed by:** | 4/12/24 |
| **Release Version:** | **1** | **Test Execution date:** | 4/12/24 |
| **Pre-condition:** There is an existing database for the user information to be stored. Connection between database and app has been established successfully | | | | |
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| **Test #** | **Test Name** | **Test Type** | **Target Screen** | **Test Purpose** | **Test Data / Situation** | **Expected Results** | **Actual Result** | **Outcome and Actions Required** |
| 1 | Test Meals | Functional | Breakfast, Lunch, Dinner Select Screen | Check whether DB Meals can be accessed by user | Upon Selection a budget user is presented with meal options from DB | User is presented with meals and images for each of the meals | Result as expected when data is valid new user is Added | Action Required. Add images for each of the meals |

## 3.1.17 Ingredients Cost

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| **MBP** | **Requirement ID:** | DB-2.1 | **Test Designed by:** | **Oscar Navarro** |
| **Test Case ID:** | **J.01** | **Test Designed date:** | 4/12/24 |
| **Test Description:** | **Ingredients in DB** | **Test Executed by:** | 4/12/24 |
| **Release Version:** | **1** | **Test Execution date:** | 4/12/24 |
| **Pre-condition:** There is an existing database for the user information to be stored. Connection between database and app has been established successfully | | | | |
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| **Test #** | **Test Name** | **Test Type** | **Target Screen** | **Test Purpose** | **Test Data / Situation** | **Expected Results** | **Actual Result** | **Outcome and Actions Required** |
| 1 | Ingredients in DB | Functional | Meal Screen | To check a meals detail, such as ingredients necessary | User will click on a meal and reveal list of ingredient and cost | User will be shown meal ingredients | User is not displayed ingredients and cost | Action required implementation of ingredients DB. |
| 2 | Cost Calculation | Functional | Meal Screen | Check the cost of ingredients for recipe | User will click on meal and check cost | User will be shown meal cost | User is not displayed ingredient cost | Action required. Implement function to calculate cost |
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## 3.1.18 Budget Options

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| **MBP** | **Requirement ID:** | UI-1.0 | **Test Designed by:** | **Oscar Navarro** |
| **Test Case ID:** | **B.05** | **Test Designed date:** | 4/12/24 |
| **Test Description:** | **Budget Select** | **Test Executed by:** | 4/12/24 |
| **Release Version:** | **1** | **Test Execution date:** | 4/12/24 |
| **Pre-condition:** There is an existing database for the user information to be stored. Connection between database and app has been established successfully | | | | |
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| **Test #** | **Test Name** | **Test Type** | **Target Screen** | **Test Purpose** | **Test Data / Situation** | **Expected Results** | **Actual Result** | **Outcome and Actions Required** |
| 1 | Budget in DB | Functional | Budget Select Screen | Store User Budget Selection in DB | User selects one of the four budget options and | When a budget is selected that selection is stored with the user in DB | Budget Selection is stored in the DB | Result as expected. No Actions required |
| 2 | Budget Re-Selection | Functional | Budget Select Screen | Test whether user can go back and change budget option | User will go back after selecting a budget and change it | User will be directed to select a budget Upon new selection budget will be changed in DB | Budget is changed in DB | Result as expected. No actions required |
|  |  |  |  |  |  |  |  |  |

## 3.1.19 Meal Selection

|  |  |  |  |  |
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| **MBP** | **Requirement ID:** | UI-1.1 | **Test Designed by:** | **Oscar Navarro** |
| **Test Case ID:** | **B.06** | **Test Designed date:** | 4/12/24 |
| **Test Description:** | **Meal Selections** | **Test Executed by:** | 4/12/24 |
| **Release Version:** | **1** | **Test Execution date:** | 4/12/24 |
| **Pre-condition:** There is an existing database for the user information to be stored. Connection between database and app has been established successfully | | | | |
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| **Test #** | **Test Name** | **Test Type** | **Target Screen** | **Test Purpose** | **Test Data / Situation** | **Expected Results** | **Actual Result** | **Outcome and Actions Required** |
| 1 | Meals Selected | Usability | Breakfast, Lunch, and Dinner Selection | Check if user can access meals selected | User will select meals | User will be displayed his selected meals in the homepage | User selections are displayed | Results as expected. No action required |

