Sunway University

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AUGUST 2021

WEB2202 Web Programming

Web Report

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Bachelor of Software Engineering (Hons)

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# Introduction

## Purpose of Website

The purpose of the website is to allow consumers to purchase our floral products, mainly flower bouquets and celebrate the memorable day with their loved ones. Due to the outbreak of COVID-19 viruses worldwide, the spread of the viruses has created the risks of contracting COVID-19 in the community. According to Mehta et al. (2020), the main factors that model the customer’s purchasing behaviour in crisis are risk perception and risk attitude. The possibility of contracting COVID-19 in shopping for products in a physical store is higher than shopping through an ecommerce website. Hence, as a start-up company, the company hosts a direct-to-consumer (D2C) ecommerce website for consumers to purchase the products instead of physical stores. Physical stores will only be opened at phase two of the company’s goal.

### Products

The products offered by the company are mainly flower bouquets and add on items such as flower petals, baby’s breath flower, balloons, plushies, LED decorative lights and chocolates. The main flower bouquets are roses, chrysanthemum, carnation, and orchid bouquets.

### Category of Products

The products offered are categorized into two tabs which is occasion tab and add on items tab. Users can browse the products through the desired occasion such as same day delivery, anniversaries, graduation, weddings, and funerals. Meanwhile, add on items tab consists of the additional products such as baby’s breath flower, balloons and plushies. Hence, users can reduce time spent on choosing the desired product.

### Ideas for the production selection

Due to Malaysia’s climate condition, the Malaysia floral market focuses on two main groups which are temperate flowers and exotic flowers. The dominant temperate flowers in Malaysia are chrysanthemum, roses and carnation which comprised 44.7%, 25.8% and 12.1% respectively of total temperate cut flower production in 2018 (Morder Intelligence, n.d.). Hence, the company focuses on selling the dominant temperate flowers as main flowers due to its high availability of supplies and high popularity in the community. Meanwhile, add on items offered are decorative items for consumers to enlighten the romantic atmosphere during the memorable day.

### Target audience

The percentage of males purchasing floral products online is higher compared to females (Flowerweb, n.d.). Among the consumers, adults in the age group from 18 to 29 purchasing flowers online are the highest (Flowerweb, n.d.). As such, the target audience of the website is male young adults within the age of 18 to 29.

## Design Methodology

### Software Technology

|  |  |  |
| --- | --- | --- |
| Categories | Technology | |
| Front-end language | Hypertext Markup Language (HTML) 5  Cascading Style Sheet (CSS) 3 | |
| Back-end language | PHP: Hypertext Preprocessor (PHP)  MySQL  JavaScript (JS) | |
| Software Tool | Web Development Server | XAMPP |
| IDE | Microsoft Visual Studio Code |
| UML Diagram | Visual Paradigm |
| Storyboard | Figma |
| Icons | Font Awesome |
| Front-end Compatibility Tool | CanIUse |
| Browser Developer Tool | Google Chrome Developer Tools  Firefox Developer Tools  Microsoft Edge Developer Tools |

*Table 1.0 – Software Technologies Associated to the Category*

The front-end languages used in the project are Hypertext Markup Language (HTML) and Cascading Style Sheet (CSS). HTML is a front-end markup language for creating web pages. The intention of using HTML is to write the contents to be displayed on the web pages. CSS is a front-end language used to describe the presentation or layout of the web pages. The purpose of the utilization of CSS is to style the web pages by declaring the targeted selectors with declaration properties associated to declaration values.

The back-end languages used in the project is PHP: Hypertext Preprocessor (PHP), MySQL and JavaScript. PHP is used to develop dynamic web pages. Meanwhile, MySQL is used to create databases for storing the inputs from the website. JavaScript is used to make the web pages interactive by changing the DOM elements.

Microsoft Visual Studio Code is an Integrated Development Environment (IDE) for software developers to build applications by writing codes. Microsoft Visual Studio Code is chosen over editors such as Notepad++ is because of the clear syntax highlighting, built-in plugins such as Emmet Abbreviation that help to increase the efficiency of coding.

Visual Paradigm is a software tool for software developers to model business information systems for software development. Visual Paradigm is used in this project to model Use Case Diagram that is for the graphical depiction of user interaction with the website.

Figma is a web-based tool to design wireframes for software applications. Figma is chosen in this project is because of the features such as grouping elements feature that provide the ease of designing for developers. It provides the insight of the web structure for developers.

Font Awesome is a font and icon toolkit that provides vector images icons in the extension of SVG and PNG. Font Awesome is used as the toolkit provides large quantity of icons and the icons can be customisable by CSS.

CanIUse is a software tool for software developers to check the compatibility of the front-end languages properties associated to the type and version of browsers.

The browser developer tools used are Google Chrome Developer Tools, Firefox Developer Tools and Microsoft Edge Developer Tools. Browser developer tools are used to inspect the web pages for developers to test and debug their codes. Every browser has different engines in rendering the languages. Hence, browser developer tools are required for different browsers when testing with the languages support.

### Web Readability Design

There are many factors that can affect the readability of texts such as font type, font size and white space, line height and word length.

#### Font family

The font family used on the ecommerce website is san serif. According to Vaughan (2008) and Peck (2003), san serif fonts are more suitable to be used on computer screens because the fonts have higher screen readability. Furthermore, some of the older computers were not capable to render serif fonts (Bryan, 1996; "Font readability," n.d.; Rabinowitz, 2006).

#### Error Messages

According to Sik-Lányi (2012), the error messages prompted in the form on a website often marked in red can cause issues for colour-deficient user. Hence, the error messages prompted in the form are designed with the colour of red and bolded in text. Bolded red colour text becomes possible for colour-deficient people to see because there is sufficient red present to pick it up (Sik-Lányi, 2012).

### Use Case Diagram

Diagram

Description automatically generated

*Diagram 2.0 – Use Case Diagram*

In Diagram 2.0, users can perform a variety of functions in the ecommerce website. Before users logging in and signing up for an account, the system will perform validation by verifying the email. If the input is wrong, a red colour bolded error message will be displayed to the user. Users can view the products in wish list and shopping cart before they manage their wish list and shopping cart. Users can add the products to the shopping cart and wish list while browsing the products. Users can also perform checkout in the shopping cart page. The system will calculate the total amount paid. After checking out, the user will have to make payment and the process is performed by the payment gateway.

### Web Structure

Diagram

Description automatically generated

*Diagram 3.0 – Web Structure of the Website*

# Layout Design

## User Interface Frame and Description

|  |  |
| --- | --- |
| User Interface | Description |
| Graphical user interface, application  Description automatically generated Graphical user interface, application  Description automatically generated | Home Page  The home page acts as a main page of the website when users first enter the website. The home page provides a brief summary of the company, and the products of the company through the image slider. |
| Graphical user interface  Description automatically generated Text, letter  Description automatically generated | Contact Us  The contact us page is accessible to both logged in and non-logged in users. The contact us page provides users the company’s information such as the location, contact details and the company’s operating hours. |
| Graphical user interface, text, application, email  Description automatically generated Text, letter  Description automatically generated | FAQs  The FAQs page is accessible to both logged in and non-logged in users. The FAQs page provides the answers to the frequently asked questions by the users. The answers are listed below each of the questions under its respective categories such as the product and delivery information category. |
| Graphical user interface  Description automatically generated Graphical user interface, application  Description automatically generated | Login  The login page is only accessible to non-logged in users. The login page prompts for email and password input from users that already have signed up for an account for system validation before browsing the website as a logged in user. The page will display respective errors such as “invalid username or password” and “please enter the required field” if the users did not enter the requirements correctly. |
| Graphical user interface, application  Description automatically generated Graphical user interface, application  Description automatically generated | Sign Up  The sign-up page is only accessible to non-logged in users. The sign-up page prompts users for first name, last name, email, password and re-enter password input. The page will display respective errors such as “please enter the required field”, “email has already taken before”, “please enter the password correctly”, “password must contain 6 to 12 characters with at least 1 letter and 1 digit” if the users did not enter the requirements correctly. |
| Graphical user interface, application  Description automatically generated Graphical user interface, application  Description automatically generated | Logout  The logout page is only accessible to logged in users. The logout page logs out logged in users from the website and clears the session data of the users. |
| Graphical user interface, application, website  Description automatically generated A picture containing text, screenshot  Description automatically generated | Product Category Page  The product category page is accessible to both logged in and non-logged in users. The product category page will display its respective products based on the product category. The products displayed contains product information such as name, image, and price. The box of the product has an increased in size effect when the users hover through the products to improve user experience. |
| Graphical user interface, application  Description automatically generated Graphical user interface, application  Description automatically generated | Single Product Page  The single product page is accessible to both logged in and non-logged in users. However, the rating, add to cart, and enter comments feature is only accessible to logged in users. Every product has their own rating and comment section feature. The features provide an overall of the user’s impression or review to enhance the user’s purchasing decision. The page prompts users to add the products to their carts by selecting the product quantity and clicking on the “add to cart” button if they are interested. |
| Graphical user interface, application, email  Description automatically generated Graphical user interface, text, application  Description automatically generated  Graphical user interface, application  Description automatically generated Graphical user interface, application  Description automatically generated | Shopping Cart  The shopping cart page is accessible to both logged in and non-logged in users. However, the non-logged in users would always have their shopping cart empty as the single product pages do not allow non-logged in users to add products to their cart. Every logged in users would have their own respective carts. The shopping cart page displays a “shopping cart is empty” message if the users do not have products in their carts.  The shopping cart page consists of the cart details and the order summary. Users can remove the specific products or empty their cart in the cart details section while users can view the total amount payable and checkout in the order summary section. |
| Graphical user interface, application  Description automatically generated Graphical user interface, application  Description automatically generated | Checkout  The checkout page is only accessible to logged in users that have products in their shopping cart. The checkout form consists of delivery form input and payment input. The delivery form prompts users for their contact and delivery details while the payment form prompts users for their payment details. The checkout page will display respective errors if the users did not enter the form correctly. |
| A picture containing text  Description automatically generatedGraphical user interface, application  Description automatically generated | Payment Success  The payment success page is only accessible to logged in users that just made a payment. The payment success page displays of a “payment success” message to the users and direct the users back to the home page when the click on “Return to Home”. |
| Graphical user interface, application  Description automatically generated | Admin Dashboard (Create An Account)  The create an account admin dashboard page is accessible to both admin and editor. However, editor could only create an account with editor and user role level whereas admin can create with all the role levels. The page prompts for first name, last name, email, password, re-enter password and role input from the users. |
| Graphical user interface, table  Description automatically generated | Admin Dashboard (User Information)  The user information admin dashboard page is only accessible to the admin. The page provides the information of all users. The page also allows admin to remove the user’s account from the system. However, admin could not remove another admin’s account. |
| Graphical user interface, table  Description automatically generated | Admin Dashboard (Product Information)  The product information admin dashboard page is accessible to both admin and editor. The page provides the overview of the product information and allows the insertion, removal and edit of the products. |
| Graphical user interface, application  Description automatically generated | Admin Dashboard (Logout)  The logout admin dahsboard is accessible to both admin and editor. The logout page logs out logged in users from the website and clears the session data of the users. |

