**Testing Process Plan**

1. **Play around with the feature**:

   o   Interact with the feature and note down initial observations.

   o   Identify key functionalities and test scenarios.

2. **Execute the tests**:

   o   Perform functional, acceptance, exploratory,smoke, security, stress, usability ,accessibility tests.

   o   Mark the checklist with results and findings.

   o   Create Bug Report

3. **Document findings**:

   o   Create a test plan

   o   Create a checklist with possible test cases (Include detailed descriptions and steps to reproduce)

   o   Create a bug report (Include detailed descriptions, steps to reproduce,status of the bug)

**Feature Tested:** Paysera Currency Calculator

**Date:** 22.02.2025

**Tester:** Valentina Panova

**Testing time:** Approximately 3 hours

**Initial Testing Plan and Checklist**

**Functional Testing:**

1. Validate that the calculator is accessible and loads correctly.

2. Verify the correct list of currencies is available for conversion.

3. Test basic currency conversion functionalities with different currencies.

4. Check the accuracy of the conversion rates provided.

5. Verify that the exchange rates displayed are accurate and updated real time

6. Confirm the calculator handles different amounts correctly (small amounts, large amounts, decimal values, non-numeric characters, negative values)

**Acceptance Testing:**

1. Ensure the calculator meets the user requirements and expectations.

2. Validate the user interface is user-friendly and intuitive.

3. Confirm there are no unclear errors during normal use.

4. Confirm that load time is ok

**Exploratory Testing:**

1. Verify the calculator works on different browsers

2. Verify the calculator works on mobile devices (check mobile version)

**Smoke Testing:**

1. Verify the core functionalities work without any major issues.

2. Confirm the calculator loads and performs basic conversions quickly.

3. Ensure the application doesn't crash or produce critical errors during use.

4. Verify conversion rates are updated real-time.

**Security Testing:**

1. Verify that only authorized users can access premium conversion rates

**Stress Testing:**

1. Verify the calculator's performance under high load conditions

**Usability Testing:**

1. Check if the calculator displays results with incorrect formatting (e.g., missing currency symbols, incorrect decimal places).
2. Gather user feedback on the calculator's ease of use and overall experience

**Accessibility testing:**

1. Verify the calculator is compatible with screen readers

# Checklist- Functional Testing:

| Testing type | Requirement | Test Case | STATUS |
|---|---|---|---|
| Functional testing | Validate that the calculator is accessible and loads correctly. | **Description:** Check calculator is accessible and loads corectly **Steps to Reproduce:** 1. Open https://www.paysera.lt/v2/en-LT/fees/currency-conversion-calculator#/ 2. Scroll down to Online currency exchange calculator and click Filter **Expected Result:** Calculator to be visible and filter button to be clickable | PASS |
| Functional testing | Verify the correct list of currencies is available for conversion. | **Description:** Check if all currencies from Specification are listed in currancy dropdowns **Steps to Reproduce:** 1. Open calculator 2. Open/click on both dropdowns 3. Check if all listed currencies from Specification are available **Expected Result:** All currancies are available. | PASS |
| Functional testing | Validate that 'Clear Filter' button is clearing data from filled in fields | **Description:** Check that 'Clear Filter' button is clearing data from filled in fields **Steps to Reproduce:** 1. Open calculator 2. Fill in 'Sell'/'Buy' field with '500' 3. Click on 'Clear filter' button **Expected Result:** 'Sell'/'Buy' field is cleared and default input appears (100) | PASS |
| Functional testing (Test basic Currency Conversion) | Convert from USD to EUR | **Description:** Convert from USD to EUR **Preconditions:** Currency conversion calculator is accessible, exchange rates are available **Steps to Reproduce:** 1. Select USD from Sell currency dropdown 2. Select EUR from Buy currency dropdown 3.Click on Filter button Expected Result: The calculator should perform the conversion and display the result. | PASS |
| Functional testing (Test basic Currency Conversion) | Convert from EUR to USD | **Description:** Convert from EUR to USD **Preconditions:** Currency conversion calculator is accessible, exchange rates are available **Steps to Reproduce:** 1. Select EUR from Sell currency dropdown 2. Select USD from Buy currency dropdown 3.Click on Filter button Expected Result: The calculator should perform the conversion and display the result. | PASS |

