

# Milestone Project 4

## Full-stack Frameworks with Django

### The Brilliant Greens E-commerce Shop

### Test Reports

Done by: Ng Chong Han Edwin

# Contents

UX Testing .....	3
Login/Sign-up Testing .....	6
User Account Testing .....	9
Payment Testing .....	11
Admin Testing .....	11
Security Testing .....	12

This test reports record the extensive testing done for “The Brilliant Greens” e-commerce shop website and to fulfill the testing requirements for the milestone project 4 Full-stack Frameworks with Django by Code Institute. The tests are categorized as per the following:

- UX Testing – To test the user experiences when using the website
- Login/ Sign-up Testing – To test the login and sign up features of the website
- User Account Testing – To test the user account features after logged into the website
- Admin Testing – To test the admin features using Django administration tool.
- Payment Testing – To test the payment features when user click the checkout button
- Security Testing – To test the security features for the website

The subsequent sections will further elaborate on each test category and its test cases.

## UX Testing

<b>Test Case 1: Landing page is displayed when a user accessed the webpage or clicked onto the brand icon.</b>
<p><b>Expected:</b> Landing page shall be displayed when a user accessed the webpage or clicked onto the brand icon.</p> <p><b>Test:</b> Type in the address of the webpage or click onto the brand icon.</p> <p><b>Result:</b> Landing page is displayed when a user accessed the webpage or clicked onto the brand icon.</p>
<b>Test Case 2: Shop page is displayed when a user clicked onto the shop icon or the “shop now” link on the landing page.</b>
<p><b>Expected:</b> Shop page shall be displayed when a user clicked onto the shop icon or “shop now” link on the landing page.</p> <p><b>Test:</b> Click onto the shop icon or “shop now” link on the landing page.</p> <p><b>Result:</b> Shop page is displayed when a user clicked onto the shop icon or “shop now” link on the landing page.</p>
<b>Test Case 3: Cart page is displayed with a “Your cart is empty” message when a user clicked onto the cart icon.</b>
<p><b>Expected:</b> Cart page shall be displayed with a “Your cart is empty” message when a user clicked onto the cart icon.</p> <p><b>Test:</b> Click onto the cart icon.</p> <p><b>Result:</b> Cart page is displayed with a “Your cart is empty” message when a user clicked onto the cart icon.</p>
<b>Test Case 4: A dropdown menu is shown with login and sign-up options when hover over the account icon.</b>
<p><b>Expected:</b> A dropdown menu shall be shown with login and sign-up options when hover over the account icon.</p> <p><b>Test:</b> Hover over the account icon.</p> <p><b>Result:</b> A dropdown menu is shown with login and sign-up options when hover over the account icon.</p>
<b>Test Case 5: The corresponding page is shown when a user clicked onto the login or sign-up option from the dropdown menu.</b>
<p><b>Expected:</b> The corresponding page shall be shown when user clicked onto the login or sign-up option from the dropdown menu.</p> <p><b>Test:</b> Click onto the option in the dropdown menu.</p> <p><b>Result:</b> The corresponding page is shown when user clicked onto the login or sign-up option from the dropdown menu.</p>
<b>Test Case 6: “About Us” page is displayed when a user clicked onto the “About Us” link.</b>