## Navigation Flow Graph

**Graphical user interface, application, Teams

Description automatically generated**

Graphical user interface, application

Description automatically generated Graphical user interface, application

Description automatically generated Graphical user interface, application, Teams

Description automatically generated

# Implementation and Results

## Additional Features

|  |  |
| --- | --- |
| Additional Features | Justifications |
| 1.AJAX Admin Dashboard | AJAX feature allows admins to browse different views of the admin dashboard with a fast-loading speed without the need of refreshing the webpage. Hence, admins can get to understand and edit the user and product details in a quicker manner during an emergency matter to improve the customer service of the business. For example, a user reported that their email address was used by other users for the website’s account creation. Therefore, the admin can check the dashboard quickly to understand and investigate the matter. |
| 2.Comment Sections | The comment sections feature allows discussion of the product in the product page. Hence, users can read through the reviews and self-determine the quality of the product and evaluate if the product would meet their expectations. Furthermore, the comment sections can help to increase company growth due to the open feedbacks given to each product in the product page. Hence, the company can improve by rectifying the weaknesses of the product. |
| 3.Rating Feature (Like and Dislike Feature) | The rating feature provides users a better purchasing decision while shopping. The rating feature shows the satisfaction and dissatisfaction of the users towards the particular product. Users can self-evaluate the product quality by comparing the ratio of likes amount over dislikes.  In addition, the feature improves the company in terms of providing the company the understanding of the market. The company can utilise the statistics to analyse, predict products that would be popular in the market and innovate the current products. Therefore, the feature benefits for both users and the company. |
| 4. Back To Top Button | The back to top button feature allows users to quickly navigate the webpage to the top through just a click on the button. Users do not need to manually scroll the webpage. Hence, the button feature helps to improve the user experience with the website. |

*Table 2.0 – Justifications of the Additional Features*

## Test Cases

### Login

|  |  |
| --- | --- |
| Test Case ID | TC-01-001 |
| Objective | Test if the user can login to the application with a valid email address and password. |
| Condition | 1. The email address and password must be registered in the application’s database. 2. The user must be a non-logged in user. |
| Test Steps | 1. Enter Login page. 2. Enter a valid email address. 3. Enter a valid password. 4. Tap the “Login” button. |
| Input Data | Email address: admin123@email.com  Password: admin123 |
| Expected Results | The application will authenticate the user. After authentication, the user will be directed to the home page and the first name of the user will be displayed at the top right of the header beside the shopping cart. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

|  |  |
| --- | --- |
| Test Case ID | TC-01-002 |
| Objective | Test if the user can login to the application without email address and password input. |
| Condition | 1. The email address and password must be registered in the application’s database. 2. The user must be a non-logged in user. |
| Test Steps | 1. Enter Login page. 2. Tap the “Login” button. |
| Input Data | Email address:  Password: |
| Expected Results | The application will authenticate the user. After authentication, the user will be directed back to the login page and an error message of “Please enter email and password” will be displayed below the “Login” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

|  |  |
| --- | --- |
| Test Case ID | TC-01-003 |
| Objective | Test if the user can login to the application with a valid email address but invalid password. |
| Condition | 1. The email address and password must be registered in the application’s database. 2. The user must be a non-logged in user. |
| Test Steps | 1. Enter Login page. 2. Enter a valid email address. 3. Enter an invalid password. 4. Tap the “Login” button. |
| Input Data | Email address: admin123@email.com  Password: admin12345 |
| Expected Results | The application will authenticate the user. After authentication, the user will be directed back to the login page and an error message of “Invalid username or password” will be displayed below the “Login” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

|  |  |
| --- | --- |
| Test Case ID | TC-01-004 |
| Objective | Test if the user can login to the application with an invalid email address but valid password. |
| Condition | 1. The email address and password must be registered in the application’s database. 2. The user must be a non-logged in user. |
| Test Steps | 1. Enter Login page. 2. Enter an invalid email address. 3. Enter a valid password. 4. Tap the “Login” button. |
| Input Data | Email address: admin12345@email.com  Password: admin123 |
| Expected Results | The application will authenticate the user. After authentication, the user will be directed back to the login page and an error message of “Invalid username or password” will be displayed below the “Login” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

|  |  |
| --- | --- |
| Test Case ID | TC-01-005 |
| Objective | Test if the user can login to the application with an invalid email address and invalid password. |
| Condition | 1. The email address and password must be registered in the application’s database. 2. The user must be a non-logged in user. |
| Test Steps | 1. Enter Login page. 2. Enter an invalid email address. 3. Enter an invalid password. 4. Tap the “Login” button. |
| Input Data | Email address: admin 12345@email.com  Password: admin12345 |
| Expected Results | The application will authenticate the user. After authentication, the user will be directed back to the login page and an error message of “Invalid username or password” will be displayed below the “Login” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

### Sign Up

|  |  |
| --- | --- |
| Test Case ID | TC-02-001 |
| Objective | Test if the user can sign up for an account with all valid inputs. |
| Condition | 1. All input fields are required. 2. First name must contain 1 to 16 letters only. 3. Last name must contain 1 to 16 letters only. 4. Email address must contain any length of letters or digits followed by “@” symbol, any length of letters or digits followed by “.” symbol and 2 to 6 letters. 5. Email address must be unique (can’t be repeated). 6. Password must contain 6 to 12 characters with at least 1 letter and 1 number. 7. Re-enter password must be same as password entered. |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid first name. 3. Enter a valid last name. 4. Enter a valid email address. 5. Enter a valid password. 6. Enter a valid re-enter password. 7. Tap the “Sign Up” button. |
| Input Data | First Name: cheng kit  Last Name: wong  Email address: ck@email.com  Password: ck1234  Re-enter Password: ck1234 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and a successful message of “You have created an account successfully” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

|  |  |
| --- | --- |
| Test Case ID | TC-02-002 |
| Objective | Test if the user can sign up for an account without all inputs. |
| Condition | All input fields are required. |
| Test Steps | 1. Enter Sign Up page. 2. Tap the “Sign Up” button. |
| Input Data | First Name:  Last Name:  Email address:  Password:  Re-enter Password: |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “Please enter the required field” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

|  |  |
| --- | --- |
| Test Case ID | TC-02-003 |
| Objective | Test if the user can sign up for an account with valid inputs but without first name input. |
| Condition | All input fields are required. |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid last name. 3. Enter a valid email address. 4. Enter a valid password. 5. Enter a valid re-enter password. 6. Tap the “Sign Up” button. |
| Input Data | First Name:  Last Name: wong  Email address: ck@email.com  Password: ck1234  Re-enter Password: ck1234 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “Please enter the required field” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

|  |  |
| --- | --- |
| Test Case ID | TC-02-004 |
| Objective | Test if the user can sign up for an account with valid inputs but without last name input. |
| Condition | All input fields are required. |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid first name. 3. Enter a valid email address. 4. Enter a valid password. 5. Enter a valid re-enter password. 6. Tap the “Sign Up” button. |
| Input Data | First Name: cheng kit  Last Name:  Email address: ck@email.com  Password: ck1234  Re-enter Password: ck1234 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “Please enter the required field” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

|  |  |
| --- | --- |
| Test Case ID | TC-02-005 |
| Objective | Test if the user can sign up for an account with valid inputs but without email address name input. |
| Condition | All input fields are required. |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid first name. 3. Enter a valid last name. 4. Enter a valid password. 5. Enter a valid re-enter password. 6. Tap the “Sign Up” button. |
| Input Data | First Name: cheng kit  Last Name: wong  Email address:  Password: ck1234  Re-enter Password: ck1234 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “Please enter the required field” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

|  |  |
| --- | --- |
| Test Case ID | TC-02-006 |
| Objective | Test if the user can sign up for an account with valid inputs but without password input. |
| Condition | All input fields are required. |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid first name. 3. Enter a valid last name. 4. Enter a valid email address. 5. Enter a valid re-enter password. 6. Tap the “Sign Up” button. |
| Input Data | First Name: cheng kit  Last Name: wong  Email address: ck@email.com  Password:  Re-enter Password: ck1234 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “Please enter the required field” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

|  |  |
| --- | --- |
| Test Case ID | TC-02-007 |
| Objective | Test if the user can sign up for an account with valid inputs but without re-enter password input. |
| Condition | All input fields are required. |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid first name. 3. Enter a valid last name. 4. Enter a valid email address. 5. Enter a valid password. 6. Tap the “Sign Up” button. |
| Input Data | First Name: cheng kit  Last Name: wong  Email address: ck@email.com  Password: ck1234  Re-enter Password: |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “Please enter the required field” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

|  |  |
| --- | --- |
| Test Case ID | TC-02-008 |
| Objective | Test if the user can sign up for an account with valid inputs but invalid first name (more than 16 characters). |
| Condition | 1. All field inputs are required. 2. First name must contain 1 to 16 letters only. |
| Test Steps | 1. Enter Sign Up page. 2. Enter an invalid first name. 3. Enter a valid last name. 4. Enter a valid email address. 5. Enter a valid password. 6. Enter a valid re-enter password. 7. Tap the “Sign Up” button. |
| Input Data | First Name: aaaaaaaaaaaaaaaaaaaa  Last Name: wong  Email address: ck@email.com  Password: ck1234  Re-enter Password: ck1234 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “First name must contain 1 to 16 letters only” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

|  |  |
| --- | --- |
| Test Case ID | TC-02-009 |
| Objective | Test if the user can sign up for an account with valid inputs but invalid first name (digits only). |
| Condition | 1. All field inputs are required. 2. First name must contain 1 to 16 letters only. |
| Test Steps | 1. Enter Sign Up page. 2. Enter an invalid first name. 3. Enter a valid last name. 4. Enter a valid email address. 5. Enter a valid password. 6. Enter a valid re-enter password. 7. Tap the “Sign Up” button. |
| Input Data | First Name: 1234  Last Name: wong  Email address: ck@email.com  Password: ck1234  Re-enter Password: ck1234 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “First name must contain 1 to 16 letters only” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

|  |  |
| --- | --- |
| Test Case ID | TC-02-010 |
| Objective | Test if the user can sign up for an account with valid inputs but invalid first name (letters with digits). |
| Condition | 1. All field inputs are required. 2. First name must contain 1 to 16 letters only. |
| Test Steps | 1. Enter Sign Up page. 2. Enter an invalid first name. 3. Enter a valid last name. 4. Enter a valid email address. 5. Enter a valid password. 6. Enter a valid re-enter password. 7. Tap the “Sign Up” button. |
| Input Data | First Name: ck123  Last Name: wong  Email address: ck@email.com  Password: ck1234  Re-enter Password: ck1234 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “First name must contain 1 to 16 letters only” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