| | | | |
|---|---|---|---|
| Functional testing (Test basic Currency Conversion) | Convert from EUR to EUR (same currency for sell and buy) | **Description:** Convert from EUR to EUR<br>**Preconditions:** Currency conversion calculator is accessible, exchange rates are available<br>**Steps to Reproduce:** 1. Select EUR from Sell currency dropdown 2. Select EUR from Buy currency dropdown 3.Click on Filter button<br>**Expected Result:** The calculator should perform the conversion and display the same result for same and buy or show message that we chose the same currencies from Sell and Buy<br>**Actual Result:** The calculator returns empy places (-) when converting from same currency for sell and buy | FAIL |
| Functional testing (Exchange Rate Accuracy) | Verify displayed exchange rates match the latest rates | **Description:** Verify that the exchange rates displayed are accurate **Preconditions:** Currency conversion calculator is accessible, exchange rates are available<br>**Test Steps:**<br>1.Open the currency conversion calculator.<br>2.Note the exchange rate for USD to EUR.<br>3.Compare the rate displayed with a reliable source.<br>**Expected Result:** The exchange rate displayed on the calculator matches the reliable source. | PASS |
| Functional testing | Verify the exchange rates are updated in real-time | **Description:** Verify the exchange rates are updated in real-time **Preconditions:** Currency conversion calculator is accessible<br>**Test Steps:**<br>1.Open the currency conversion calculator.<br>2.Note the current exchange rate for USD to EUR.<br>3.Wait for a predefined interval (e.g., 1 hour).<br>4.Refresh the calculator and check the exchange rate again. **Expected Result:** The exchange rate is updated to reflect the latest market rate. | PASS |
| Functional testing(amount limits) | Test with maximum allowed amounts | Maximum Amount Limit<br>**Description:** Verify the calculator can handle the maximum allowed amount<br>**Preconditions:** Currency conversion calculator is accessible **Test Steps:**<br>1.Open the currency conversion calculator.<br>2.Enter the maximum allowed amount (max amount that the fields allow).<br>3.Click on the "Filter" button.   **Expected Result:** The calculator processes the conversion without any errors and displays the correct amount. **Actual Result:** SERVER ERROR | FAIL |

| | | | |
|---|---|---|---|
| Functional testing | Test with decimal values | **Description:** Verify the calculator handles decimal precision accurately **Preconditions:** Currency conversion calculator is accessible **Test Steps:** 1.Open the currency conversion calculator. 2.Enter a decimal value (e.g., 100.25 USD). 3.Select EUR as the target currency. 4.Click on the "Filter" button. **Expected Result:** The calculator displays the correct conversion amount with accurate decimal precision. | PASS |
| Functional testing(Negative tests/Error Handling) | Input non-numeric characters | **Description:** Handling Non-Numeric Input **Preconditions:** Currency conversion calculator is accessible **Test Steps:** 1.Open the currency conversion calculator. 2.Enter a non-numeric character (e.g., "ABC") in the amount field. 3.Click on the "Filter" button. **Expected Result:** The calculator displays an error message indicating invalid input. | PASS |
| Functional testing (Negative tests/Error Handling) | Input negative values | **Description:** Verify the calculator handles negative value input **Preconditions:** Currency conversion calculator is accessible **Test Steps:** 1.Open the currency conversion calculator. 2.Enter a negative value (e.g., -100 USD). 3.Click on the "Filter" button. **Expected Result:** The calculator displays an error message indicating invalid input. **Actual Result:** The calculator provides a conversion result for the negative amount. | FAIL |
| Functional testing(Negative tests/Error Handling) | Test with maximum allowed amounts (Conversion Rates Near Zero) | **Description:** Inconsistent Conversion Rates Near Zero **Preconditions:** Currency conversion calculator is accessible **Steps to Reproduce:** 1.Enter a very small amount (e.g., 0.0001) 2. Click on Filter **Expected Result:** The calculator should provide accurate conversion results for small amounts. | PASS |