<p><b>Expected:</b> “About Us” page shall be displayed when a user clicked onto the “About Us” link.</p> <p><b>Test:</b> Click onto the “About Us” link.</p> <p><b>Result:</b> “About Us” page is displayed when a user clicked onto the “About Us” link.</p>
<p><b>Test Case 7: The corresponding social media page from Code Institute is displayed in a new tab when a user clicked onto the Facebook, Instagram and YouTube icons.</b></p>
<p><b>Expected:</b> The corresponding social media page from Code Institute shall be displayed in a new tab when a user clicked onto the Facebook, Instagram and YouTube icons.</p> <p><b>Test:</b> Click onto each of the Facebook, Instagram and YouTube icons.</p> <p><b>Result:</b> The corresponding social media page from Code Institute is displayed in a new tab when a user clicked onto the Facebook, Instagram and YouTube icons.</p>
<p><b>Test Case 8: The queried result is shown on the shop page when a user types in some queries in the search bar.</b></p>
<p><b>Expected:</b> The queried result shall be shown on the shop page when a user type in queries in the search bar.</p> <p><b>Test:</b> Type in some relevant queries in the search bar.</p> <p><b>Result:</b> The queried result is shown on the shop page when a user type in queries in the search bar.</p>
<p><b>Test Case 9: No result is shown in the shop page when a user types in some queries in the search bar that are not relevant.</b></p>
<p><b>Expected:</b> No result shall be shown in the shop page when a user types in some queries in the search bar that are not relevant.</p> <p><b>Test:</b> Type in some irrelevant queries in the search bar.</p> <p><b>Result:</b> No result is shown in the shop page when a user types in some queries in the search bar that are not relevant.</p>
<p><b>Test Case 10: Navigation bar icons are highlighted when hover over.</b></p>
<p><b>Expected:</b> Navigation bar icons shall be highlighted when hover over</p> <p><b>Test:</b> Hover over any of the icons in the navigation bar.</p> <p><b>Result:</b> Navigation bar icons are highlighted when hover over.</p>
<p><b>Test Case 11: Cart icon is replaced with a “filled up” cart icon together with the number of items added into the cart follow by a “Cart is successfully added” flash message when a user clicked onto the “add to cart” button in the shop page or the product page.</b></p>
<p><b>Expected:</b> Cart icon shall be replaced with a “filled up” cart icon together with the number of items added into the cart follow by a “Cart is successfully added” flash message when a user clicked onto the “add to cart” button in the shop page.</p> <p><b>Test:</b> Click onto the “add to cart” button in the shop page or the product for different items.</p> <p><b>Result:</b> Cart icon is replaced with a “filled up” cart icon together with the number of items added into the cart follow by a “Cart is successfully added” flash message when a user clicked onto the “add to cart” button in the shop page or the product page.</p>

<p><b>Test Case 12: “Running low” and “Out of stock” red warning message appeared below the quantity information in the product page and corresponding product in the shop page when a product reaches &lt;3 or 0 respectively.</b></p> <p><b>Expected:</b> “Running low” and “Out of stock” red warning message shall appeared below the quantity information in the product page and corresponding product in the shop page when a product reaches &lt;3 or 0 respectively.</p> <p><b>Test:</b> Set any product quantity to be &lt; 3 and 0 respectively from Django administration webpage.</p> <p><b>Result:</b> “Running low” and “Out of stock” red warning message appeared below the quantity information in the product page and corresponding product in the shop page when a product reaches &lt;3 or 0.</p>
<p><b>Test Case 13: “Add to cart” button in the shop and product page is disabled and greyed out when the product quantity reaches 0.</b></p> <p><b>Expected:</b> “Add to cart” button in the shop and product page shall be disabled and greyed out when the product quantity reaches 0.</p> <p><b>Test:</b> Set any product quantity to be 0 from Django administration webpage.</p> <p><b>Result:</b> “Add to cart” button in the shop and product page is disabled and greyed out when the product quantity reaches 0.</p>
<p><b>Test Case 14: “Limit to 5 per user” red warning message appeared above the “Add to cart” button when a user try to add more than 5 quantities into the cart.</b></p> <p><b>Expected:</b> “Limit to 5 per user” red warning message appeared above the “Add to cart” button when a user try to add more than 5 quantities into the cart.</p> <p><b>Test:</b> Click “Add to cart” button more than 5 times.</p> <p><b>Result:</b> “Limit to 5 per user” red warning message appeared above the “Add to cart” button when a user try to add more than 5 quantities into the cart.</p>
<p><b>Test Case 15: Total cost amount and items added to the cart is shown in the cart page when a user added some items into the cart.</b></p> <p><b>Expected:</b> Total cost amount and items added to the cart shall be shown in the cart page when a user added some items into the cart.</p> <p><b>Test:</b> Add some items into the cart.</p> <p><b>Result:</b> Total cost amount and items added to the cart is shown in the cart page when a user added some items into the cart.</p>
<p><b>Test Case 16: Product quantities and prices are updated as accordingly when a user selected a quantity in the quantity dropdown menu and clicked onto the update button in the cart page.</b></p> <p><b>Expected:</b> Product quantities and prices are updated as accordingly when a user selected a quantity in the quantity dropdown menu and clicked onto the update button in the cart page.</p> <p><b>Test:</b> Click any quantity in the dropdown menu and update button.</p>