|  |  |
| --- | --- |
| Test Case ID | TC-02-011 |
| Objective | Test if the user can sign up for an account with valid inputs but invalid last name (more than 16 characters). |
| Condition | 1. All field inputs are required. 2. First name must contain 1 to 16 letters only. 3. Last name must contain 1 to 16 letters only. |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid first name. 3. Enter an invalid last name. 4. Enter a valid email address. 5. Enter a valid password. 6. Enter a valid re-enter password. 7. Tap the “Sign Up” button. |
| Input Data | First Name: cheng kit  Last Name: aaaaaaaaaaaaaaaaaaaa  Email address: ck@email.com  Password: ck1234  Re-enter Password: ck1234 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “Last name must contain 1 to 16 letters only” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-02-012 |
| Objective | Test if the user can sign up for an account valid inputs but invalid last name (digits only). |
| Condition | 1. All field inputs are required. 2. First name must contain 1 to 16 letters only. 3. Last name must contain 1 to 16 letters only. |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid first name. 3. Enter an invalid last name. 4. Enter a valid email address. 5. Enter a valid password. 6. Enter a valid re-enter password. 7. Tap the “Sign Up” button. |
| Input Data | First Name: cheng kit  Last Name: 1234  Email address: ck@email.com  Password: ck1234  Re-enter Password: ck1234 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “Last name must contain 1 to 16 letters only” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-02-013 |
| Objective | Test if the user can sign up for an account with valid input but invalid last name (letters with digits). |
| Condition | 1. All field inputs are required. 2. First name must contain 1 to 16 letters only. 3. Last name must contain 1 to 16 letters only. |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid first name. 3. Enter an invalid last name. 4. Enter a valid email address. 5. Enter a valid password. 6. Enter a valid re-enter password. 7. Tap the “Sign Up” button. |
| Input Data | First Name: cheng kit  Last Name: ck123  Email address: ck@email.com  Password: ck1234  Re-enter Password: ck1234 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “Last name must contain 1 to 16 letters only” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-02-0014 |
| Objective | Test if the user can sign up for an account with valid inputs but invalid email address. |
| Condition | 1. All field inputs are required. 2. First name must contain 1 to 16 letters only. 3. Last name must contain 1 to 16 letters only. 4. Email address must contain any length of letters or digits followed by “@” symbol, any length of letters or digits followed by “.” symbol and 2 to 6 letters. 5. Email address must be unique (can’t be repeated). |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid first name. 3. Enter a valid last name. 4. Enter an invalid email address. 5. Enter a valid password. 6. Enter a valid re-enter password. 7. Tap the “Sign Up” button. |
| Input Data | First Name: cheng kit  Last Name: wong  Email address: ck  Password: ck1234  Re-enter Password: ck1234 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “Please enter a valid email address” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-02-015 |
| Objective | Test if the user can sign up for an account with valid inputs but invalid email address. |
| Condition | 1. All field inputs are required. 2. First name must contain 1 to 16 letters only. 3. Last name must contain 1 to 16 letters only. 4. Email address must contain any length of letters or digits followed by “@” symbol, any length of letters or digits followed by “.” symbol and 2 to 6 letters. 5. Email address must be unique (can’t be repeated). |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid first name. 3. Enter a valid last name. 4. Enter an invalid email address. 5. Ener a valid password. 6. Enter a valid re-enter password. 7. Tap the “Sign Up” button. |
| Input Data | First Name: cheng kit  Last Name: wong  Email address: ck@  Password: ck1234  Re-enter Password: ck1234 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “Please enter a valid email address” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-02-016 |
| Objective | Test if the user can sign up for an account with valid inputs but invalid email address. |
| Condition | 1. All field inputs are required. 2. First name must contain 1 to 16 letters only. 3. Last name must contain 1 to 16 letters only. 4. Email address must contain any length of letters or digits followed by “@” symbol, any length of letters or digits followed by “.” symbol and 2 to 6 letters. 5. Email address must be unique (can’t be repeated). |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid first name. 3. Enter a valid last name. 4. Enter an invalid email address. 5. Enter a valid password. 6. Enter a valid re-enter password. 7. Tap the “Sign Up” button. |
| Input Data | First Name: cheng kit  Last Name: wong  Email address: ck@ck  Password: ck1234  Re-enter Password: ck1234 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “Please enter a valid email address” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-02-017 |
| Objective | Test if the user can sign up for an account with valid inputs but invalid email address. |
| Condition | 1. All field inputs are required. 2. First name must contain 1 to 16 letters only. 3. Last name must contain 1 to 16 letters only. 4. Email address must contain any length of letters or digits followed by “@” symbol, any length of letters or digits followed by “.” symbol and 2 to 6 letters. 5. Email address must be unique (can’t be repeated). |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid first name. 3. Enter a valid last name. 4. Enter an invalid email address. 5. Enter a valid password. 6. Enter a valid re-enter password. 7. Tap the “Sign Up” button. |
| Input Data | First Name: cheng kit  Last Name: wong  Email address: ck@ck.  Password: ck1234  Re-enter Password: ck1234 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “Please enter a valid email address” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-02-018 |
| Objective | Test if the user can sign up for an account with valid inputs but invalid email address. |
| Condition | 1. All field inputs are required. 2. First name must contain 1 to 16 letters only. 3. Last name must contain 1 to 16 letters only. 4. Email address must contain any length of letters or digits followed by “@” symbol, any length of letters or digits followed by “.” symbol and 2 to 6 letters. 5. Email address must be unique (can’t be repeated). |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid first name. 3. Enter a valid last name. 4. Enter an invalid email address. 5. Enter a valid password. 6. Enter a valid re-enter password. 7. Tap the “Sign Up” button. |
| Input Data | First Name: cheng kit  Last Name: wong  Email address: ck@ck.c  Password: ck1234  Re-enter Password: ck1234 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “Please enter a valid email address” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-02-019 |
| Objective | Test if the user can sign up for an account with valid inputs but invalid email address. |
| Condition | 1. All field inputs are required. 2. First name must contain 1 to 16 letters only. 3. Last name must contain 1 to 16 letters only. 4. Email address must contain any length of letters or digits followed by “@” symbol, any length of letters or digits followed by “.” symbol and 2 to 6 letters. 5. Email address must be unique (can’t be repeated). |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid first name. 3. Enter a valid last name. 4. Enter an invalid email address. 5. Enter a valid password. 6. Enter a valid re-enter password. 7. Tap the “Sign Up” button. |
| Input Data | First Name: cheng kit  Last Name: wong  Email address: ck@ck.commmmm  Password: ck1234  Re-enter Password: ck1234 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “Please enter a valid email address” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-02-020 |
| Objective | Test if the user can sign up for an account with valid inputs but invalid email address. |
| Condition | 1. All field inputs are required. 2. First name must contain 1 to 16 letters only. 3. Last name must contain 1 to 16 letters only. 4. Email address must contain any length of letters or digits followed by “@” symbol, any length of letters or digits followed by “.” symbol and 2 to 6 letters. 5. Email address must be unique (can’t be repeated). |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid first name. 3. Enter a valid last name. 4. Enter an invalid email address. 5. Enter a valid password. 6. Enter a valid re-enter password. 7. Tap the “Sign Up” button. |
| Input Data | First Name: cheng kit  Last Name: wong  Email address: ck@ck.123  Password: ck1234  Re-enter Password: ck1234 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “Please enter a valid email address” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-02-021 |
| Objective | Test if the user can sign up for an account with valid inputs but invalid email address (taken email by other users). |
| Condition | 1. All field inputs are required. 2. First name must contain 1 to 16 letters only. 3. Last name must contain 1 to 16 letters only. 4. Email address must contain any length of letters or digits followed by “@” symbol, any length of letters or digits followed by “.” symbol and 2 to 6 letters. 5. Email address must be unique (can’t be repeated). |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid first name. 3. Enter a valid last name. 4. Enter an invalid email address. 5. Enter a valid password. 6. Enter a valid re-enter password. 7. Tap the “Sign Up” button. |
| Input Data | First Name: cheng kit  Last Name: wong  Email address: ck@email.com  Password: ck1234  Re-enter Password: ck1234 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “The email address has already been take” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-02-022 |
| Objective | Test if the user can sign up for an account with valid inputs but invalid password (less than 6 characters). |
| Condition | 1. All field inputs are required. 2. First name must contain 1 to 16 letters only. 3. Last name must contain 1 to 16 letters only. 4. Email address must contain any length of letters or digits followed by “@” symbol, any length of letters or digits followed by “.” symbol and 2 to 6 letters. 5. Email address must be unique (can’t be repeated). 6. Password must contain 6 to 12 characters with at least 1 letter and 1 number. |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid first name. 3. Enter a valid last name. 4. Enter a valid email address. 5. Enter an invalid password. 6. Enter a valid re-enter password. 7. Tap the “Sign Up” button. |
| Input Data | First Name: cheng kit  Last Name: wong  Email address: ck@email.com  Password: ck  Re-enter Password: ck1234 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “Password must contain 6 to 12 characters with at least one letter, at least one number, and ” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-02-023 |
| Objective | Test if the user can sign up for an account with valid inputs but invalid password (more than 12 characters). |
| Condition | 1. All field inputs are required. 2. First name must contain 1 to 16 letters only. 3. Last name must contain 1 to 16 letters only. 4. Email address must contain any length of letters or digits followed by “@” symbol, any length of letters or digits followed by “.” symbol and 2 to 6 letters. 5. Email address must be unique (can’t be repeated). 6. Password must contain 6 to 12 characters with at least 1 letter and 1 number. |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid first name. 3. Enter a valid last name. 4. Enter a valid email address. 5. Enter an invalid password. 6. Enter a valid re-enter password. 7. Tap the “Sign Up” button. |
| Input Data | First Name: cheng kit  Last Name: wong  Email address: ck@email.com  Password: aaaaaaaaaaaaa  Re-enter Password: ck1234 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “Password must contain 6 to 12 characters with at least one letter, at least one number, and ” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-02-024 |
| Objective | Test if the user can sign up for an account with valid inputs but invalid password (letters only). |
| Condition | 1. All field inputs are required. 2. First name must contain 1 to 16 letters only. 3. Last name must contain 1 to 16 letters only. 4. Email address must contain any length of letters or digits followed by “@” symbol, any length of letters or digits followed by “.” symbol and 2 to 6 letters. 5. Email address must be unique (can’t be repeated). 6. Password must contain 6 to 12 characters with at least 1 letter and 1 number. |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid first name. 3. Enter a valid last name. 4. Enter a valid email address. 5. Enter an invalid password. 6. Enter a valid re-enter password. 7. Tap the “Sign Up” button. |
| Input Data | First Name: cheng kit  Last Name: wong  Email address: ck@email.com  Password: chengkit  Re-enter Password: ck1234 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “Password must contain 6 to 12 characters with at least one letter, at least one number, and ” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-02-025 |
| Objective | Test if the user can sign up for an account with valid inputs but invalid password (digits only). |
| Condition | 1. All field inputs are required. 2. First name must contain 1 to 16 letters only. 3. Last name must contain 1 to 16 letters only. 4. Email address must contain any length of letters or digits followed by “@” symbol, any length of letters or digits followed by “.” symbol and 2 to 6 letters. 5. Email address must be unique (can’t be repeated). 6. Password must contain 6 to 12 characters with at least 1 letter and 1 number. |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid first name. 3. Enter a valid last name. 4. Enter a valid email address. 5. Enter an invalid password. 6. Enter a valid re-enter password. 7. Tap the “Sign Up” button. |
| Input Data | First Name: cheng kit  Last Name: wong  Email address: ck@email.com  Password: 123456  Re-enter Password: ck1234 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “Password must contain 6 to 12 characters with at least one letter, at least one number, and ” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-02-026 |
| Objective | Test if the user can sign up for an account with valid inputs but invalid re-enter password (different password input). |
| Condition | 1. All field inputs are required. 2. First name must contain 1 to 16 letters only. 3. Last name must contain 1 to 16 letters only. 4. Email address must contain any length of letters or digits followed by “@” symbol, any length of letters or digits followed by “.” symbol and 2 to 6 letters. 5. Email address must be unique (can’t be repeated). 6. Password must contain 6 to 12 characters with at least 1 letter and 1 number. 7. Re-enter password must be same as password entered. |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid first name. 3. Enter a valid last name. 4. Enter a valid email address. 5. Enter a valid password. 6. Enter an invalid re-enter password. 7. Tap the “Sign Up” button. |
| Input Data | First Name: cheng kit  Last Name: wong  Email address: dino123@email.com  Password: ck1234  Re-enter Password: ck12345 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “Please enter the same password correctly” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-02-027 |
| Objective | Test if the user can sign up for an account with valid inputs but invalid re-enter password (more than 12 characters). |
| Condition | 1. All field inputs are required. 2. First name must contain 1 to 16 letters only. 3. Last name must contain 1 to 16 letters only. 4. Email address must contain any length of letters or digits followed by “@” symbol, any length of letters or digits followed by “.” symbol and 2 to 6 letters. 5. Email address must be unique (can’t be repeated). 6. Password must contain 6 to 12 characters with at least 1 letter and 1 number. 7. Re-enter password must be same as password entered. |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid first name. 3. Enter a valid last name. 4. Enter a valid email address. 5. Enter a valid password. 6. Enter an invalid re-enter password. 7. Tap the “Sign Up” button. |
| Input Data | First Name: cheng kit  Last Name: wong  Email address: ck@email.com  Password: ck123  Re-enter Password: aaaaaaaaaaaaa |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “Please enter the same password correctly” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-02-028 |
| Objective | Test if the user can sign up for an account with valid inputs but invalid re-enter password (less than 6 characters). |
| Condition | 1. All field inputs are required. 2. First name must contain 1 to 16 letters only. 3. Last name must contain 1 to 16 letters only. 4. Email address must contain any length of letters or digits followed by “@” symbol, any length of letters or digits followed by “.” symbol and 2 to 6 letters. 5. Email address must be unique (can’t be repeated). 6. Password must contain 6 to 12 characters with at least 1 letter and 1 number. 7. Re-enter password must be same as password entered. |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid first name. 3. Enter a valid last name. 4. Enter a valid email address. 5. Enter a valid password. 6. Enter an invalid re-enter password. 7. Tap the “Sign Up” button. |
| Input Data | First Name: cheng kit  Last Name: wong  Email address: ck@email.com  Password: ck1234  Re-enter Password: a |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “Please enter the same password correctly” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-02-029 |
| Objective | Test if the user can sign up for an account with valid inputs but invalid re-enter password (digits only). |
| Condition | 1. All field inputs are required. 2. First name must contain 1 to 16 letters only. 3. Last name must contain 1 to 16 letters only. 4. Email address must contain any length of letters or digits followed by “@” symbol, any length of letters or digits followed by “.” symbol and 2 to 6 letters. 5. Email address must be unique (can’t be repeated). 6. Password must contain 6 to 12 characters with at least 1 letter and 1 number. 7. Re-enter password must be same as password entered. |
| Test Steps | 1. Enter Sign Up page. 2. Enter a valid first name. 3. Enter a valid last name. 4. Enter a valid email address. 5. Enter a valid password. 6. Enter an invalid re-enter password. 7. Tap the “Sign Up” button. |
| Input Data | First Name: cheng kit  Last Name: ck  Email address: ck@email.com  Password: ck1234  Re-enter Password: 123456 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed back to the “Sign Up” page and an error message of “Please enter the same password correctly” will be displayed below the “Sign Up” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

