**Scenarios for End-to-end testing**

**Author: O.Solodka**

**Project name:**

**Skybot Web portal Version: 3.0.0.** [**https://prometheusqastage3.wixsite.com/skybot**](https://prometheusqastage3.wixsite.com/skybot)

**Server: https://prometheusqastage3.wixsite.com/skybot**

**Browsers Tested: Chrome on Android, Edge and Chrome on Windows 11 Pro**

| **Test scenario 1: User Registration with valid data** | **Scenario for Successful User Registration** |
| --- | --- |
| **Scenario description** | The user attempts to register a new account |
| **Setup** | Website is accessible, user is not registered |

| **Step** | **Test action** | **Expected Results** | **Pass/Fail** |
| --- | --- | --- | --- |
| 1 | Access the home page | Home page successfully loads |  |
| 2 | Navigate to the registration button | Registration button successfully open registration page |  |
| 3 | Push the button Sign Up | Button works without any issue |  |
| 4 | Enter email address | Email address is entered without errors |  |
| 5 | Enter username | Username is entered correctly |  |
| 6 | Enter password | Password is entered without errors |  |
| 7 | Push the button “I’m not a robot” | The checkbox is selected |  |
| 8 | Click the "Sign up" button | Registration attempt is made, progress indicator appears |  |
| 9 | Check for a successful registration message | User receives a message indicating successful registration |  |
| 10 | Automatic login | User is automatically logged into the system after registration |  |
| 11 | Verify redirection to the user profile page | User is redirected to their profile page |  |

| **Test scenario 2: User Registration with Invalid Data** | **Scenario for Handling Invalid User Registration** |
| --- | --- |
| **Scenario description** | The user attempts to register a new account with invalid data |
| **Setup** | Website is accessible, user is not registered |

| **Step** | **Test Action** | **Expected Results** | **Pass/Fail** |
| --- | --- | --- | --- |
| 1 | Access the home page | Home page successfully loads |  |
| 2 | Navigate to the registration page | Registration page successfully opens |  |
| 3 | Enter an invalid email address (e.g., userexample.com) | Error message indicating invalid email format appears |  |
| 4 | Enter a username that is too short (e.g., ab) | Error message indicating username does not meet length requirements |  |
| 5 | Enter a password that is too weak (e.g., 123) | Error message indicating password does not meet security criteria |  |
| 6 | Confirm the password with a mismatched value (e.g., 1234) | Error message indicating passwords do not match |  |
| 7 | Attempt to submit the registration form | Form submission is blocked; user remains on the registration page |  |
| 8 | Verify that no account is created | User is not redirected; no new account is created |  |
| 9 | Correct one field at a time and observe results | Each error message clears only when the corresponding field is corrected |  |
| 10 | Ensure all error messages are displayed until corrected | User must correct all errors before the "Register" button becomes active |  |

| **Test scenario 3: Product Purchase** | **Scenario for Successful Product Purchase** |
| --- | --- |
| **Scenario description** | The user successfully purchases a product |
| **Setup** | Website is accessible, user has an account, product is available for purchase |

| **Step** | **Test Action** | **Expected Results** | **Pass/Fail** | **Notes** |
| --- | --- | --- | --- | --- |
| 1 | Access the home page | Home page successfully loads |  |  |
| 2 | Log in with valid credentials | User is logged in and redirected to the homepage |  |  |
| 3 | Navigate to the "Shop" section | Product listing page successfully loads |  |  |
| 4 | Select a product to view its details | Product detail page successfully loads with accurate information |  |  |
| 5 | Click "Add to Cart" | Product is added to the shopping cart |  |  |
| 6 | Navigate to the shopping cart | Shopping cart page successfully loads showing the selected product |  |  |
| 7 | Click "Proceed to Checkout" | Checkout page successfully loads |  |  |
| 8 | Enter valid shipping information | Shipping information is accepted without errors |  | User can’t enter shipping information |
| 9 | Enter valid payment details (e.g., credit card info) | Payment details are accepted without errors |  | User can’t enter any payment details |
| 10 | Review order details and click "Confirm Purchase" | Order confirmation page successfully loads with order summary |  | Order confirmation page doesn’t load |
| 11 | Verify order confirmation email is received | User receives an order confirmation email |  | User can’t check order information with email |
| 12 | Check order history in the user's account | Order appears correctly in the user's order history |  | User can’t see order history |