<b>Result:</b> Product quantities and prices are updated as accordingly when a user selected a quantity in the quantity dropdown menu and clicked onto the update button in the cart page.
<b>Test Case 17: Cart item is deleted, “Your cart is empty” message appeared and the “filled up” cart icon is replaced with empty cart icon when a user clicked onto the bin icon of the only item in the cart page.</b>
<p><b>Expected:</b> The cart item shall be deleted, “Your cart is empty” message shall appeared and the “filled up” cart icon shall be replaced with empty cart icon when a user clicked onto the bin icon of the only item in the cart page.</p> <p><b>Test:</b> Delete the only item in the cart page.</p> <p><b>Result:</b> The cart item is deleted, “Your cart is empty” message appeared and the “filled up” cart icon is replaced with empty cart icon when a user clicked onto the bin icon of the only item in the cart page.</p>
<b>Test Case 18: “Filled up” cart icon remained and quantities shown on the icon is reduced when only 1 of the items in the cart is removed from the cart page.</b>
<p><b>Expected:</b> “Filled up” cart icon shall remained and quantities shown on the icon shall be reduced when only 1 of the items in the cart is removed from the cart page.</p> <p><b>Test:</b> Delete the 1 of the item in the cart page.</p> <p><b>Result:</b> “Filled up” cart icon remained and quantities shown on the icon is reduced when only 1 of the items in the cart is removed from the cart page.</p>
<b>Test Case 19: User is redirected to the “login/sign-up” page when clicked onto the checkout button in the cart page.</b>
<p><b>Expected:</b> User shall be redirected to “login/sign-up” page when clicked onto the checkout button in the cart page.</p> <p><b>Test:</b> Click onto the checkout button.</p> <p><b>Result:</b> User is redirected to “login/sign-up” page when clicked onto the checkout button in the cart page.</p>

## Login/Sign-up Testing

<b>Test Case 20: A welcome user message is not shown on the right end of the navigation bar when a user is not logged in.</b>
<p><b>Expected:</b> A welcome user message shall not be shown on the right end of the navigation bar when a user is not logged in.</p> <p><b>Test:</b> Type in the address of the webpage.</p> <p><b>Result:</b> A welcome user message is not shown on the right end of the navigation bar when a user is not logged in.</p>

<p><b>Test Case 21: A welcome user message with the username is shown on the right end of the navigation bar, the dropdown menu on the account icon is disabled when hover over and a logout icon appeared beside the account icon when a user is logged in.</b></p>
<p><b>Expected:</b> A welcome user message with the username shall be shown on the right end of the navigation bar, the dropdown menu on the account icon shall be disabled when hover over and a logout icon shall appeared beside the account icon when a user is logged in.</p> <p><b>Test:</b> Log in into the account.</p> <p><b>Result:</b> A welcome user message with the username is shown on the right end of the navigation bar, the dropdown menu on the account icon is disabled when hover over and a logout icon appeared beside the account icon when a user is logged in.</p>
<p><b>Test Case 22: Invalid red warning message is shown beside the sign in button when a user attempts to log in with invalid inputs.</b></p>
<p><b>Expected:</b> Invalid red warning message shall be shown beside the sign in button when a user attempts to log in with invalid inputs.</p> <p><b>Test:</b> Login in with invalid inputs.</p> <p><b>Result:</b> Invalid red warning message is shown beside the sign in button when a user attempts to log in with invalid inputs.</p>
<p><b>Test Case 23: Password reset page is shown when a user clicked onto the “Forgotten Password?” link.</b></p>
<p><b>Expected:</b> Password reset page shall be shown when a user clicked onto the “Forgotten Password?” link.</p> <p><b>Test:</b> Click onto the “Forgotten Password?” link.</p> <p><b>Result:</b> Password reset page is shown when a user clicked onto the “Forgotten Password?” link.</p>
<p><b>Test Case 24: An email is sent and received in a registered email address and “Password Sent” page is shown when a user clicked onto the “Reset My Password” button after providing the registered email address.</b></p>
<p><b>Expected:</b> An email shall be sent and received in a registered email address and “Password Sent” page is shown when a user clicked onto the “Reset My Password” button after providing the registered email address.</p> <p><b>Test:</b> Provide the registered email address in the input field and click “Reset My Password” button. Check for the password reset email from the registered email address.</p> <p><b>Result:</b> An email is sent and received in a registered email address and “Password Sent” page is shown when a user clicked onto the “Reset My Password” button after providing the registered email address.</p>
<p><b>Test Case 25: A “Reset Password” page is shown when a user clicked onto the link in the email on the request of password reset by the user.</b></p>