# Acceptance Testing:

| | | | |
|---|---|---|---|
| Acceptance Testing (User Interface) | Check clarity and readability of the interface | **Description:** Check clarity and readability of the interface<br>**Steps to Reproduce:** 1. Open calculator 2. Scroll down to Online currency exchange calculator and click Filter<br>**Expected Result:** Interface is clear and easy to read | PASS |
| Acceptance Testing (User Interface) | Error Message for Invalid Input (maximum symbols) | **Description:** The calculator displays a generic error message instead of a specific one for invalid input.<br>**Expected Result:** A specific error message should be displayed indicating the input is invalid.<br>**Actual Result:** SERVER ERROR | FAIL |
| Acceptance Testing (Loading time) | Measure the time it takes to load the calculator | **Description:** Verify the calculator show results fastly **Preconditions:** Currency conversion calculator is accessible **Test Steps:**<br>1.Open the currency conversion calculator.<br>2.Enter input in Sell field<br>3.Click on the "Filter" button. **Expected Result:** Load time is under 3 seconds | PASS |

# Exploratory Testing:

| | | | |
|---|---|---|---|
| Exploratory Testing(Cross-Browser Compatibility) | Test on Chrome/Firefox | **Description:** Verify the calculator works on Firefox browser **Preconditions:** Currency conversion calculator is accessible on Firefox browser **Test Steps:**<br>1.Open the Firefox browser.<br>2.Access the currency conversion calculator.<br>3.Perform a currency conversion (e.g., USD to EUR). **Expected Result:** The calculator functions correctly, and all elements are displayed properly. | PASS |
| Exploratory Testing (Mobile Responsiveness) | Test on mobile devices (Safari, Iphone) | **Description:** Verify that the calculator is responsive on mobile devices<br>**Preconditions:** Currency conversion calculator is accessible on an Iphone device<br>**Test Steps:**<br>1.Open the currency conversion calculator on Iphone.<br>2.Perform a currency conversion (e.g., USD to EUR). 1122 to be the input amount.<br>3.Check the layout and functionality of the calculator. **Expected Result:** The calculator is responsive, with all elements properly aligned and functional. **Actual Result:** Calculator responds but column fields are misplaced and information dispay is misleading. | FAIL |

# Smoke Testing: (Part of major test cases are described in Functional testing section)

| | | | |
|---|---|---|---|
| Smoke Testing | Ensure basic currency conversion functions correctly on launch | **Expected Result:** Conversion functions without issues | PASS |
| Smoke Testing | Verify exchange rates are updated in real-time | **Expected Result:** Real-time update of exchange rates | PASS |

# Security Testing:

| | | | |
|---|---|---|---|
| Security Testing | User Authentication and Authorization | **Description:** Verify that only authorized users can access premium conversion rates **Preconditions:** Currency conversion calculator is accessible; user authentication is required for premium rates **Test Steps:** 1.Open the currency conversion calculator. 2.Attempt to access premium conversion rates without logging in. 3.Log in with valid credentials. 4.Access premium conversion rates again. **Expected Result:** Premium rates are accessible only after successful login; unauthorized access is denied. | PASS |

# Stress Testing:

| | | | |
|---|---|---|---|
| Stress Testing | High Volume of Conversions | **Description:** Verify the calculator's performance under high load conditions **Preconditions:** Currency conversion calculator is accessible **Test Steps:** 1.Open the currency conversion calculator. 2.Simulate a high volume of currency conversions (e.g., 100 conversions within a short period). 3.Monitor the calculator's responsiveness and performance. **Expected Result:** The calculator handles the high volume of conversions without crashing or significant performance degradation. | PASS |