| **Test scenario 4 : Product Purchase with Invalid Data** | **Scenario for Handling Errors During Product Purchase** |
| --- | --- |
| **Scenario description** | The user encounters errors while attempting to purchase a product |
| **Setup** | Website is accessible, user has an account, product is available for purchase |

| **Step** | **Test Action** | **Expected Results** | **Pass/Fail** | **Notes** |
| --- | --- | --- | --- | --- |
| 1 | Access the home page | Home page successfully loads |  |  |
| 2 | Log in with valid credentials | User is logged in and redirected to the homepage |  |  |
| 3 | Navigate to the "Shop" section | Product listing page successfully loads |  |  |
| 4 | Select a product to view its details | Product detail page successfully loads |  |  |
| 5 | Click "Add to Cart" | Product is added to the shopping cart |  |  |
| 6 | Navigate to the shopping cart | Shopping cart page successfully loads |  |  |
| 7 | Click "Proceed to Checkout" | Checkout page successfully loads |  |  |
| 8 | Enter invalid shipping information (e.g., incomplete address) | Error message indicating invalid shipping information is displayed |  | User can’t enter any shipping information |
| 9 | Correct shipping information, then enter invalid payment details (e.g., expired credit card) | Error message indicating invalid payment details is displayed |  | It is not error message that indicating invalid payment details is displayed |
| 10 | Attempt to confirm purchase without correcting payment information | Form submission is blocked; error message remains visible |  | There is no information about invalid payment details |
| 11 | Enter mismatched billing and shipping addresses without required confirmation | Error message asking for confirmation of mismatched addresses appears |  | There is no error message |
| 12 | Attempt to submit payment with insufficient funds or blocked card | Transaction is declined, and an appropriate error message is displayed |  | User hasn’t opportunity enter information from any cards |
| 13 | Check that no order is created in the user's account | Order is not created, and no confirmation appears in order history |  | User can’t check that any orders creating in account |

| **Test scenario 5 : Electric Vehicle Test Drive Booking** | **Scenario for Successful Electric Vehicle Test Drive Booking** |
| --- | --- |
| **Scenario description** | The user successfully schedules a test drive for an electric vehicle |
| **Setup** | Website is accessible.  User has a valid account and is logged out.  Desired electric vehicles are available for test drives.  User's profile is complete with necessary information. |

| **Step** | **Test Action** | **Expected Results** | **Pass/Fail** |  |
| --- | --- | --- | --- | --- |
| 1 | Access the home page | Home page loads successfully without errors |  |  |
| 2 | Click on the "Login" button | Login page opens successfully |  |  |
| 3 | Enter valid username/email and password credentials | Credentials are accepted without errors |  |  |
| 4 | Click the "Login" button | User is successfully logged in and redirected to the dashboard/home page |  |  |
| 5 | Navigate to the "Our services" section | "Our services" page loads displaying available vehicles for test drives |  |  |
| 6 | Push the button Electric scooter first ride  “Book now” | The button has to opens showing information about the selected vehicle and available test drive slots |  |  |
| 7 | Select the desired electric vehicle from the list | Vehicle details page opens showing information about the selected vehicle and available test drive slots |  | User can’t choose electric vehicle from the list |
| 8 | Click on the "Book Test Drive" button/link on the vehicle details page | Test drive booking form/modal appears |  | User doesn’t see any booking form |
| 8 | Select a preferred date from the available dates calendar | Selected date is accepted and available time slots for that date are displayed |  | User couldn't select date |
| 9 | Select a preferred time slot from the available options | Selected time slot is accepted and confirmed in the form |  | User couldn’t select time |
| 10 | Fill in any additional required information (e.g., driver's license number, contact details) if not already provided | Information is entered correctly and validated without errors |  | There is no options |
| 11 | Review all entered details for accuracy | All details are correct and ready for submission |  | User couldn’t enter details |
| 12 | Click the "Confirm Booking" or "Submit" button to finalize the booking | Booking is processed, and a confirmation message is displayed stating that the test drive has been successfully scheduled |  | There is no options |
| 13 | Verify that a confirmation email is received at the registered email address | Confirmation email arrives promptly with correct booking details |  |  |
| 14 | Navigate to the "My Bookings" or "Upcoming Test Drives" section in the user account | The newly scheduled test drive appears in the list with correct details (vehicle, date, time, location) |  | There is no options |
| 15 | Log out of the account by clicking the "Logout" button/link | User is successfully logged out and redirected to the home or login page |  | There is no options |