<p><b>Expected:</b> A “Reset Password” page shall be shown when a user clicked onto the link in the email on the request of password reset by the user.</p> <p><b>Test:</b> Click on the link in the email from the registered email address.</p> <p><b>Result:</b> A “Reset Password” page is shown when a user clicked onto the link in the email on the request of password reset by the user.</p>
<p><b>Test Case 26: User is not logged in but redirected to “login/sign-up” page after successfully reset the password.</b></p>
<p><b>Expected:</b> User shall not be logged in but redirected to “login/sign-up” page after successfully reset the password.</p> <p><b>Test:</b> Complete the reset password by providing a new password.</p> <p><b>Result:</b> User is not in logged in but redirected to “login/sign-up” page after successfully reset the password.</p>
<p><b>Test Case 27: User is logged in and redirected to landing page with the new password.</b></p>
<p><b>Expected:</b> User shall be logged in and redirected to landing page with the new password.</p> <p><b>Test:</b> Log in with the new password.</p> <p><b>Result:</b> User is logged in and redirected to landing page with the new password.</p>
<p><b>Test Case 28: Invalid red warning messages are shown below each input field when a user provides invalid input in the sign-up page.</b></p>
<p><b>Expected:</b> Invalid red warning messages shall be shown below each input field when a user provides invalid input in the sign-up page.</p> <p><b>Test:</b> Sign up with invalid inputs.</p> <p><b>Result:</b> Invalid red warning messages are shown below each input field when a user provides invalid input in the sign-up page.</p>
<p><b>Test Case 29: An email is sent and received in a registered email address and “Confirmation Sent” page is shown when a user clicked onto the “Sign Up” button after filling up the input fields.</b></p>
<p><b>Expected:</b> An email shall be sent and received in a registered email address and “Confirmation Sent” page is shown when a user clicked onto the “Sign Up” button after filling up the input fields.</p> <p><b>Test:</b> Fill up in the input fields with valid details and click “Sign Up” button. Check for the confirmation email from the registered email address.</p> <p><b>Result:</b> An email is sent and received in a registered email address and “Confirmation Sent” page is shown when a user clicked onto the “Sign Up” button after filling up the input fields.</p>
<p><b>Test Case 30: A “Confirmation” page is shown when a user clicked onto the link in the email on the request of sign up for an account by the user.</b></p>
<p><b>Expected:</b> A “Confirmation” page shall be shown when a user clicked onto the link in the email on the request of sign up for an account by the user.</p> <p><b>Test:</b> Click on the link in the email from the registered email address.</p>

**Result:** A “Confirmation” page is shown when a user clicked onto the link in the email on the request of sign up for an account by the user.

## User Account Testing

**Test Case 31: Account detail page is displayed when a logged in user clicked onto the account icon.**

**Expected:** Account detail page shall be displayed when a logged in user clicked onto the account icon.

**Test:** Click onto the account icon.

**Result:** Account detail page is displayed when a logged in user clicked onto the account icon.

**Test Case 32: Account detail tab is highlighted and selected and the corresponding user information page is shown on the right side of the page when a user clicked onto the account detail tab.**

**Expected:** Account detail tab shall be highlighted and selected and the corresponding user information page shall be shown on the right side of the page when a user clicked onto the account detail tab.

**Test:** Click onto the account information tab.

**Result:** Account detail tab is highlighted and selected and the corresponding user information page is shown on the right side of the page when a user clicked onto the account detail tab.

**Test Case 33: User information is updated when a user updated his/her information in the account details page.**

**Expected:** User information shall be updated when a user updated his/her information in the account details page.

**Test:** Update the user information.

**Result:** User information is updated when a user updated his/her information in the account details page.

**Test Case 34: An invalid age red warning message appeared below the age field when a user provided a future date or an age below 6 years.**

**Expected:** An invalid age red warning message shall appeared below the age field when a user provided a future date or an age below 6 years.

**Test:** Provide a future date and an age below 6 years old.

**Result:** An invalid age red warning message appeared below the age field when a user provided a future date or an age below 6 years.