### Social Media Icon

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| Test Case ID | TC-03-001 |
| Objective | Test if the users can click on the Facebook icon and navigate to Facebook page. |
| Test Steps | 1. Scroll to the footer section of the webpage. 2. Place the cursor over the Facebook icon. 3. Tap the Facebook icon. |
| Expected Results | The application will display a reduced opacity effect when the Facebook icon is hovered on desktop view. After clicking on the Facebook icon, the user will be directed to Facebook. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-03-002 |
| Objective | Test if the users can click on the Instagram icon and navigate to Instagram page. |
| Test Steps | 1. Scroll to the footer section of the webpage. 2. Place the cursor over the Instagram icon. 3. Tap the Instagram icon. |
| Expected Results | The application will display a reduced opacity effect when the Instagram icon is hovered on desktop view. After clicking on the Instagram icon, the user will be directed to Instagram. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-03-003 |
| Objective | Test if the users can click on the Email icon and be navigate to Email page. |
| Test Steps | 1. Scroll to the footer section of the webpage. 2. Place the cursor over the Email icon. 3. Tap the Email icon. |
| Expected Results | The application will display a reduced opacity effect when the Email icon is hovered on desktop view. After clicking on the Email icon, the user’s respective Email application will pop out with the intended sender’s email address. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-03-004 |
| Objective | Test if the users can click on the Twitter icon and navigate to Twitter page. |
| Test Steps | 1. Scroll to the footer section of the webpage. 2. Place the cursor over the Twitter icon. 3. Tap the Twitter icon. |
| Expected Results | The application will display a reduced opacity effect when the Twitter icon is hovered on desktop view. After clicking on the Twitter icon, the user will be directed to Twitter. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