| **Test scenario 6 : Electric Vehicle Test Drive Booking with Invalid Data** | **Scenario for Handling Errors During Electric Vehicle Test Drive Booking** |
| --- | --- |
| **Scenario description** | The user encounters errors while attempting to book a test drive for an electric vehicle. |
| **Setup** | Website is accessible.  User has a valid account and is logged out.  Desired electric vehicles are available for test drives.  User's profile is incomplete (missing required details) |

| **Step** | **Test Action** | **Expected Results** | **Pass/Fail** | **Notes** |
| --- | --- | --- | --- | --- |
| 1 | Access the home page | Home page loads successfully |  |  |
| 2 | Click on the "Login" button | Login page opens successfully |  |  |
| 3 | Enter invalid username/email and password credentials | An error message appears indicating invalid credentials |  |  |
| 4 | Retry login with valid credentials | User successfully logs in and is redirected to the dashboard/home page |  |  |
| 5 | Navigate to the "Our services” section | "Our services" page loads, displaying available vehicles for test drives |  |  |
| 6 | Select the desired electric vehicle from the list | Vehicle details page opens |  | Option is not available |
| 7 | Click on the "Book Test Drive" button/link | Test drive booking form/modal appears |  | Option is not available |
| 8 | Select an unavailable date from the calendar (e.g., past date or date with no slots) | Error message appears indicating that the selected date is unavailable |  | Option is not available |
| 9 | Attempt to select a time slot when none are available | Error message appears indicating that no time slots are available |  | Option is not available |
| 10 | Enter incomplete or invalid additional information (e.g., missing driver's license number) | Error message appears, highlighting the missing or invalid field(s) |  | Option is not available |
| 11 | Attempt to submit the booking form without correcting the errors | Form submission is blocked, and error messages remain visible |  | Option is not available |
| 12 | Enter mismatched or incorrect details (e.g., wrong contact information) | Error message appears, indicating incorrect or mismatched details |  | Option is not available |
| 13 | Attempt to double-book the same time slot by opening multiple tabs or sessions | Booking is blocked, and an error message indicates that the time slot is already taken |  | Option is not available |
| 14 | Attempt to book a test drive while logged out or with an expired session | User is prompted to log in again before proceeding |  | Option is not available |
| 15 | Review the error handling on the booking page | All errors are clearly communicated, and the user cannot proceed without correcting them |  | Option is not available |

| **Test scenario 7 : Writing a Review and Rating a Product** | **Scenario for Successful Review and Star Rating Submission** |
| --- | --- |
| **Scenario description** | The user successfully writes a review and rates a product with stars. |
| **Setup** | Website is accessible.  User has a valid account and is logged out.  Desired product is available for review and rating.  User has previously purchased the product |

| **Step** | **Test Action** | **Expected Results** | **Pass/Fail** |
| --- | --- | --- | --- |
| 1 | Access the home page | Home page successfully loads |  |
| 2 | Click on the "Login" button | Login page opens successfully |  |
| 3 | Enter valid username/email and password credentials | User logs in successfully and is redirected to the homepage |  |
| 4 | Navigate to the "Shop" section | Products listing page loads displaying available products |  |
| 5 | Select the product that the user wishes to review and rate | Product detail page opens with accurate product information |  |
| 6 | Scroll down to the "Reviews" section on the product detail page | Reviews section loads, showing existing reviews and a form for new reviews |  |
| 7 | Click on the button “Leave a Review" | Review submission form appears, allowing the user to enter a review |  |
| 8 | Enter a valid review title and detailed review text | Review title and text are entered without errors |  |
| 9 | Select a star rating (e.g., 4 out of 5 stars) using the star rating system | Selected star rating is displayed correctly and ready for submission |  |
| 10 | Click the "Publish" button to submit the review and rating | Review and rating are successfully submitted |  |
| 11 | Verify that the newly submitted review and rating are displayed under the product | Review and rating appear in the "Reviews" section, with correct details (review text, rating, username, date) |  |
| 12 | Log out of the account by clicking the "Logout" button | User is successfully logged out and redirected to the home or login page |  |

| **Test scenario 8 :Writing a Review and Rating a Product with Invalid Data** | **Scenario for Handling Errors During Review and Rating Submission** |
| --- | --- |
| **Scenario description** | The user encounters errors while attempting to write a review and rate a product with stars |
| **Setup** | Website is accessible.  User has a valid account and is logged out.  Desired product is available for review and rating.  User's purchase history may or may not include the product. |