<b>Test Case 35: Orders History tab is highlighted and selected and the corresponding user order history is shown on the right side of the page when a user clicked onto the order history detail tab.</b>
<p><b>Expected:</b> Orders History tab shall be highlighted and selected and the corresponding user orders history shall be shown on the right side of the page when a user clicked onto the orders history tab.</p> <p><b>Test:</b> Click onto the orders history tab.</p> <p><b>Result:</b> Orders History tab is highlighted and selected and the corresponding user order history is shown on the right side of the page when a user clicked onto the orders history tab.</p>
<b>Test Case 36: Review status of each order is shown on the order history page and “Write a review” button is available for review if the review is not done.</b>
<p><b>Expected:</b> Review status of each order shall be shown on the order history page and “Write a review” button shall be available for review if the review is not done.</p> <p><b>Test:</b> Check on the review status for each order.</p> <p><b>Result:</b> Review status of each order is shown on the order history page and “Write a review” button is available for review if the review is not done.</p>
<b>Test Case 37: Review page is shown when a logged in user clicked onto a “Write a review” button from his/her order page.</b>
<p><b>Expected:</b> Review page shall be shown when a logged in user clicked onto a “Write a review” button from his/her order history page.</p> <p><b>Test:</b> Check on the review status for each order.</p> <p><b>Result:</b> Review page is shown when a logged in user clicked onto a “Write a review” button from his/her order history page.</p>
<b>Test Case 38: The number of reviews and rating for a plant by each user are summed up and averaged out respectively and are shown on the corresponding product and shop page.</b>
<p><b>Expected:</b> The number of reviews and rating for a plant by each user shall be summed up and averaged out respectively and are shown on the corresponding product and shop page.</p> <p><b>Test:</b> Sum up the total reviews for each plant and average out the rating for each plant and compare the result.</p> <p><b>Result:</b> The number of reviews and rating for a plant by each user are summed up and averaged out respectively and are shown on the corresponding product and shop page.</p>
<b>Test Case 39: Reviews History tab is highlighted and selected and the corresponding user reviews history is shown on the right side of the page when a user clicked onto the reviews history detail tab.</b>
<p><b>Expected:</b> Reviews History tab shall be highlighted and selected and the corresponding user reviews history shall be shown on the right side of the page when a user clicked onto the reviews history tab.</p> <p><b>Test:</b> Click onto the reviews history tab.</p>

**Result:** Reviews History tab is highlighted and selected and the corresponding user reviews history is shown on the right side of the page when a user clicked onto the reviews history tab.

## Payment Testing

**Test Case 40: Stripe payment page is shown when a logged in user clicked the checkout button.**

**Expected:** Stripe payment page shall be shown when a logged in user clicked the checkout button.

**Test:** Click the checkout button.

**Result:** Stripe payment page is shown when a logged in user clicked the checkout button.

**Test Case 41: Payment completed page is shown when a payment is successful.**

**Expected:** Payment completed page shall be shown when a payment is successful.

**Test:** Complete the payment from the stripe payment page.

**Result:** Payment completed page is shown when a payment is successful.

**Test Case 42: Payment uncompleted page is shown when a payment is unsuccessful.**

**Expected:** Payment uncompleted page shall be shown when a payment is unsuccessful.

**Test:** Cancel the payment from the stripe payment page.

**Result:** Payment uncompleted page is shown when a payment is unsuccessful.

**Test Case 43: Completed order is updated and shown in the user orders history page.**

**Expected:** Completed order shall be updated and shown in the user orders history page.

**Test:** Check the completed order in the orders history page after completed a payment.

**Result:** Completed order is updated and shown in the user orders history page.

## Admin Testing

**Test Case 44: All models are created and reflected in the Django administrator webpage**

**Expected:** All models shall be created and reflected in the Django administrator webpage.

**Test:** Check the models in Django administrator webpage.

**Result:** All models are created and reflected in the Django administrator webpage.

**Test Case 45: Changes in the model information from the Django administrator webpage are reflected in the application.**

**Expected:** Changes in the model information from the Django administrator webpage shall be reflected in the application.

**Test:** Change the quantity of some plant and verify with the application.

**Result:** Changes in the model information from the Django administrator webpage are reflected in the application.

## Security Testing

**Test Case 46: User is redirected to login page when login required links are accessed without logging in.**

**Expected:** User shall be redirected to login page when login required links are accessed without logging in.

**Test:** Access login required links.

**Result:** User is redirected to login page when login required links are accessed without logging in.

**Test Case 47: User is redirected to 404 error page when trying to access invalid links**

**Expected:** User shall be redirected to 404 error page when trying to access invalid links.

**Test:** Access invalid links.

**Result:** User is redirected to 404 error page when trying to access invalid links