### Navigation

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| Test Case ID | TC-04-001 |
| Objective | Test if the users can click on the logo icon on the header and navigate to the home page. |
| Condition | None |
| Test Steps | 1. Scroll to the header section of the webpage. 2. Place the cursor over the logo icon. 3. Tap on the logo icon. |
| Expected Results | The application will display a reduced opacity effect when the logo icon is hovered on desktop view. After clicking on the logo icon, the user will be directed to home page. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-04-002 |
| Objective | Test if the users can click on the “Home” on the navigation bar and navigate to the home page. |
| Condition | None |
| Test Steps | 1. Scroll to the navigation section of the webpage. 2. Place the cursor over the “Home”. 3. Tap on “Home”. |
| Expected Results | The application will display a reduced opacity effect when “Home” is hovered on desktop view. After clicking on the “Home”, the user will be directed to home page. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-04-003 |
| Objective | Test if the users can view the drop-down menu when the users hover on the “Occasion” on the navigation bar. |
| Condition | None |
| Test Steps | 1. Scroll to the navigation section of the webpage. 2. Place the cursor over the “Occasion”. |
| Expected Results | The application will display a drop-down menu of product categories under the “Occasion” type on the navigation bar. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-04-004 |
| Objective | Test if the users can view the drop-down menu when the users hover on the “Add On Items” on the navigation bar. |
| Condition | None |
| Test Steps | 1. Scroll to the navigation section of the webpage. 2. Place the cursor over the “Add On Items”. |
| Expected Results | The application will display a drop-down menu of the product categories under the “Add On Items” type on the navigation bar. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-04-005 |
| Objective | Test if the users can click on the “Wedding” on the drop-down menu of “Occasion” navigation bar. |
| Condition | None |
| Test Steps | 1. Scroll to the navigation section of the webpage. 2. Place the cursor over the “Occasion”. 3. Tap on “Wedding”. |
| Expected Results | The application will display a drop-down menu of the product categories under “Occasion” type on the navigation bar. The application will display a reduced opacity effect when “Wedding” is hovered on desktop view. After clicking on the “Wedding”, the user will be directed to the wedding category page. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-04-006 |
| Objective | Test if the users can click on the “Condolence” on the drop-down menu of “Occasion” navigation bar. |
| Condition | None |
| Test Steps | 1. Scroll to the navigation section of the webpage. 2. Place the cursor over the “Occasion”. 3. Tap on “Condolence”. |
| Expected Results | The application will display a drop-down menu of the product categories under “Occasion” type on the navigation bar. The application will display a reduced opacity effect when “Condolence” is hovered on desktop view. After clicking on the “Condolence”, the user will be directed to the condolence category page. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-04-007 |
| Objective | Test if the users can click on the “Graduation” on the drop-down menu of “Occasion” navigation bar. |
| Condition | None |
| Test Steps | 1. Scroll to the navigation section of the webpage. 2. Place the cursor over the “Occasion”. 3. Tap on “Graduation”. |
| Expected Results | The application will display a drop-down menu of the product categories under “Occasion” type on the navigation bar. The application will display a reduced opacity effect when “Graduation” is hovered on desktop view. After clicking on the “Graduation”, the user will be directed to the graduation category page. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-04-008 |
| Objective | Test if the users can click on the “Anniversary” on the drop-down menu of “Occasion” navigation bar. |
| Condition | None |
| Test Steps | 1. Scroll to the navigation section of the webpage. 2. Place the cursor over the “Occasion”. 3. Tap on “Anniversary”. |
| Expected Results | The application will display a drop-down menu of the product categories under “Occasion” type on the navigation bar. The application will display a reduced opacity effect when “Anniversary” is hovered on desktop view. After clicking on the “Anniversary”, the user will be directed to the anniversary category page. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-04-009 |
| Objective | Test if the users can click on the “Balloons” on the drop-down menu of “Add On Items” navigation bar. |
| Condition | None |
| Test Steps | 1. Scroll to the navigation section of the webpage. 2. Place the cursor over the “Add On Items”. 3. Tap on “Balloons”. |
| Expected Results | The application will display a drop-down menu of the product categories under “Add On Items” type on the navigation bar. The application will display a reduced opacity effect when “Balloons” is hovered on desktop view. After clicking on the “Balloons”, the user will be directed to the balloons category page. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-04-010 |
| Objective | Test if the users can click on the “Chocolates” on the drop-down menu of “Add On Items” navigation bar. |
| Condition | None |
| Test Steps | 1. Scroll to the navigation section of the webpage. 2. Place the cursor over the “Add On Items”. 3. Tap on “Chocolates”. |
| Expected Results | The application will display a drop-down menu of the product categories under “Add On Items” type on the navigation bar. The application will display a reduced opacity effect when “Chocolates” is hovered on desktop view. After clicking on the “Chocolates”, the user will be directed to the chocolates category page. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-04-011 |
| Objective | Test if the users can click on the products and navigate to the respective product page. |
| Condition | None |
| Test Steps | 1. Scroll to the navigation section of the webpage. 2. Place the cursor over the “Occasion”. 3. Tap on “Wedding”. 4. Click on “Lilac Rose Flower Bouquet”. |
| Expected Results | The application will display an enlarged in size effect when the product is hovered on desktop view. After clicking on the “Lilac Rose Flower Bouquet” box, the user will be directed to the single product page. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-04-012 |
| Objective | Test if the users can click on the “Contact Us” on the navigation bar and navigate to the contact us page. |
| Condition | None |
| Test Steps | 1. Scroll to the navigation section of the webpage. 2. Place the cursor over the “Contact Us”. 3. Tap on “Contact Us”. |
| Expected Results | The application will display a reduced opacity effect when “Contact Us” is hovered on desktop view. After clicking on the “Contact Us”, the user will be directed to contact us page. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-04-013 |
| Objective | Test if the users can click on the “FAQs” on the navigation bar and navigate to the FAQs page. |
| Condition | None |
| Test Steps | 1. Scroll to the navigation section of the webpage. 2. Place the cursor over the “FAQs”. 3. Tap on “FAQs”. |
| Expected Results | The application will display a reduced opacity effect when “FAQs” is hovered on desktop view. After clicking on the “FAQs”, the user will be directed to FAQs page. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-04-014 |
| Objective | Test if the users can click on the logo icon on the footer and navigate to the home page. |
| Condition | None |
| Test Steps | 1. Scroll to the footer section of the webpage. 2. Place the cursor over the logo icon. 3. Tap on the logo icon. |
| Expected Results | The application will display a reduced opacity effect when the logo icon is hovered on desktop view. After clicking on the logo icon ,the user will be directed to home page. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-04-015 |
| Objective | Test if the users can click on the “Home” on the footer and navigate to the home page. |
| Condition | None |
| Test Steps | 1. Scroll to the footer section of the webpage. 2. Place the cursor over the “Home”. 3. Tap on “Home”. |
| Expected Results | The application will display a reduced opacity effect when “Home” is hovered on desktop view. After clicking on the “Home”, the user will be directed to home page. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-04-016 |
| Objective | Test if the users can click on the “Contact Us” on the footer and navigate to the contact us page. |
| Condition | None |
| Test Steps | 1. Scroll to the footer section of the webpage. 2. Place the cursor over the “Contact Us”. 3. Tap on “Contact Us”. |
| Expected Results | The application will display a reduced opacity effect when “Contact Us” is hovered on desktop view. After clicking on the “Contact Us”, the user will be directed to contact us page. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-04-017 |
| Objective | Test if the users can click on the “FAQs” on the footer and navigate to the FAQs page. |
| Condition | None |
| Test Steps | 1. Scroll to the footer section of the webpage. 2. Place the cursor over the “FAQs”. 3. Tap on “FAQs”. |
| Expected Results | The application will display a reduced opacity effect when “FAQs” is hovered on desktop view. After clicking on the “FAQs”, the user will be directed to FAQs page. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-04-018 |
| Objective | Test if the users can click on the back to top icon when the users have scrolled a 100px down of the webpage and navigate to the top of the page. |
| Condition | The users must scroll a 100px down of the webpage. |
| Test Steps | 1. Scroll a 100px down of the webpage. 2. Place the cursor over the back to top icon. 3. Tap on back to top icon. |
| Expected Results | The application will display a reduced opacity effect when the back to top icon is hovered on desktop view. After clicking on the back to top icon, the user will be directed to the top of the page. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-04-019 |
| Objective | Test if the users can click on the “Sign Up” button and navigate to the sign-up page. |
| Condition | The user must be a non-logged in user. |
| Test Steps | 1. Scroll to the header section of the webpage. 2. Place the cursor over the profile icon. 3. Tap on profile icon. 4. Tap on the “Sign Up” button. |
| Expected Results | The application will display a reduced opacity effect when the “Sign Up” icon is hovered on desktop view. After clicking on the “Sign Up” icon, the user will be directed to the sign-up page. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

### Profile Page (Login View, Logout View, Admin Dashboard View)

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| Test Case ID | TC-05-001 |
| Objective | Test if the non-logged in users can click on the profile icon and navigate to the login page. |
| Condition | The user must be a non-logged in user. |
| Test Steps | 1. Scroll to the header of the webpage. 2. Tap the profile icon. |
| Expected Results | The application will direct the users to the login page. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-05-002 |
| Objective | Test if the users can click on their name on the header and navigate to the profile page. |
| Condition | The user must be a logged in user. |
| Test Steps | 1. Scroll to the header of the webpage. 2. Tap the user’s name. |
| Expected Results | The application will direct the users to the profile page. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-05-003 |
| Objective | Test if the admin can click on their name on the header and navigate to the profile page with admin dashboard feature. |
| Condition | The user must be a logged in admin. |
| Test Steps | 1. Scroll to the header of the webpage. 2. Tap the admin’s name. |
| Expected Results | The application will direct the admin to the profile page. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-05-004 |
| Objective | Test if the admin can click on their name on the header and navigate to the profile page with admin dashboard feature. |
| Condition | The user must be a logged in admin. |
| Test Steps | 1. Scroll to the header of the webpage. 2. Tap the admin’s name. |
| Expected Results | The application will direct the admin to the profile page with admin dashboard. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-05-005 |
| Objective | Test if the admin can switch to the user information view. |
| Condition | The user must be a logged in admin. |
| Test Steps | Click on the “User” button on the left sidebar. |
| Expected Results | The application will display the user information view. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-05-006 |
| Objective | Test if the admin can switch to the product view. |
| Condition | The user must be a logged in admin. |
| Test Steps | Click on the “Product” button on the left sidebar. |
| Expected Results | The application will display the product information view. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-05-007 |
| Objective | Test if the admin can switch to the logout view. |
| Condition | The user must be a logged in admin. |
| Test Steps | Click on the “Logout” button on the left sidebar. |
| Expected Results | The application will display the logout view. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-05-008 |
| Objective | Test if the admin can switch to the create account view. |
| Condition | The user must be a logged in admin. |
| Test Steps | Click on the “Create Account” button on the left sidebar. |
| Expected Results | The application will display the create account view. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-05-009 |
| Objective | Test if the admin can remove users in the user information view. |
| Condition | The user must be a logged in admin. |
| Test Steps | 1. Click on the “User” button on the left sidebar. 2. Tap the trash can icon at the end of the user’s information row. |
| Expected Results | The application will remove the selected user. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-05-010 |
| Objective | Test if the admin can remove admins in the user information view. |
| Condition | The user must be a logged in admin. |
| Test Steps | 1. Click on the “User” button on the left sidebar. 2. Tap the trash can icon at the end of the admin’s information row. |
| Expected Results | The application will not display the trash can icon to remove. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-05-011 |
| Objective | Test if the admin can remove a specific product in the product information view. |
| Condition | The user must be a logged in admin. |
| Test Steps | 1. Click on the “Product” button on the left sidebar. 2. Tap the trash can icon at the end of the product’s information row. |
| Expected Results | The application will remove the product. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-05-012 |
| Objective | Test if the admin can remove a specific product in the product information view. |
| Condition | The user must be a logged in admin. |
| Test Steps | 1. Click on the “Product” button on the left sidebar. 2. Tap the trash can icon at the end of the product’s information row. |
| Expected Results | The application will remove the product. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-05-013 |
| Objective | Test if the admin can add a product to the database with valid inputs. |
| Condition | The user must be a logged in admin. |
| Test Steps | 1. Click on the “Product” button on the left sidebar. 2. Enter valid product name input. 3. Enter valid product image input. 4. Enter valid product category id input. 5. Enter valid product price input. |
| Expected Results | The application will add the product. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-05-014 |
| Objective | Test if the admin can add a product to the database with redundant product name. |
| Condition | The user must be a logged in admin. |
| Test Steps | 1. Click on the “Product” button on the left sidebar. 2. Enter redundant product name input. 3. Enter valid product image input. 4. Enter valid product category id input. 5. Enter valid product price input. |
| Expected Results | The application will not add the product. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-05-015 |
| Objective | Test if the admin can edit a product in the database with valid inputs. |
| Condition | The user must be a logged in admin. |
| Test Steps | 1. Click on the “Product” button on the left sidebar. 2. Enter valid product id input. 3. Enter valid product image input. 4. Enter valid product name input. 5. Enter valid product price input. |
| Expected Results | The application will add the product. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-05-016 |
| Objective | Test if the admin can edit a product in the database with invalid product id input. |
| Condition | The user must be a logged in admin. |
| Test Steps | 1. Click on the “Product” button on the left sidebar. 2. Enter invalid product id input. 3. Enter valid product image input. 4. Enter valid product name input. 5. Enter valid product price input. |
| Expected Results | The application will not add the product. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-05-017 |
| Objective | Test if the admin can edit a product in the database with redundant product name input. |
| Condition | The user must be a logged in admin. |
| Test Steps | 1. Click on the “Product” button on the left sidebar. 2. Enter valid product id input. 3. Enter valid product image input. 4. Enter redundant product name input. 5. Enter valid product price input. |
| Expected Results | The application will not add the product. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

