1. Case Study: Medication E-commerce Website - Treatment Journey Feature

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Scenario

You are a Quality Assurance (QA) specialist working on an e-commerce website that sells medications. The development team has implemented a new feature: a "Treatment Journey" system. Customers can complete a medical questionnaire, and based on their responses, they will receive a recommendation for the appropriate dosage of a medication. If they are already on a dosage, the system will recommend the next higher dosage after a set period (e.g., one month).

Task

Your role is to test this feature thoroughly to ensure it complies with functional requirements, is user-friendly, and adheres to safety and compliance standards. You need to identify any potential issues and suggest improvements if needed.

Details

1. Feature Description
   - Customers fill out a medical questionnaire before purchasing medication.
   - Based on the responses, the system recommends an initial dosage.
   - If the customer has previously purchased a dosage, the system recommends the next higher dosage after one month.
   - Compliance with legal and medical standards is critical (e.g., recommendations based on questionnaire responses must be accurate).
2. Known Functional Requirements
   - The questionnaire should provide questions that lead to clear dosage recommendations.
   - Dosage recommendations must follow the treatment progression rules (e.g., starting with the lowest dose and gradually increasing).
   - Customers should be able to view and confirm the recommendation before proceeding.
   - All medical data must be securely handled and stored.

Assignment

Answer the following:

1. Test Scenarios
   - List 5 test scenarios you would write to validate the "Treatment Journey" feature.
2. Bug Investigation
   - During your testing, you notice the following issue:
     - The system recommends a lower dosage when the customer has already reached the maximum allowable dosage according to the rules.
   - How would you report this bug? Write a sample bug report that includes:
     - Bug Title
     - Steps to Reproduce
     - Expected Result
     - Actual Result
     - Severity Level
3. Compliance Testing
   - What steps would you take to ensure that the system complies with legal and medical standards for recommending medications?
4. Process Improvement
   - Imagine you find that the questionnaire logic is not well-documented, leading to confusion about dosage recommendations during testing.
   - What steps would you take to improve documentation and communication between QA and the development team?
5. Collaboration
   - The development team says fixing the bug (where maximum dosage limits are ignored) will delay the release, but the compliance team insists it is a critical issue that must be resolved before launch. How would you mediate this conflict?

2. Case Study: Automation Testing for E-commerce Website – Checkout Page and Coupon Code Feature

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Scenario

You are a Quality Assurance (QA) specialist working on an e-commerce website. The checkout page of the site includes a feature where users can apply a coupon code to receive a discount. After selecting a product and filling out user details, users are prompted to enter a coupon code on the checkout page to receive a discount. Your task is to automate testing for this checkout process, focusing on the coupon code functionality and ensuring it works correctly under various conditions.

Task

Your role is to automate test cases for the checkout page, specifically for the coupon code input functionality. These tests should cover different scenarios, including entering valid and invalid coupon codes, applying multiple coupon codes, and verifying the correct application of discounts.

Details

Feature Description

- ○ After selecting products and entering user details, the user reaches the checkout page.
- ○ There is an input field for entering a coupon code.
- ○ If a valid coupon code is entered, the system applies the discount to the order total.
- ○ If an invalid coupon code is entered, an error message is shown (e.g., "Invalid coupon code").
- ○ The system should display the updated order total after the coupon is applied.

Website url:
https://sprechstunde-test.wellsterhealth.com/1534?env_backend=ekstst
Valid coupon code: Welcome2025

Assignment

Answer the following:

1. Test Scenarios to Automate
   - List 5 test scenarios you would automate for the "Coupon Code" functionality. For each scenario, describe:
     - The action(s) to be performed (e.g., entering a valid coupon code, applying an invalid coupon).
     - The expected result (e.g., discount applied correctly, error message displayed).
     - The tools or frameworks you would use to automate these tests (e.g., Selenium, Cypress, TestNG).
2. Sample Automated Test Script
   - Write a sample automated test script for one of the test scenarios. For example, automate the process of entering a valid coupon code and verifying the updated total on the checkout page. Include the following:
     - Test description
     - Steps for setting up the test (e.g., selecting a product, filling in user details).
     - Steps for applying the coupon code.
     - Expected result (e.g., the discount is applied and the total is updated correctly).
3. Handling Edge Cases in Automation
   - How would you handle edge cases during automation testing? Consider those scenarios as well.
4. Data-Driven Testing
   - How would you implement data-driven testing for coupon codes? Describe how you would use a data file (e.g., CSV, Excel) to test multiple coupon codes with different conditions (valid, expired, max usage reached, etc.).
5. Collaboration and Reporting
   - After running the automated tests, you notice that the coupon discount is not applied correctly for a specific coupon code. How would you report this issue to the development team? What steps would you take to ensure that the issue is fixed and tested again?