| **Step** | **Test Action** | **Expected Results** | **Pass/Fail** | **Notes** |
| --- | --- | --- | --- | --- |
| 1 | Access the home page | Home page loads successfully |  |  |
| 2 | Click on the "Login" button | Login page opens successfully |  |  |
| 3 | Enter invalid username/email and password credentials | Error message appears indicating invalid credentials |  |  |
| 4 | Retry login with valid credentials | User logs in successfully and is redirected to the homepage |  |  |
| 5 | Navigate to the "Shop" section | Products listing page loads |  |  |
| 6 | Select a product that the user wishes to review and rate | Product detail page opens |  |  |
| 7 | Scroll down to the "Reviews" section on the product detail page | Reviews section loads with a form for submitting new reviews |  |  |
| 8 | Attempt to submit the review form without entering any text or selecting a rating | Error message appears indicating that both the review text and rating are required |  |  |
| 9 | Enter an excessively short review (e.g., just one word) and try to submit | Error message appears indicating that the review text is too short |  | User could leaves only one word |
| 10 | Enter invalid characters in the review text (e.g., HTML tags or special symbols) | Error message appears or input is sanitized, preventing submission |  | User could leaves invalid characters without sanitized |
| 11 | Attempt to submit the review without selecting a star rating | Error message appears indicating that a star rating is required |  |  |
| 12 | Attempt to submit a duplicate review (same user, same product) | Error message appears indicating that the user has already reviewed this product |  |  |
| 13 | Attempt to submit the review while logged out or with an expired session | User is redirected to the login page, and the review is not submitted |  |  |
| 14 | Attempt to delete review | Review is successfully deleted |  |  |

| **Test scenario 9: Navigation Across the Electric Vehicle Sales Portal** | **Scenario for Successful Navigation Across the Portal** |
| --- | --- |
| **Scenario description** | The user successfully navigates through the key sections of the electric vehicle sales portal |
| **Setup** | Website is accessible.  User has a valid account and is logged out.  All portal sections are functional and populated with content |

| **Step** | **Test Action** | **Expected Results** | **Pass/Fail** | **Notes** |
| --- | --- | --- | --- | --- |
| 1 | Access the home page | Home page loads successfully with all elements (header, navigation bar, brand name) |  | There is no brand name on the main page |
| 2 | Click on the "Login" button/link in the navigation bar | Login page opens successfully |  |  |
| 3 | Enter valid username/email and password credentials | User logs in successfully and is redirected to the homepage |  |  |
| 4 | Hover over or click on the main navigation menu (e.g., "Shop," "Video reviews," "Our services", “About us”, “FAQ”, “Support”, “Store policies”, “Careers”) | Menu display correctly, and links are functional |  |  |
| 5 | Click on the "Shop" link in the navigation menu | Products listing page loads successfully, displaying available electric vehicles |  |  |
| 6 | Use the filters to narrow down the product listings (e.g., filter by vehicle type, price range) | Filtered results are displayed accurately and promptly |  |  |
| 7 | Click on a product to view its details | Product detail page loads successfully with all relevant information (specifications, images, reviews) |  |  |
| 8 | Click on the "Our services" link in the navigation menu | "Our services" page loads successfully, showing available vehicles and booking options |  |  |
| 9 | Click on the "About Us" link | The respective page About Us loads successfully, showing accurate information |  |  |
| 10 | Click on the "Cart" or "My Account" icon in the header | The respective page (Cart/My Account) loads successfully, showing accurate user/cart details |  |  |
| 11 | Navigate back to the homepage using the website logo or "Main" link in the navigation bar | Homepage reloads successfully, maintaining a consistent user experience |  |  |
| 12 | Log out by clicking the "Logout" button in the navigation bar or account menu | User is successfully logged out and redirected to the homepage or login page |  |  |

| **Test scenario 10: Submission of the "Contact Us" Form** | **Scenario for Successful Submission of the "Contact Us" Form** |
| --- | --- |
| **Scenario description** | The user successfully fills out and submits the "Contact Us" form on the website and receives a confirmation message indicating that the message was sent successfully |
| **Setup** | Website is accessible.  User has a valid account.  The user is on the "Contact Us" page. |

