| **Description of Test** | **Test Data to Be Used (If Required)** | **Type of Testing** | **Expected Outcome** | **Actual Outcome** | **Comments and Intended Actions** |
| --- | --- | --- | --- | --- | --- |
| Verify navigation links on the Home page. | Click each navbar link on the Home page. | Integration/Interface Testing | All links navigate to the expected pages without errors. |  |  |
| Verify that the Profile/Login button is displayed correctly on the Home page based on user login status. | Log in and log out; inspect the navbar. | Functional/Integration Testing | Shows "Profile" when logged in, "Login" when logged out. |  |  |
| Test responsiveness of the Home page hamburger menu at smaller screen sizes. | Resize browser below 768px; click the hamburger menu. | Responsive/UI Testing | Hamburger menu appears and toggles links correctly. |  |  |
| Verify that all Product page navbar links navigate correctly. | Click all navbar links on the Products page. | Integration Testing | All links navigate to appropriate pages. |  |  |
| Check if the Profile/Login button appears on the Products page navbar when logged in. | Log in and visit the Products page. | Functional Testing | "Profile" button is visible in the navbar when logged in. |  |  |
| Verify that bookings for the selected date are displayed on the Booking page. | Select a test date; observe displayed time slots. | Functional/Interface Testing | Displays booked and available time slots for the selected date. |  |  |
| Test date navigation on the Booking page. | Click "prev-date" and "next-date" buttons. | Functional Testing | The displayed date updates correctly. |  |  |
| Verify that unavailable time slots are disabled and labeled on the Booking page. | Select a date with existing bookings. | Boundary/Functional Testing | Unavailable slots are disabled and labeled "Unavailable." |  |  |
| Check that a successful booking displays a flash success message. | Submit a valid booking. | Functional Testing | A flash success message is displayed. |  |  |
| Verify that an error flash message appears when attempting to book an unavailable time slot. | Attempt to book a previously booked slot. | Error/Boundary Testing | Displays an error flash message indicating the slot is unavailable. |  |  |
| Verify that the Carbon Footprint page iframe loads correctly. | Visit the Carbon Footprint page. | Interface Testing | The iframe displays the Carbon Footprint Calculator. |  |  |
| Check the Registration page functionality. | Fill out all fields with valid data; submit form. | Functional Testing | Successfully registers a new user and redirects to the login page. |  |  |
| Test Registration page error handling for invalid data. | Leave fields blank or input invalid email formats; attempt to submit. | Error/Boundary Testing | Displays relevant error messages for invalid/missing inputs. |  |  |
| Verify that the Profile page displays the user’s personal information correctly. | Log in and navigate to the Profile page. | Functional/Interface Testing | Displays user’s name, email, and other information correctly. |  |  |
| Test the delete profile functionality with a confirmation prompt. | Click "Delete Profile" button and confirm. | Functional Testing | Deletes the profile and redirects to the home or login page. |  |  |
| Verify that the Accessibility page font size selector updates the font size dynamically. | Change the font size from "Standard" to "Large." | Functional/UI Testing | Font size updates on the page in real-time. |  |  |
| Check the Accessibility page contrast selector for functionality. | Switch between "Weak," "Standard," and "Strong" contrast options. | Functional/UI Testing | Contrast adjusts background and text colors appropriately. |  |  |
| Verify that Accessibility page settings persist across sessions. | Change settings; reload page to verify persistence. | Functional Testing | The selected settings are applied on page reload. |  |  |
| Test the Login functionality. | Use valid and invalid credentials to log in. | Functional Testing, Error Testing | Allows valid logins, rejects invalid ones, with appropriate messages. |  |  |
| Check the Logout functionality. | Log in, then log out by clicking "Logout." | Functional Testing | Logs out the user and redirects to the home page or login page. |  |  |
| Verify that user bookings appear correctly on the Profile page. | Log in and visit Profile; check listed bookings. | Functional/Interface Testing | Displays accurate booking information for the logged-in user. |  |  |
| Verify that deleting a booking from the Profile page removes it successfully. | Delete a test booking from the Profile page. | Functional Testing | Successfully removes the booking and updates the list dynamically. |  |  |
| Ensure that when logged in, the Profile button appears on all pages’ navbars. | Log in and navigate to each page; check the navbar. | Integration Testing | Profile button is consistently visible on all pages when logged in. |  |  |
| Test the Footer links on all pages. | Click the footer links for Terms, Privacy, and Accessibility. | Integration Testing | Footer links navigate to their respective pages. |  |  |
| Ensure that the time slot dropdown dynamically updates when changing the date on the Booking page. | Use "prev-date" and "next-date" buttons; observe the dropdown. | Integration/Functional Testing | Time slot dropdown updates to reflect availability for the new date. |  |  |
| Verify that booking data is stored correctly in the database when submitted successfully. | Submit a test booking; query the database to verify record creation. | White Box Testing | Booking record is created with correct details in the database. |  |  |
| Test the navbar responsiveness across different browsers and screen sizes. | Open the site on Chrome, Firefox, Safari, and Edge; resize browser width. | Responsive/Compatibility Testing | The navbar functions correctly on all browsers and screen sizes. |  |  |
| Check for database integrity when deleting a user profile. | Delete a test user profile; ensure related bookings are also removed (if applicable). | White Box Testing, Functional Testing | User data is fully removed without errors or orphaned records. |  |  |
| Test boundary scenarios on the Booking page by attempting to select a date far in the future or past. | Manually set the hidden input date to a value like "2100-01-01" or "1900-01-01." | Boundary Testing | Page processes the date correctly and displays appropriate time slots. |  |  |
| Verify that invalid date formats in the Booking page hidden input are handled gracefully. | Modify the hidden date input to an invalid value ("2025-13-01") and submit the form. | Error Testing, Functional Testing | Displays an error message and does not allow submission. |  |  |
| Test the dynamic update of time slot dropdown using AJAX (if implemented). | Inspect the dropdown for updates via browser dev tools or logs during date changes. | Integration/Interface Testing | Time slot dropdown updates dynamically based on the selected date. |  |  |
| Verify that all styles load correctly across pages (CSS consistency check). | Reload each page; inspect layout and design consistency. | Interface Testing | Styles load without errors; consistent design across all pages. |  |  |
| Ensure the Terms & Conditions and Privacy Policy pages load their content correctly. | Visit Terms & Conditions and Privacy Policy pages via footer links. | Interface Testing | Content loads fully without errors. |  |  |
| Check error handling for multiple users attempting to book the same time slot. | Simulate concurrent booking requests for the same time slot. | Concurrency Testing | Only one booking succeeds; others see an error message. |  |  |
| Verify that changing the service type dropdown on the Booking page does not affect time slot availability. | Select a service type, then inspect the time slot dropdown. | Functional Testing | Time slot dropdown remains unchanged regardless of service type. |  |  |
| Test the screen reader accessibility of the Navbar and Booking page forms. | Use screen reader software to navigate and interact with these elements. | Accessibility Testing | Screen reader announces elements correctly and allows interaction. |  |  |
| Verify that required fields on the Registration and Login forms enforce input validation. | Submit forms without entering required data. | Error Testing, Functional Testing | Displays error messages for missing or invalid inputs. |  |  |
| Verify that the Carbon Footprint page iframe content resizes correctly on small screens. | Resize the browser while the iframe is visible. | Responsive Testing | The iframe resizes and remains |  |  |