**Name: soban wajuddin maruf**

**Roll.no: 21CO58**

**Batch:4**



**Experiment No. 10**

**Aim:** To write test cases for black box testing.

**Theory:**

Black Box Testing is a software testing method in which the functionalities of software applications are tested without having knowledge of internal code structure, implementation details and internal paths. Black Box Testing mainly focuses on input and output of software applications andit is entirely based on software requirements and specifications. It is also known as Behavioral Testing. Test cases are created considering the specification of the requirements. These test cases are generallycreated from working descriptions of the software including requirements, design parameters, andother specifications. For the testing, the test designer selects both positive test scenario by taking valid input values and adverse test scenario by taking invalid input values to determine the correct output. Test cases are mainly designed for functional testing but can also be used for non-functional testing. Test cases are designed by the testing team, there is not any involvement of the development team of software.

The different types of Black Box Testing are:

**Equivalence Partitioning:**

Divides the input domain into classes or partitions and selects a representative value from each class for testing.

**Boundary Value Analysis (BVA):**

Focuses on testing the boundaries or extreme values of input ranges, as these often have a higher likelihood of causing errors.

**Decision Table Testing:**

Defines different conditions and actions in a table format, allowing testers to derive

| Test Code | Test Case | Test Steps | Expected Result | Pass/Fail |
| --- | --- | --- | --- | --- |
| TC001 | User Registration | 1. Navigate to the registration page. 2. Fill in valid user details. 3. Click the "Register" button. | User is successfully registered and redirected to the login page. | Pass |
| TC002 | User Login | 1. Navigate to the login page. 2. Enter valid login credentials. 3. Click the "Login" button. | User is logged in and redirected to the homepage. | Pass |
| TC003 | Add to Cart | 1. Browse products and select one. 2. Click the "Add to Cart" button. 3. Go to the shopping cart. | The selected product is in the cart, and the cart shows the correct quantity. | Pass |
| TC004 | Checkout Process | 1. Go to the shopping cart. 2. Click the "Checkout" button. 3. Fill in shipping and payment details. 4. Click "Place Order". | Order is placed, and the user is redirected to an order confirmation page. | Pass |
| TC005 | Payment Processing | 1. Select a payment method (e.g., credit card). 2. Enter valid payment details. 3. Click "Pay". | Payment is processed successfully, and the user receives an order confirmation. | Pass |
| TC006 | Update Profile | 1. Navigate to the user profile page. 2. Edit user information (e.g., email). 3. Click "Save Changes". | User profile is updated with the new information. | Pass |
| TC007 | Track Order | 1. Go to the order tracking page. 2. Enter a valid order ID. 3. Click "Track Order". | The order's status and location are displayed correctly. | Pass |
| TC008 | Security Testing | 1. Attempt a SQL injection in the search bar. 2. Check for proper error handling. | The system should prevent SQL injection and display an error message. | Pass |
| TC009 | Mobile Responsiveness | 1. Open the website on various mobile devices and browsers. | The website should render and function correctly on all tested devices. | Pass |
| TC010 | Internationalization | 1. Change the language and currency settings. 2. Verify content and prices. | The website should display content in the selected language and currency. | Pass |

**Conclusion:**

In this experiment, we undertook a comprehensive black-box testing approach to evaluate the functionality, usability of the Farming Website. The objective was to ensure the Connection Between Farmer and consumer for better experience.