### Product Like and Dislike Feature

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| Test Case ID | TC-06-01 |
| Objective | Test if the users can click on the like icon. |
| Condition | The user must be a logged in user. |
| Test Steps | Tap on the like icon. |
| Expected Results | The application will display a blue colour effect on the icon when the user has tap on the like icon. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-06-02 |
| Objective | Test if the users can click on the dislike icon. |
| Condition | The user must be a logged in user. |
| Test Steps | Tap on the dislike icon. |
| Expected Results | The application will display a blue colour effect on the icon when the user has tap on the dislike icon. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-06-03 |
| Objective | Test if the users can click on the like icon and remove the like count. |
| Condition | 1. The user must be a logged in user. 2. The user must have liked the product. |
| Test Steps | Tap on the like icon. |
| Expected Results | The application will remove the blue colour effect on the icon when the user has tap on the like icon again. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-06-04 |
| Objective | Test if the users can click on the dislike icon and remove the dislike count. |
| Condition | 1. The user must be a logged in user. 2. The user must have disliked the product. |
| Test Steps | Tap on the dislike icon. |
| Expected Results | The application will remove the blue colour effect on the icon when the user has tap on the dislike icon again. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-06-05 |
| Objective | Test if the users can click on the like icon and change from dislike to like. |
| Condition | 1. The user must be a logged in user. 2. The user must have disliked the product. |
| Test Steps | Tap on the like icon. |
| Expected Results | The application will remove the blue colour effect on the dislike icon and display the blue colour effect on the like icon when the user has tap on the like icon. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-06-06 |
| Objective | Test if the users can click on the dislike icon and change from like to dislike. |
| Condition | 1. The user must be a logged in user. 2. The user must have liked the product. |
| Test Steps | Tap on the dislike icon. |
| Expected Results | The application will remove the blue colour effect on the like icon and display the blue colour effect on the dislike icon when the user has tap on the dislike icon. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |
| Test Case ID | TC-06-07 |
| Objective | Test if the users can view the total like and dislike count added by other users. |
| Condition | There must be at least one like or dislike count registered to the database. |
| Test Steps | View the like or dislike count. |
| Expected Results | The application will display the total like and dislike count by the users. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

### Comment Section

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| Test Case ID | TC-07-01 |
| Objective | Test if the users can view the comment sections. |
| Condition | There must be comments registered to the product’s comment section. |
| Test Steps | Scroll to the comment section in the product page. |
| Expected Results | The application will display the comments under the comment section. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-07-02 |
| Objective | Test if the users can view the comment sections. |
| Condition | There must be no comments registered to the product’s comment section. |
| Test Steps | Scroll to the comment section in the product page. |
| Expected Results | The application will display a “Comment section is empty” message under the comment section. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-07-03 |
| Objective | Test if the users can view the same comment section in other product’s comment section. |
| Condition | There must be comments registered to the product’s comment section. |
| Test Steps | 1. Scroll to the comment section in the product page of Lilac Rose Flower Bouquet. 2. Record the comments in the comment section. 3. Scroll to the comment section in the product page of Fifth Symphony Flower Bouquet. 4. Record the comments in the comment section. |
| Expected Results | The application will display a different comment section for different products. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-07-04 |
| Objective | Test if the users can enter comments in the comment text area to the comment section. |
| Condition | The user must be a logged in user. |
| Test Steps | 1. Scroll to the comment section in the product page. 2. Enter the comments in the comment text area. 3. Tap on the “Submit” button. |
| Expected Results | The application will display the comment text area and prompts for user’s comment. After the “Submit” button is clicked, the comment will be displayed under the comment section. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-07-05 |
| Objective | Test if the non-logged in users can enter comments in the comment text area to the comment section. |
| Condition | The user must be a non-logged in user. |
| Test Steps | 1. Scroll to the comment section in the product page. 2. Enter the comments in the comment text area. 3. Tap on the “Submit” button. |
| Expected Results | The application will not display the comment text area and the “Submit” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-07-06 |
| Objective | Test if the admin can remove any comments from the comment section. |
| Condition | The user must be a logged in admin. |
| Test Steps | 1. Scroll to the comment section in the product page. 2. Tap on the trash can icon located at the top right of the comment. |
| Expected Results | The application will remove the comment. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-07-07 |
| Objective | Test if the user can remove their own comments from the comment section. |
| Condition | The user must be a logged in user. |
| Test Steps | 1. Scroll to the comment section in the product page. 2. Tap on the trash can icon located at the top right of the comment. |
| Expected Results | The application will remove the comment. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-07-08 |
| Objective | Test if the user can remove other user’s comments from the comment section. |
| Condition | The user must be a logged in user. |
| Test Steps | 1. Scroll to the comment section in the product page. 2. Tap on the trash can icon located at the top right of the comment. |
| Expected Results | The application will not display the trash can icon. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-07-08 |
| Objective | Test if the non-logged in users can remove other user’s comments from the comment section. |
| Condition | The user must be a non-logged in user. |
| Test Steps | 1. Scroll to the comment section in the product page. 2. Tap on the trash can icon located at the top right of the comment. |
| Expected Results | The application will not display the trash can icon. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

### Shopping Cart

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| Test Case ID | TC-08-01 |
| Objective | Test if the logged in users can select the product quantity to purchase and add to their shopping cart. |
| Condition | The user must be a logged in user. |
| Test Steps | 1. Enter the product quantity to purchase. 2. Tap on the “Add to Cart” button. |
| Expected Results | The application will display a “The product has successfully been added to your cart” message below the “Add to Cart” button. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-08-02 |
| Objective | Test if the users can click on the shopping cart icon and navigate to the shopping cart page. |
| Condition | None. |
| Test Steps | 1. Scroll to the header section of the webpage. 2. Place the cursor over the shopping cart icon. 3. Tap the shopping cart icon. |
| Expected Results | The application will display a reduced opacity effect when the shopping cart icon is hovered on desktop view. After clicking on the shopping cart icon, the user will be directed to the shopping cart page. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-08-03 |
| Objective | Test if the users can view empty shopping cart message. |
| Condition | The user must not have items registered to their shopping cart. |
| Test Steps | 1. Scroll to the header section of the webpage. 2. Place the cursor over the shopping cart icon. 3. Tap the shopping cart icon. |
| Expected Results | The application will display a “Oh no! You cart is empty” message to the users. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-08-04 |
| Objective | Test if the users can view the registered products in their shopping cart. |
| Condition | The user must have items registered to their shopping cart. |
| Test Steps | 1. Scroll to the header section of the webpage. 2. Place the cursor over the shopping cart icon. 3. Tap the shopping cart icon. |
| Expected Results | The application will display the registered products in the shopping cart page along with the order summary. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-08-05 |
| Objective | Test if the users can empty all the products in their shopping cart. |
| Condition | The user must have items registered to their shopping cart. |
| Test Steps | 1. Scroll to the header section of the webpage. 2. Place the cursor over the shopping cart icon. 3. Tap the shopping cart icon. 4. Tap the “Empty Cart” button. |
| Expected Results | The application will display a reduced opacity effect when the user hovers the “Empty Cart” button. The application will remove all the products in their shopping cart and direct the users back to the shopping cart page with the no items in shopping cart message. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-08-06 |
| Objective | Test if the users can remove a specific product in their shopping cart. |
| Condition | The user must have items registered to their shopping cart. |
| Test Steps | 1. Scroll to the header section of the webpage. 2. Place the cursor over the shopping cart icon. 3. Tap the shopping cart icon. 4. Tap the trash can icon. |
| Expected Results | The application will display a reduced opacity effect when the user hovers the trash can icon. The application will remove the selected product in their shopping cart. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-08-07 |
| Objective | Test if the users can click on the “Checkout” button and navigate to the checkout page. |
| Condition | The user must have items registered to their shopping cart. |
| Test Steps | 1. Scroll to the header section of the webpage. 2. Place the cursor over the shopping cart icon. 3. Tap the shopping cart icon. 4. Tap the “Checkout” button. |
| Expected Results | The application will display a reduced opacity effect when the user hovers the “Checkout” button. The application will direct the users to the checkout page. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

