

Test Approach for the CSGOEmpire Application

19th Jan 20, 2024

ONBOARDING PROCESS

The onboarding process will require an introduction to the application and how it works. As a new employee, gathering as much information as needed to understand the flow is always good. That can be accomplished by going through the project documentation (for example Jira Confluence page), Test Plan document, jira board, UX designs, reported bug tickets, and test cases.

OVERVIEW

It is important to:

- Prioritize, track, evaluate, and document existing bugs in the application, and resolve them ASAP,
- Always define DOD (Definition of done),
- Prevent potential risk issues(technical complexity - if something can be tested, security risk - secure payment methods and data leaks, delays, budget overruns),
- Have a clear communication among team members and stakeholders,
- Define what can be tested with automated tests, and its coverage,
- Define what needs to be tested manually,
- Define item pass and fail criteria,
- Go through existing test strategy, tools, and test types. Here, in particular, tools for developing the app: Figma or other design tool to check the mockups for the UI, Jira or other tracking tools for issue and bug tracking, and Tools for Automation - Jenkins for CI/CD and Cypress for writing test scripts.
- Configure a test report that can be generated(daily) after test execution,
- Maintain the application.

TEST APPROACHES

- **MANUAL E2E TESTING** - vertical E2E test approach:
 - Manually going through the application, and testing each UI component (buttons, links, input fields, dropdowns) .
 - Comparing actual and expected results by providing different user values, inputs.
 - Documenting test scenarios and create mind maps to visualize testing.
- **INTEGRATION TESTING:**
 - Verifying that different components work together as expected.
 - Tools I would use: Cypress for automated tests, Postman for API testing.
 - Coverage should be increased by introducing the checks like:
 - resolving all needed dependencies properly,
 - end-to-end flows.
- **AUTOMATED E2E TESTING** - Horizontal E2E test approach:
 - Cover components with simple tests, existence of elements, checking if they are clickable(enabled or disabled), get user input
 - UI tests are implemented using Cypress. The regression testing should be automated, avoiding testing scenarios covered on the integration level. The happy flows, field validations, and mandatory fields check will be automated.

TEST AND TEST DESCRIPTIONS:

1. Opening the landing page and render all landing page components correctly,
2. Check if the starting value for the amount input field is zero,
3. By clicking on the amount input control buttons the expected results are correct
 - Not sure if the MAX button is changing the result?
4. User tries to manually input amount and then by clicking away gets the expected result in the amount input field
 - so for this case, the 123 becomes 123.00,
 - 123String, becomes 123.00,
 - 123.789, becomes 123.80 and 123.091 becomes 123.09

-
5. User tries to input a value less than zero
 - For this case I noticed that user is able to do that, should that be treated as an invalid input? User can add minus and then number, but we can put some logic to transform that number either to zero or to positive value.
 6. User enters some value that is not a number(string or special character):
 - User can do that, so it would be the best if this field is just for integers and float values
 7. Check for the max number input
 - I have noticed that there is no restriction for the max number for the amount

Note: For the input fields there should be added error messages when user enters string, special character, negative values - suggestion - Add regex for input validation.

8. While rolling the bet buttons should be disabled,
9. Check if all chat rooms are showing up, when user clicks dropdown menu
 - When user clicks on the arrow down button, he should be able to see all the rooms that are listed
 - What I have noticed, it would be great user experience if that arrow changes: from arrow up when it's closed to arrow down when the dropdown is clicked (check with designer).
10. Changing the rooms on dropdown menu click opens the correct chat room.