| **Step** | **Test Action** | **Expected Results** | **Pass/Fail** | **Notes** |
| --- | --- | --- | --- | --- |
| 1 | Open the homepage of the website | The homepage loads without errors |  |  |
| 2 | Navigate to the "Contact Us" form by scrolling down main page | The "Contact Us" form opens successfully |  |  |
| 3 | Fill in the "Name" field with a valid name | The "Name" field accepts the input without errors |  |  |
| 4 | Fill in the "Address" field with a valid address | The "Address” field accepts the input without errors |  |  |
| 5 | Fill in the "Email" field with a valid email address | The "Email" field accepts the input without errors |  |  |
| 6 | Fill in the "Phone" field with a valid phone number | The "Phone" field accepts the input without errors |  |  |
| 7 | Fill in the "Topic" field with a brief description of the inquiry | The "Topic" field accepts the input without errors |  |  |
| 8 | Fill in the "Message" field with a detailed description of the inquiry | The "Message" field accepts the input without errors |  |  |
| 9 | Click the "Надіслати" button | A success message appears, confirming the form submission (e.g., "Your message has been sent. We will contact you shortly.") |  | Information displays with different language |
| 10 | Check the email provided in the form | A confirmation email is received, confirming the successful submission of the inquiry |  | User didn’t receive the message on email address |

| **Test scenario 10: Submission of the "Contact Us" Form with invalid data** | **Scenario for Handling Errors During Submission of the "Contact Us" Form** |
| --- | --- |
| **Scenario description** | The user encounters errors while attempting to fill out and submit the "Contact Us" form on the website, preventing the form from being submitted successfully |
| **Setup** | Website is accessible.  User has a valid account.  The user is on the "Contact Us" page. |

| **Step** | **Test Action** | **Expected Results** | **Pass/Fail** | **Notes** |
| --- | --- | --- | --- | --- |
| 1 | Open the homepage of the website | The homepage loads without errors |  |  |
| 2 | Navigate to the "Contact Us" form by scrolling down main page | The "Contact Us" page opens successfully |  |  |
| 3 | Leave the "Name" field empty and proceed to the next field | An error message appears, indicating that the "Name" field is required |  |  |
| 4 | Enter an invalid email format in the "Email" field (e.g., "user@domain" without ".com") | An error message appears, indicating that the email format is invalid |  |  |
| 5 | Enter a very short or non-descriptive text in the "Topic" field (e.g., "Hi") | A warning message appears, suggesting that the topic is too short or not descriptive enough |  | User can fill the form with too short topic |
| 6 | Leave the "Message" field empty and attempt to submit the form | An error message appears, indicating that the "Message" field is required |  | User can fill and sent message with empty “Message” field |
| 7 | Fill in all fields incorrectly and click the "Submit" button | The form is not submitted, and error messages remain visible until the errors are corrected |  | User can fill the form with invalid data and send the message |
| 8 | Attempt to submit the form after filling out the "Message" field with an overly long message that exceeds the character limit | An error message appears, indicating that the message exceeds the maximum allowed characters |  | There are not limit for allowed characters |

### **E2E Test Report**

#### **Project: Skybot Web Portal Version 3.0.0**

#### **Test Date: 26.08.2024**

#### **Tester: O.Solodka**

### **Test Overview:**

End-to-end testing was conducted on the website's key functionalities, specifically focusing on the ability to place an order for an electric vehicle and to book a test drive.

### **Test Results:**

**Result:** The website did not pass E2E testing. Users are unable to successfully place an order or book a test drive.

### **Issues Identified:**

1. **Inability to Place an Order:**
   * **Description:** Users are unable to complete the order process. After selecting a product and adding it to the cart, an error occurs during checkout.
   * **Observed Problems:**
     + The "Place Order" button remains inactive even after all required fields are filled out.
     + After clicking the "Checkoutr" button, nothing happens, or a technical error message is displayed.
2. **Inability to Book a Test Drive:**
   * **Description:** Users are unable to book a test drive for the selected electric vehicle.
   * **Observed Problems:**
     + Users can’t select a date and time for the test drive.
     + There are no booking form

### **Recommendations:**

1. **Immediate Diagnosis and Fixes:** The identified issues critically affect the functionality of the website. A thorough analysis is needed to address problems related to the order placement and test drive booking processes.
2. **Retesting:** Once the issues have been resolved, it is recommended to conduct another round of E2E testing to ensure that the problems are fixed and the website functions as expected.

### **Conclusion:**

Currently, the website is not ready for customer use due to critical errors that prevent users from placing orders and booking test drives. Resolving these issues is a top priority.