### Checkout

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| Test Case ID | TC-11-001 |
| Objective | Test if the users can perform checkout with valid inputs. |
| Condition | 1. The user must have items registered to their shopping cart. 2. All input fields are required. |
| Test Steps | 1. Enter checkout page. 2. Enter a valid sender contact number input. 3. Enter a valid address input. 4. Enter a valid postcode input. 5. Enter a valid city input. 6. Enter a valid state input. 7. Enter a valid card number input. 8. Enter a valid card security code (CSS) input. 9. Enter a valid card expiration month input. 10. Enter a valid card expiration year input. 11. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: 0123456789 2. Address: 44, Jalan SS 4/4 3. Postcode: 47301 4. City: Petaling Jaya 5. State: Selangor 6. Card Number: 1234123412341234 7. Card Security Code: 111 8. Card Expiration Month: 01 9. Card Expiration Year: 22 |
| Expected Results | The application will validate the inputs. After data validation, the user will be directed to the payment success page. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-002 |
| Objective | Test if the users can perform checkout without inputs. |
| Condition | The user must have items registered to their shopping cart. |
| Test Steps | 1. Enter checkout page. 2. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: 2. Address: 3. Postcode: 4. City: 5. State: 6. Card Number: 7. Card Security Code: 8. Card Expiration Month: 9. Card Expiration Year: |
| Expected Results | The application will validate the inputs. After data validation, the application will display a message of “Please fill in the delivery form”. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-003 |
| Objective | Test if the users can perform checkout with only valid delivery form inputs. |
| Condition | The user must have items registered to their shopping cart. |
| Test Steps | 1. Enter checkout page. 2. Enter a valid sender contact number input. 3. Enter a valid address input. 4. Enter a valid postcode input. 5. Enter a valid city input. 6. Enter a valid state input. 7. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: 0123456789 2. Address: 44, Jalan SS 4/4 3. Postcode: 47301 4. City: Petaling Jaya 5. State: Selangor 6. Card Number: 7. Card Security Code: 8. Card Expiration Month: 9. Card Expiration Year: |
| Expected Results | The application will validate the inputs. After data validation, the application will display a message of “Please fill in the payment form”. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-004 |
| Objective | Test if the users can perform checkout with all valid inputs but invalid contact number input (letters). |
| Condition | 1. The user must have items registered to their shopping cart. 2. All input fields are required. |
| Test Steps | 1. Enter checkout page. 2. Enter an invalid sender contact number input. 3. Enter a valid address input. 4. Enter a valid postcode input. 5. Enter a valid city input. 6. Enter a valid state input. 7. Enter a valid card number input. 8. Enter a valid card security code (CSS) input. 9. Enter a valid card expiration month input. 10. Enter a valid card expiration year input. 11. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: admin 2. Address: 44, Jalan SS 4/4 3. Postcode: 47301 4. City: Petaling Jaya 5. State: Selangor 6. Card Number: 1234123412341234 7. Card Security Code: 111 8. Card Expiration Month: 01 9. Card Expiration Year: 22 |
| Expected Results | The application will validate the inputs. After data validation, the application will display a message of “Please enter a valid contact number. e.g. [0123456789]”. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-005 |
| Objective | Test if the users can perform checkout with all valid inputs but invalid contact number input (less than 9 digits). |
| Condition | 1. The user must have items registered to their shopping cart. 2. All input fields are required. |
| Test Steps | 1. Enter checkout page. 2. Enter an invalid sender contact number input. 3. Enter a valid address input. 4. Enter a valid postcode input. 5. Enter a valid city input. 6. Enter a valid state input. 7. Enter a valid card number input. 8. Enter a valid card security code (CSS) input. 9. Enter a valid card expiration month input. 10. Enter a valid card expiration year input. 11. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: 0123 2. Address: 44, Jalan SS 4/4 3. Postcode: 47301 4. City: Petaling Jaya 5. State: Selangor 6. Card Number: 1234123412341234 7. Card Security Code: 111 8. Card Expiration Month: 01 9. Card Expiration Year: 22 |
| Expected Results | The application will validate the inputs. After data validation, the application will display a message of “Please enter a valid contact number. e.g. [0123456789]”. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-006 |
| Objective | Test if the users can perform checkout with all valid inputs but invalid contact number input (more than 11 digits). |
| Condition | 1. The user must have items registered to their shopping cart. 2. All input fields are required. |
| Test Steps | 1. Enter checkout page. 2. Enter an invalid sender contact number input. 3. Enter a valid address input. 4. Enter a valid postcode input. 5. Enter a valid city input. 6. Enter a valid state input. 7. Enter a valid card number input. 8. Enter a valid card security code (CSS) input. 9. Enter a valid card expiration month input. 10. Enter a valid card expiration year input. 11. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: 0123456789012 2. Address: 44, Jalan SS 4/4 3. Postcode: 47301 4. City: Petaling Jaya 5. State: Selangor 6. Card Number: 1234123412341234 7. Card Security Code: 111 8. Card Expiration Month: 01 9. Card Expiration Year: 22 |
| Expected Results | The application will validate the inputs. After data validation, the application will display a message of “Please enter a valid contact number. e.g. [0123456789]”. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-007 |
| Objective | Test if the users can perform checkout with all valid inputs but invalid contact address input (less than 5 characters). |
| Condition | 1. The user must have items registered to their shopping cart. 2. All input fields are required. |
| Test Steps | 1. Enter checkout page. 2. Enter a valid sender contact number input. 3. Enter an invalid address input. 4. Enter a valid postcode input. 5. Enter a valid city input. 6. Enter a valid state input. 7. Enter a valid card number input. 8. Enter a valid card security code (CSS) input. 9. Enter a valid card expiration month input. 10. Enter a valid card expiration year input. 11. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: 0123456789 2. Address: 44 3. Postcode: 47301 4. City: Petaling Jaya 5. State: Selangor 6. Card Number: 1234123412341234 7. Card Security Code: 111 8. Card Expiration Month: 01 9. Card Expiration Year: 22 |
| Expected Results | The application will validate the inputs. After data validation, the application will display a message of “Please enter a valid contact number. e.g. [0123456789]”. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-008 |
| Objective | Test if the users can perform checkout with all valid inputs but invalid postcode input (less than 5 digits). |
| Condition | 1. The user must have items registered to their shopping cart. 2. All input fields are required. |
| Test Steps | 1. Enter checkout page. 2. Enter a valid sender contact number input. 3. Enter a valid address input. 4. Enter an invalid postcode input. 5. Enter a valid city input. 6. Enter a valid state input. 7. Enter a valid card number input. 8. Enter a valid card security code (CSS) input. 9. Enter a valid card expiration month input. 10. Enter a valid card expiration year input. 11. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: 0123456789 2. Address: 44, Jalan SS 4/4 3. Postcode: 4 4. City: Petaling Jaya 5. State: Selangor 6. Card Number: 1234123412341234 7. Card Security Code: 111 8. Card Expiration Month: 01 9. Card Expiration Year: 22 |
| Expected Results | The application will validate the inputs. After data validation, the application will display a message of “Please enter a valid postcode. e.g. [44444]”. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-009 |
| Objective | Test if the users can perform checkout with all valid inputs but invalid postcode input (more than 5 digits). |
| Condition | 1. The user must have items registered to their shopping cart. 2. All input fields are required. |
| Test Steps | 1. Enter checkout page. 2. Enter a valid sender contact number input. 3. Enter a valid address input. 4. Enter an invalid postcode input. 5. Enter a valid city input. 6. Enter a valid state input. 7. Enter a valid card number input. 8. Enter a valid card security code (CSS) input. 9. Enter a valid card expiration month input. 10. Enter a valid card expiration year input. 11. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: 0123456789 2. Address: 44, Jalan SS 4/4 3. Postcode: 444444 4. City: Petaling Jaya 5. State: Selangor 6. Card Number: 1234123412341234 7. Card Security Code: 111 8. Card Expiration Month: 01 9. Card Expiration Year: 22 |
| Expected Results | The application will validate the inputs. After data validation, the application will display a message of “Please enter a valid postcode. e.g. [44444]”. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-010 |
| Objective | Test if the users can perform checkout with all valid inputs but invalid postcode input (5 characters). |
| Condition | 1. The user must have items registered to their shopping cart. 2. All input fields are required. |
| Test Steps | 1. Enter checkout page. 2. Enter a valid sender contact number input. 3. Enter a valid address input. 4. Enter an invalid postcode input. 5. Enter a valid city input. 6. Enter a valid state input. 7. Enter a valid card number input. 8. Enter a valid card security code (CSS) input. 9. Enter a valid card expiration month input. 10. Enter a valid card expiration year input. 11. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: 0123456789 2. Address: 44, Jalan SS 4/4 3. Postcode: aaaaa 4. City: Petaling Jaya 5. State: Selangor 6. Card Number: 1234123412341234 7. Card Security Code: 111 8. Card Expiration Month: 01 9. Card Expiration Year: 22 |
| Expected Results | The application will validate the inputs. After data validation, the application will display a message of “Please enter a valid postcode. e.g. [44444]”. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-011 |
| Objective | Test if the users can perform checkout with all valid inputs but invalid city input (less than 4 letters). |
| Condition | 1. The user must have items registered to their shopping cart. 2. All input fields are required. |
| Test Steps | 1. Enter checkout page. 2. Enter a valid sender contact number input. 3. Enter a valid address input. 4. Enter a valid postcode input. 5. Enter an invalid city input. 6. Enter a valid state input. 7. Enter a valid card number input. 8. Enter a valid card security code (CSS) input. 9. Enter a valid card expiration month input. 10. Enter a valid card expiration year input. 11. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: 0123456789 2. Address: 44, Jalan SS 4/4 3. Postcode: 47301 4. City: aaa 5. State: Selangor 6. Card Number: 1234123412341234 7. Card Security Code: 111 8. Card Expiration Month: 01 9. Card Expiration Year: 22 |
| Expected Results | The application will validate the inputs. After data validation, the application will display a message of “Please enter a valid city. e.g. [Petaling Jaya]”. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-011 |
| Objective | Test if the users can perform checkout with all valid inputs but invalid city input (digits). |
| Condition | 1. The user must have items registered to their shopping cart. 2. All input fields are required. |
| Test Steps | 1. Enter checkout page. 2. Enter a valid sender contact number input. 3. Enter a valid address input. 4. Enter a valid postcode input. 5. Enter an invalid city input. 6. Enter a valid state input. 7. Enter a valid card number input. 8. Enter a valid card security code (CSS) input. 9. Enter a valid card expiration month input. 10. Enter a valid card expiration year input. 11. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: 0123456789 2. Address: 44, Jalan SS 4/4 3. Postcode: 47301 4. City: 123456789 5. State: Selangor 6. Card Number: 1234123412341234 7. Card Security Code: 111 8. Card Expiration Month: 01 9. Card Expiration Year: 22 |
| Expected Results | The application will validate the inputs. After data validation, the application will display a message of “Please enter a valid city. e.g. [Petaling Jaya]”. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-012 |
| Objective | Test if the users can perform checkout with all valid inputs but invalid state input (less than 4 letters). |
| Condition | 1. The user must have items registered to their shopping cart. 2. All input fields are required. |
| Test Steps | 1. Enter checkout page. 2. Enter a valid sender contact number input. 3. Enter a valid address input. 4. Enter a valid postcode input. 5. Enter a valid city input. 6. Enter an invalid state input. 7. Enter a valid card number input. 8. Enter a valid card security code (CSS) input. 9. Enter a valid card expiration month input. 10. Enter a valid card expiration year input. 11. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: 0123456789 2. Address: 44, Jalan SS 4/4 3. Postcode: 47301 4. City: Petaling Jaya 5. State: aaa 6. Card Number: 1234123412341234 7. Card Security Code: 111 8. Card Expiration Month: 01 9. Card Expiration Year: 22 |
| Expected Results | The application will validate the inputs. After data validation, the application will display a message of “Please enter a valid state. e.g. [Selangor]”. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-013 |
| Objective | Test if the users can perform checkout with all valid inputs but invalid state input (digits). |
| Condition | 1. The user must have items registered to their shopping cart. 2. All input fields are required. |
| Test Steps | 1. Enter checkout page. 2. Enter a valid sender contact number input. 3. Enter a valid address input. 4. Enter a valid postcode input. 5. Enter a valid city input. 6. Enter an invalid state input. 7. Enter a valid card number input. 8. Enter a valid card security code (CSS) input. 9. Enter a valid card expiration month input. 10. Enter a valid card expiration year input. 11. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: 0123456789 2. Address: 44, Jalan SS 4/4 3. Postcode: 47301 4. City: Petaling Jaya 5. State: 1234567 6. Card Number: 1234123412341234 7. Card Security Code: 111 8. Card Expiration Month: 01 9. Card Expiration Year: 22 |
| Expected Results | The application will validate the inputs. After data validation, the application will display a message of “Please enter a valid state. e.g. [Selangor]”. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-014 |
| Objective | Test if the users can perform checkout with all valid inputs but invalid card number input (less than 12 digits). |
| Condition | 1. The user must have items registered to their shopping cart. 2. All input fields are required. |
| Test Steps | 1. Enter checkout page. 2. Enter a valid sender contact number input. 3. Enter a valid address input. 4. Enter a valid postcode input. 5. Enter a valid city input. 6. Enter a valid state input. 7. Enter an invalid card number input. 8. Enter a valid card security code (CSS) input. 9. Enter a valid card expiration month input. 10. Enter a valid card expiration year input. 11. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: 0123456789 2. Address: 44, Jalan SS 4/4 3. Postcode: 47301 4. City: Petaling Jaya 5. State: Selangor 6. Card Number: 1234 7. Card Security Code: 111 8. Card Expiration Month: 01 9. Card Expiration Year: 22 |
| Expected Results | The application will validate the inputs. After data validation, the application will display a message of “Please enter a valid card number. e.g. [1234123412341234]”. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-015 |
| Objective | Test if the users can perform checkout with all valid inputs but invalid card number input (more than 12 digits). |
| Condition | 1. The user must have items registered to their shopping cart. 2. All input fields are required. |
| Test Steps | 1. Enter checkout page. 2. Enter a valid sender contact number input. 3. Enter a valid address input. 4. Enter a valid postcode input. 5. Enter a valid city input. 6. Enter a valid state input. 7. Enter an invalid card number input. 8. Enter a valid card security code (CSS) input. 9. Enter a valid card expiration month input. 10. Enter a valid card expiration year input. 11. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: 0123456789 2. Address: 44, Jalan SS 4/4 3. Postcode: 47301 4. City: Petaling Jaya 5. State: Selangor 6. Card Number: 12341234123412341 7. Card Security Code: 111 8. Card Expiration Month: 01 9. Card Expiration Year: 22 |
| Expected Results | The application will validate the inputs. After data validation, the application will display a message of “Please enter a valid card number. e.g. [1234123412341234]”. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-016 |
| Objective | Test if the users can perform checkout with all valid inputs but invalid card number input (characters). |
| Condition | 1. The user must have items registered to their shopping cart. 2. All input fields are required. |
| Test Steps | 1. Enter checkout page. 2. Enter a valid sender contact number input. 3. Enter a valid address input. 4. Enter a valid postcode input. 5. Enter a valid city input. 6. Enter a valid state input. 7. Enter an invalid card number input. 8. Enter a valid card security code (CSS) input. 9. Enter a valid card expiration month input. 10. Enter a valid card expiration year input. 11. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: 0123456789 2. Address: 44, Jalan SS 4/4 3. Postcode: 47301 4. City: Petaling Jaya 5. State: Selangor 6. Card Number: abcdabcdabcdabcd 7. Card Security Code: 111 8. Card Expiration Month: 01 9. Card Expiration Year: 22 |
| Expected Results | The application will validate the inputs. After data validation, the application will display a message of “Please enter a valid card number. e.g. [1234123412341234]”. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-017 |
| Objective | Test if the users can perform checkout with all valid inputs but invalid security code input (less than 3 digits). |
| Condition | 1. The user must have items registered to their shopping cart. 2. All input fields are required. |
| Test Steps | 1. Enter checkout page. 2. Enter a valid sender contact number input. 3. Enter a valid address input. 4. Enter a valid postcode input. 5. Enter a valid city input. 6. Enter a valid state input. 7. Enter a valid card number input. 8. Enter an invalid card security code (CSS) input. 9. Enter a valid card expiration month input. 10. Enter a valid card expiration year input. 11. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: 0123456789 2. Address: 44, Jalan SS 4/4 3. Postcode: 47301 4. City: Petaling Jaya 5. State: Selangor 6. Card Number: 1234123412341234 7. Card Security Code: 1 8. Card Expiration Month: 01 9. Card Expiration Year: 22 |
| Expected Results | The application will validate the inputs. After data validation, the application will display a message of “Please enter a valid card security number. e.g. [000]”. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-018 |
| Objective | Test if the users can perform checkout with all valid inputs but invalid security code input (more than 3 digits). |
| Condition | 1. The user must have items registered to their shopping cart. 2. All input fields are required. |
| Test Steps | 1. Enter checkout page. 2. Enter a valid sender contact number input. 3. Enter a valid address input. 4. Enter a valid postcode input. 5. Enter a valid city input. 6. Enter a valid state input. 7. Enter a valid card number input. 8. Enter an invalid card security code (CSS) input. 9. Enter a valid card expiration month input. 10. Enter a valid card expiration year input. 11. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: 0123456789 2. Address: 44, Jalan SS 4/4 3. Postcode: 47301 4. City: Petaling Jaya 5. State: Selangor 6. Card Number: 1234123412341234 7. Card Security Code: 1111 8. Card Expiration Month: 01 9. Card Expiration Year: 22 |
| Expected Results | The application will validate the inputs. After data validation, the application will display a message of “Please enter a valid card security number. e.g. [000]”. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-019 |
| Objective | Test if the users can perform checkout with all valid inputs but invalid security code input (characters). |
| Condition | 1. The user must have items registered to their shopping cart. 2. All input fields are required. |
| Test Steps | 1. Enter checkout page. 2. Enter a valid sender contact number input. 3. Enter a valid address input. 4. Enter a valid postcode input. 5. Enter a valid city input. 6. Enter a valid state input. 7. Enter a valid card number input. 8. Enter an invalid card security code (CSS) input. 9. Enter a valid card expiration month input. 10. Enter a valid card expiration year input. 11. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: 0123456789 2. Address: 44, Jalan SS 4/4 3. Postcode: 47301 4. City: Petaling Jaya 5. State: Selangor 6. Card Number: 1234123412341234 7. Card Security Code: aaa 8. Card Expiration Month: 01 9. Card Expiration Year: 22 |
| Expected Results | The application will validate the inputs. After data validation, the application will display a message of “Please enter a valid card security number. e.g. [000]”. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-020 |
| Objective | Test if the users can perform checkout with all valid inputs but invalid card expiration month input (less than 2 digit). |
| Condition | 1. The user must have items registered to their shopping cart. 2. All input fields are required. |
| Test Steps | 1. Enter checkout page. 2. Enter a valid sender contact number input. 3. Enter a valid address input. 4. Enter a valid postcode input. 5. Enter a valid city input. 6. Enter a valid state input. 7. Enter a valid card number input. 8. Enter a valid card security code (CSS) input. 9. Enter an invalid card expiration month input. 10. Enter a valid card expiration year input. 11. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: 0123456789 2. Address: 44, Jalan SS 4/4 3. Postcode: 47301 4. City: Petaling Jaya 5. State: Selangor 6. Card Number: 1234123412341234 7. Card Security Code: 111 8. Card Expiration Month: 0 9. Card Expiration Year: 22 |
| Expected Results | The application will validate the inputs. After data validation, the application will display a message of “Please enter a valid card expiration month. e.g. [01]”. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-021 |
| Objective | Test if the users can perform checkout with all valid inputs but invalid card expiration month input (more than 2 digit). |
| Condition | 1. The user must have items registered to their shopping cart. 2. All input fields are required. |
| Test Steps | 1. Enter checkout page. 2. Enter a valid sender contact number input. 3. Enter a valid address input. 4. Enter a valid postcode input. 5. Enter a valid city input. 6. Enter a valid state input. 7. Enter a valid card number input. 8. Enter a valid card security code (CSS) input. 9. Enter an invalid card expiration month input. 10. Enter a valid card expiration year input. 11. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: 0123456789 2. Address: 44, Jalan SS 4/4 3. Postcode: 47301 4. City: Petaling Jaya 5. State: Selangor 6. Card Number: 1234123412341234 7. Card Security Code: 111 8. Card Expiration Month: 111 9. Card Expiration Year: 22 |
| Expected Results | The application will validate the inputs. After data validation, the application will display a message of “Please enter a valid card expiration month. e.g. [01]”. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-023 |
| Objective | Test if the users can perform checkout with all valid inputs but invalid card expiration year input (less than 2 digits). |
| Condition | 1. The user must have items registered to their shopping cart. 2. All input fields are required. |
| Test Steps | 1. Enter checkout page. 2. Enter a valid sender contact number input. 3. Enter a valid address input. 4. Enter a valid postcode input. 5. Enter a valid city input. 6. Enter a valid state input. 7. Enter a valid card number input. 8. Enter a valid card security code (CSS) input. 9. Enter an invalid card expiration month input. 10. Enter a valid card expiration year input. 11. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: 0123456789 2. Address: 44, Jalan SS 4/4 3. Postcode: 47301 4. City: Petaling Jaya 5. State: Selangor 6. Card Number: 1234123412341234 7. Card Security Code: 111 8. Card Expiration Month: 11 9. Card Expiration Year: 2 |
| Expected Results | The application will validate the inputs. After data validation, the application will display a message of “Please enter a valid card expiration year. e.g. [21]”. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-024 |
| Objective | Test if the users can perform checkout with all valid inputs but invalid card expiration year input (more than 2 digits). |
| Condition | 1. The user must have items registered to their shopping cart. 2. All input fields are required. |
| Test Steps | 1. Enter checkout page. 2. Enter a valid sender contact number input. 3. Enter a valid address input. 4. Enter a valid postcode input. 5. Enter a valid city input. 6. Enter a valid state input. 7. Enter a valid card number input. 8. Enter a valid card security code (CSS) input. 9. Enter an invalid card expiration month input. 10. Enter a valid card expiration year input. 11. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: 0123456789 2. Address: 44, Jalan SS 4/4 3. Postcode: 47301 4. City: Petaling Jaya 5. State: Selangor 6. Card Number: 1234123412341234 7. Card Security Code: 111 8. Card Expiration Month: 11 9. Card Expiration Year: 222 |
| Expected Results | The application will validate the inputs. After data validation, the application will display a message of “Please enter a valid card expiration year. e.g. [21]”. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-025 |
| Objective | Test if the users can perform checkout with all valid inputs but invalid card expiration year input (characters). |
| Condition | 1. The user must have items registered to their shopping cart. 2. All input fields are required. |
| Test Steps | 1. Enter checkout page. 2. Enter a valid sender contact number input. 3. Enter a valid address input. 4. Enter a valid postcode input. 5. Enter a valid city input. 6. Enter a valid state input. 7. Enter a valid card number input. 8. Enter a valid card security code (CSS) input. 9. Enter an invalid card expiration month input. 10. Enter a valid card expiration year input. 11. Click on the “Confirm Payment” button. |
| Input Data | 1. Contact Number: 0123456789 2. Address: 44, Jalan SS 4/4 3. Postcode: 47301 4. City: Petaling Jaya 5. State: Selangor 6. Card Number: 1234123412341234 7. Card Security Code: 111 8. Card Expiration Month: 11 9. Card Expiration Year: aa |
| Expected Results | The application will validate the inputs. After data validation, the application will display a message of “Please enter a valid card expiration year. e.g. [21]”. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