## 3.1.20 Show Meals for the Day

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| --- | --- | --- | --- | --- |
| **MBP** | **Requirement ID:** | **UI-2.3** | **Test Designed by:** | **Rachel Liu** |
| **Test Case ID:** | **K.01** | **Test Designed date:** | 4/12/24 |
|  | **Test Description:** | **Show  Meals for Day** | **Test Executed by:** | 4/12/24 |
|  | **Release Version:** | **1** | **Test Execution date:** | 4/12/24 |
| **Pre-condition:  User Account is created with valid credentials in Database through Create Account View. Budget option is selected and stored in user info database. Meals for each breakfast category are selected and stored in database** | | | | |
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| **Test #** | **Test Name** | **Test Type** | **Target File or Screen** | **Test Purpose** | **Test Data / Situation** | **Expected Results** | **Actual Result** | **Outcome and Actions Required** |
| 1 | Show Breakfast for day | functional | Home Screen | Verify display of meals for the day from user selection for breakfast | Selected Meals: Avocado Toast, American Breakfast, Apple, and Peanut Butter Toast | Breakfast: Avocado Toast | Breakfast:  Avocado Toast | Expected outcome, no actions necessary |
| 2 | Show Lunch for day | functional | Lunch Select Screen | Verify display of meals for the day from user selection for lunch | Selected Meals: Avocado and Egg Sandwich, Chicken and Cabbage Bowls with Sesame Dressing, Turkey Apple Cheddar Sandwich | Lunch: Avocado and Egg Sandwich | Lunch: Avocado and Egg Sandwich | Expected outcome, no actions necessary |
| 3 | Show Dinner for day | functional | Dinner Select Screen | Verify display of meals for the day from user selection for dinner | Selected Meals: Tomato Soup, Rotisserie Chicken Sandwich, Chicken and Cabbage Bowls with Sesame Dressing | Dinner: Tomato Soup | Dinner: Tomato Soup | Expected outcome, no actions necessary |

## 3.1.21 Show Additional Meal Option

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| --- | --- | --- | --- | --- |
| **MBP** | **Requirement ID:** | **UI-4.0** | **Test Designed by:** | **Rachel Liu** |
| **Test Case ID:** | **N.01** | **Test Designed date:** | 4/11/24 |
|  | **Test Description:** | **Show Additional Meal Option** | **Test Executed by:** | 4/12/24 |
|  | **Release Version:** | **1** | **Test Execution date:** | 4/12/24 |
| **Pre-condition:  User Account is created with valid credentials, budget preference, meal selections in Database. Must have Home Screen and Tab bar. Must be on explore page** | | | | |
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| **Test #** | **Test Name** | **Test Type** | **Target File or Screen** | **Test Purpose** | **Test Data / Situation** | **Expected Results** | **Actual Result** | **Outcome and Actions Required** |
| 1 | Additional Breakfast Options | Functional | Explore Page | Verify that clicking on Breakfast Tab shows more Breakfast options | Click Breakfast tab | Additional, unselected Breakfast Meals | Breakfast images | Did not meet expected results, require action to fully implement |
| 2 | Additional Lunch Options | Functional | Explore Page | Verify that clicking on Lunch Tab shows more Breakfast options | Click Lunch tab | Additional, unselected Lunch Meals | Breakfast images | Did not meet expected results, require action to fully implement |
| 3 | Additional Dinner Options | Functional | Explore Page | Verify that clicking on Dinner Tab shows more Breakfast options | Click Dinner tab | Additional, unselected Dinner Meals | Breakfast images | Did not meet expected results, require action to fully implement |

# Additional Material

## Appendix

* App – Application
* MBP – Meal Budget Plan
* SQL – Standard Query Language
* iOS – Mobile Apple Operating System
* SUSTD – Software Unit and System Test Documentation
* ID – Identification
* UI – User Interface
* DB – Database

## 4.1.2 Test Log

|  |  |  |  |
| --- | --- | --- | --- |
| Completed By: | Rachel Liu | Report Date: | 04/12/24 |
| Project ID / Name | MBP Project | Testing Name / Event: | Welcome Options, Create Account, Account Set Up, View Meal Plan, Navigate Tab Bar, Create Account, Login, Authenticate User, Budget Select UI, Select Budget, Meals based on Budget |
| Total Number of Test Cases | 15 | Testing Sub-Type: | Functional, Usability, Security, Interface |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Week / Month | Current Period | Project to Date | % Started | % Open | Project to Date | % Completed |
| April - 11 | 13 | 13 | 85 | 85 | 13 | 85 |
| April - 12 | 2 | 15 | 15 | 100 | 15 | 100 |
|  |  |  |  |  |  |  |

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| --- | --- | --- | --- |
| Completed By: | Oscar Navarro | Report Date: | 4/12/24 |
| Project ID / Name | MBP Project | Testing Name / Event: | Meal Selections, Budget Selections, Ingredients Cost, Meal Entity, Store Meal Selection, User Account |
| Total Number of Test Cases | 6 | Testing Sub-Type: | Functional, Usability, Security, Interface |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Week / Month | Current Period | Project to Date | % Started | % Open | Project to Date | % Completed |
| April - 11 | 3 | 3 | 50 | 50 | 3 | 50 |
| April - 12 | 3 | 6 | 50 | 100 | 6 | 100 |
|  |  |  |  |  |  |  |