Test Strategy

This test strategy document will help in understanding the test strategy, approach for Shop Apotheke and how the team is going to perform the validation. This document can be treated as a general test strategy document and not specific to the feature.

Scope:

This section will help you in understanding the Scope In and Scope out details.

Scope In:

- Feature "customer login"
- Error handling cases on invalid login
- Api level validation
- Device Testing
- Regression on other reports.

Scope Out:

 Post login (like list page, orders etc). As per this document post login features are out of scope.

Test Approach

This section will explain, process and levels of testing that will be carried out and what are the roles and responsibilities of each team member.

Process:

- Requirements should be properly captured in the confluence page or any other documentation.
- All the error handling scenarios and error messages have to be mentioned in the requirement document properly.
- Testing team has to be involved in requirement analysis meetings with the team.
- Any question regarding the requirement needs to be clarified from the Product owner only by posting the questions in emails or confluence page comments. So, that it will be visible to all the team members.
- The QA team has to prepare the test cases well in advance, when the
 development team is developing the feature, so that the development
 team can refer to the document if they have any questions.

- The QA team has to share the test cases with the team and get it reviewed by the Product owner and develop leads.
- Testing team will perform the validation in the QA environment.
- Development team hands over the build to the QA team showing a demo on what they have implemented and what is pending.
- Development team should perform unit testing from their end before they hand over the build to the QA team.
- Development team should share the release notes with the team on what has been released in the QA environment.

Testing levels and responsibilities:

- The QA team is responsible for creating test plans, test cases, and test execution.
- QA team has to perform Smoke test to accept the build for testing
- Team will perform integration and system testing by executing the test cases written.
- The QA team is responsible for logging the defect in JIRA or any other management tool.
- The QA team is responsible for tracking the bug until it is closed.
- QA team has to raise the red flag in scrum meetings if something Is not followed as a process or blocker for their progress.
- QA lead will be responsible to sign the build after completing the validation.
- QA lead has to assign the stories to allocate the task for the QA team members
- The QA team has to make sure to pick up and run the regression cases to be sure on, no issue has been introduced because of this new feature.

Types of Testing and tools:

- The QA team will perform Functional and non-Functional testing.
- Functional testing team will perform both manual and automation wherever possible.
- For functional automation Team will use selenium using java and Rest Assured for api automation.
- For non-functional testing the team will use JMeter for load testing.
- Uses zephyr or QC for maintaining the testing cases.
- Uses JIRA to raise defects.
- For testing api's team will use postman or SoapUI.

Test Environment

This section will help in understanding the test environment requirement, where the QA team will be performing their testing.

- There should be a dedicated environment for QA to perform their testing.
- In case of running the performance test there should be a dedicated QA performance site whose resource should at least be matching the production.
- Test data should be created before the testing activity starts.

Testing Tools

This section will explain to you the tool that will be used for functional and non-functional testing.

Functional testing tools:

- Selenium UI automation
- Rest Assured
 – api automation
- Eclipse IDE to script
- Postman open source to test api's
- JIRA Management tool for bug tracking
- Browser stack Cross browser testing

Non-Functional testing tools:

Jmeter

Release Control

- Development team hands over the build to the QA team showing a demo on what they have implemented and what is pending.
- Development team should perform unit testing from their end before they hand over the build to the QA team.
- Development team should share the release notes with versions to the team on what has been released in the QA environment.
- All the acceptance criteria should be satisfied to start the testing.
- The QA team has to provide the Test report, executed test cases and sign off documents.

Risk Analysis

Risk & mitigation:

- QA sites should be stable and available throughout the testing phase. Failing in
 which will impact the timeline. Can have a performance site to have the same QA
 code so we can use the site as back up.
- During product release we should have a back up plan in case of issues after release. We must do the roll back testing in the QA site so that in case issues arise in production we can roll back the changes.

Design one detailed test case. Others can be reduced to headlines.

- Implement test automation for one of the two following (you decide which one you prefer):
 - o endpoint defined by contract, using JAVA or JavaScript/TypeScript
 - o functionality displayed in GUI, using Java or JavaScript with Selenium or

Cypress • Document any findings in bullet point format

Test Cases:

UI Test cases:

- 1. Verify users are able to land on the login page by clicking the register option from the main page.
- 2. Verify users are able to load the login page directly by giving the login page url in the browser.
- 3. Verify users are able to login successfully with valid credentials and land on the Home page.
- 4. Verify Register button is enabled only after the system completes the Anti-Robot Verification.
- 5. Verify users are shown with a validation message when trying to login with invalid credentials.
- 6. Verify users are shown with a validation message when trying to login with a user whose account is already closed (which was active long and got closed or deleted).
- 7. Verify users are shown with a validation message when trying to login with a blocked/Locked account.
- 8. Verify users accounts are getting locked after 3 invalid attempts.
- 9. Verify users are able to login after reset their password using the forget passwords

- option from the login page.
- 10. Verify users are shown with a validation message when they try to enter the old password to login.
- 11. Verify users are shown with a reset password page post successful login when their password is older than 3 months.
- 12. Verify users' sessions are killed properly once logged out. By clicking on the browser back arrow from the logout page. User should display logout/login page Session should be killed and user should not navigate back to the application home page.
- 13. Verify users are redirected to the login/ logout page. When directly trying to load the application Home page url in the browser after the session is killed.
- 14. Verify users session is killed properly when user closes the browser without logout. The next time the user loads the home page url, the user should land on the login page.
- 15. Verify users are able to load the page in the next tab with the same session.
- 16. Verify users are able to login successfully with valid credentials in different browsers. Check for the UI alignment in all those browsers.
- 17. Verify users are able to login successfully with valid credentials in different devices, mobile and tabs with different OS (like android and IOS). Check for the UI alignment.
- 18. Verify application UI is responsive, change the dimension and try to load the login page. Check if the user is able to login successfully without any UI alignment issues.
- 19. Verify users are able to login successfully immediately after signing up to the application.
- 20. Verify users are able to login successfully when they try to check out the product from the chart which was added before login.