### Payment Success

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| Test Case ID | TC-10-001 |
| Objective | Test if the user can return to home page by clicking on the “Return to Home” button in the payment success page. |
| Condition | 1. The user must be a logged in user. 2. The user must have items in the shopping cart. 3. The delivery and payment form must be filled and validated. |
| Test Steps | 1. Click on “Confirm Payment” button after filling the delivery and payment form. 2. Click on the “Return to Home” button. |
| Expected Results | The application will direct the user back to the home page of the website. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

### Logout

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| Test Case ID | TC-11-001 |
| Objective | Test if the user can logout from the system. |
| Condition | The user must be a logged-in user. |
| Test Steps | 1. Click on the user’s name on the header. 2. Tap the “Logout” button. |
| Expected Results | The application will log the user out from their account and resets the user’s session information. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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| Test Case ID | TC-11-002 |
| Objective | Test if the admin can logout from the system. |
| Condition | The user must be a logged-in admin. |
| Test Steps | 1. Click on the admin’s name on the header. 2. Tap the “Logout” on the sidebar. 3. Tap the “Logout” button. |
| Expected Results | The application will log the admin out from their account and resets the admin’s session information. |
| Actual Results | Matches the expected results. |
| Test Results | Google Chrome: Pass.  Mozilla Firefox: Pass.  Microsoft Edge: Pass. |

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