# Usability Testing

| | | | |
|---|---|---|---|
| Usability Testing | Check display of conversion results | **Description:** The calculator displays results with incorrect formatting (e.g., missing currency symbols, incorrect decimal places). **Preconditions:** Currency conversion calculator is accessible **Test Steps:** Perform any conversion and observe the result format. **Expected Result:** The conversion result should be displayed with correct formatting (e.g., "$1,234.56"). **Actual Result:** The result is displayed without currency symbols | FAIL |
| Usability Testing | Gather user feedback on the calculator's ease of use and overall experience | **Description:** Gather user feedback on the calculator's ease of use and overall experience **Preconditions:** Currency conversion calculator is accessible **Test Steps:** 1.Provide access to the currency conversion calculator to a group of users. 2.Ask the users to perform various currency conversions (e.g., USD to EUR, JPY to USD). 3. Collect feedback on the ease of use, interface design, and overall experience. **Expected Result:** Users find the calculator easy to use, intuitive, and efficient. | PASS |

# Accessibility Testing

| | | | |
|---|---|---|---|
| Accessability testing | Verify the calculator is compatible with screen readers | **Description:** Verify the calculator is compatible with screen readers **Preconditions:** Currency conversion calculator is accessible, screen reader software is available **Test Steps:** 1.Open the currency conversion calculator. 2.Enable screen reader software. 3.Perform a currency conversion (e.g., USD to EUR) using the screen reader. 4.Verify that the screen reader reads out all relevant information and instructions clearly. **Expected Result:** The calculator is fully accessible using a screen reader, with all elements and instructions properly read out. | PASS |

# Bug/Improvement Report Template

**BUGS REPORT**

| ISSUE ID | Category | Desription | Steps to reproduce | Expected Behavior | Actual Behavior | Status |
|---|---|---|---|---|---|---|
| 1 | Functional testing (Test basic Currency Conversion) | Convert from EUR to EUR (same currency for sell and buy) | Preconditions: Currency conversion calculator is accessible, exchange rates are available Steps to Reproduce: 1. Select EUR from Sell currency dropdown 2. Select EUR from Buy currency dropdown 3.Click on Filter button | The calculator should perform the conversion and display the same result for buy or show message that we chose the same currencies from Sell and Buy | The calculator returns empy places (-) when converting from same currency for sell and buy | Open |
| 2 | Functional testing(amount limits) | Verify the calculator can handle the maximum allowed amount | Preconditions: Currency conversion calculator is accessible Steps to Reproduce: 1.Open the currency conversion calculator. 2.Enter the maximum allowed amount (max amount that the fields allow). 3.Click on the "Filter" button. | The calculator processes the conversion without any errors and displays the correct amount. | SERVER ERROR | Open |
| 3 | Functional testing (Negative tests/Error Handling) | Verify the calculator handles negative value input | Preconditions: Currency conversion calculator is accessible Steps to Reproduce: 1.Open the currency conversion calculator. 2.Enter a negative value (e.g., -100 USD). 3.Click on the "Filter" button. | The calculator displays an error message indicating invalid input. | The calculator provides a conversion result for the negative amount. | Open |
| 4 | Exploratory Testing (Mobile Responsiveness) | Verify that the calculator is responsive on mobile devices.Test on mobile devices (Safari, Iphone) | Preconditions: Currency conversion calculator is accessible Steps to Reproduce: 1.Open the currency conversion calculator on Iphone. 2.Perform a currency conversion (e.g., USD to EUR). 1122 to be the input amount. 3.Check the layout and functionality of the calculator. | The calculator is responsive, with all elements properly aligned and functional. | Calculator responds but column fields are misplaced and information dispay is misleading. | Open |
| 5 | Usability Testing | The calculator displays results with incorrect formatting (e.g., missing currency symbols, incorrect decimal places). | Preconditions: Currency conversion calculator is accessible Steps to reproduce: Perform any conversion and observe the result format. Write 1234.56 in Sell field and click on Filter. | The conversion result should be displayed with correct formatting (e.g., "$1,234.56"). | The result is displayed without currency symbols | Open |