Detailed Test case

TestCase_001:

TestCase_Name: Verify users are able to login successfully with valid credentials and land on the Home page

Sn o	Steps	Test data	Expected	Status Pass/Fail
1	Open the browser and launch the Shop Apotheke url	URL: https://www. shop-apothek e.com/	User should land on the Main page of the Shop Apotheke site	
2	Mouse hover on the		User should navigate to login page	

	Register avatar at the right top next to the chart icon. Click on Register option		and display 2 widget One saying "Login with customer account" and other with "Create a account"	
3	In login with customer widget try to enter the valid userName (Email) and password (valid password)	UserName: Sxxxxx@abc.c om Password: aA1!bB2@cC3 #dD4\$	 Entered email address should display in the email address field Entered password should be masked 	
4	Click on "Click here" button in Anti-Robot Verification section just under password field and above Register button		System will validate and show the progressing loader. Once completed it will display a message "I am a human". Then Register button will be enabled to click	
5	Now click on Register button and Verify user is able to login successfully		User should successfully login and Land on the Home page (My overview page)	

TestCase_002:

TestCase_Name: Verify users are shown with a validation message when trying to login with invalid credentials

Sn o	Steps	Test data	Expected	Status Pass/Fail
1	Open the browser and launch the Shop Apotheke url	URL: https://www. shop-apothek e.com/	User should land on the Main page of the Shop Apotheke site	
2	Mouse hover on the Register avatar at the right top next to the chart icon. Click on Register option	URL: https://www. shop-apothek e.com/nx/logi n/	User should navigate to login page and display 2 widget One saying "Login with customer account" and other with "Create a account"	

3	In login with customer widget try to enter the valid userName (Email) and password (valid password)	UserName: Sxxxxx@abc.c om Password: aA1!bB2@cC3	 Entered email address should display in the email address field Entered password should be masked 	
4	Click on "Click here" button in Anti-Robot Verification section just under password field and above Register button		System will validate and show the progressing loader. Once completed it will display a message "I am a human". Then Register button will be enabled to click	
5	Now click on Register button and Verify user is shown with validation message		User should display a validation message saying: "E-mail address and/or password are incorrect. Please check your entries."	

API test cases:

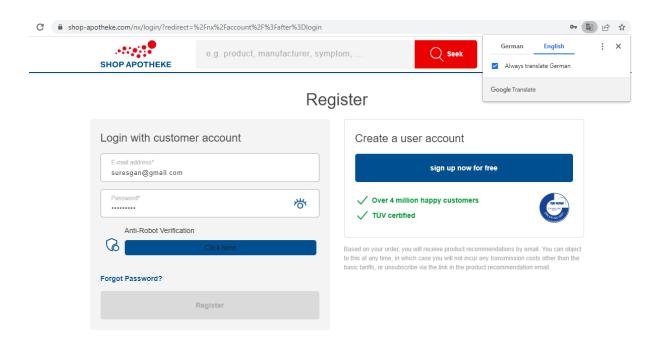
This is a general api test case which checks for status code. In real time, I will create a postman collection for positive and negative cases, and have field level checks.

- 1. Verify status code 200 OK and check the response body.
- 2. Verify status code 400 Bad request when headers are missing.
- 3. Verify status code 401 when invalid token is passed.
- 4. Verify status code 404 when url is not found.
- 5. Verify status code 400 bad request when mandatory field is missing in the request body.
- 6. Verify status code 415 unsupported media file when content type is sent wrong in request header.

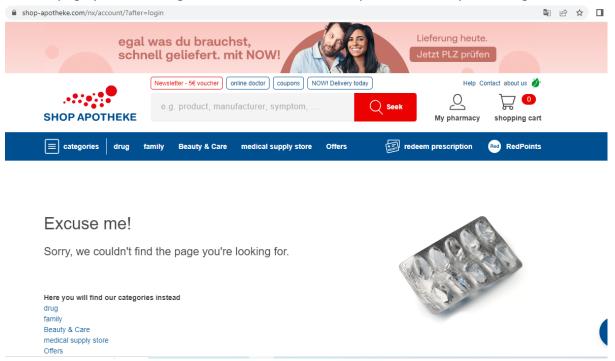
Findings:

• At times when I enter valid credentials and click on "Click here" anti- robot button then, click on register button was redirecting me back to the login page.

Below is the screenshot:



This is an intermediate issue. Post login I am landing on a page with "Sorry, We couldn't find the page you're looking for". You can see the URL parameter it says after login.



Note:

- In terms of automation, the script will fail at the last step where selenium is not able to click on the Register button (login button) as it is disabled because Anti-robot validation fails. Generally in test environments, ever we have this kind of pre-login validation we will disable it in order to execute our script.
- Secondly I had the idea of creating a framework to showcase. But due to the time limit I submitted so please ignore the reporters, then extended reports codes. That will work fine but not implemented in an ideal way.