Test Cases

Test Case 1: Verify High Monthly Deposit Handling

Objective: Ensure that the calculator correctly processes a high monthly deposit beyond typical limits. **Steps:**

1. Select the **Classic Building Savings (Saver Tariff)**.
2. Input a monthly deposit of **EUR 3,550**.
3. Verify that the total savings sum over six years is **EUR 255,600**.
4. Check the maximum and minimum savings projections.
5. Ensure the correct application of interest rates, KESt, and fees. **Expected Result:** The calculator should accurately compute and display the final projected savings balance.

Test Case 2: Verify Interest Rate Changes After Fixed Period

Objective: Validate that the interest rate updates correctly after the 3.25% fixed interest period ends on 31.03.2026. **Steps:**

1. Set the contract start date to 04.03.2025.
2. Verify that the fixed interest rate for the first year is 3.25%.
3. Check how the calculator adjusts the interest rate after the fixed period (12-Month EURIBOR - 1.25%).
4. Input different EURIBOR scenarios and confirm that the calculator correctly applies the formula (min 0.1%, max 4.0%). **Expected Result:** The system correctly applies interest rate changes after 31.03.2026.

Test Case 3: Verify State Premium Calculation for Different Years

Objective: Ensure the correct state premium calculation based on annual rate changes. **Steps:**

1. Input savings amount for the year 2025 and verify that the premium is calculated at 1.5%.
2. Input savings amount for post-2026 years and verify that the premium is calculated at 4%.

3. Ensure the correct application of the maximum contribution limit (EUR 1,200 per person per year). **Expected Result:** The premium should correctly reflect the applicable rates based on the year.

Test Case 4: Verify Account Management Fee Adjustments

Objective: Ensure that the account management fee updates based on Raiffeisen Bank's collective salary agreements. **Steps:**

1. Check the default fee for 2025 (EUR 49.80).
2. Adjust the date to future years and verify that the fee changes dynamically. **Expected Result:** The fee should adjust based on changes in the bank's salary agreement policies.

Test Case 5: Verify Effective Annual Interest Rate Calculation

Objective: Ensure the calculator correctly computes the effective annual interest rate before KESt. **Steps:**

1. Verify that the effective interest rate before KESt for maximum savings is 4.9%.
2. Verify that the effective interest rate before KESt for minimum savings is 0.5%. **Expected Result:** The displayed effective interest rate should match expected values.

Test Case 6: Verify Data Persistence and Edge Cases

Objective: Ensure the calculator handles user input correctly and prevents invalid data entry. **Steps:**

1. Attempt to input an amount exceeding EUR 7,200 and check for validation messages.
2. Input non-numeric characters and verify error handling.
3. Check if previously entered values persist when navigating back to the calculator. **Expected Result:** The calculator should validate inputs, handle errors gracefully, and retain correct values during navigation.

Test Case 7: Verify Usability in Translated Environments

Objective: Ensure the calculator functions correctly when used in different language settings.
Steps:

1. Change the website language (if an option is available) or use browser translation features.

2. Verify that all labels, tooltips, and error messages display correctly in the translated language.

3. Check that the numeric inputs and currency formatting remain consistent across different language settings.

4. Perform basic calculations and compare results with those from the default language setting. **Expected Result:** The calculator should remain functional and readable across different language translations without affecting the calculations.

Test Case 8: Verify Handling of Partial-Year Contributions

Objective: Ensure the calculator correctly calculates savings for users who start contributing mid-year.
Steps:

1. Select the **Classic Building Savings (Saver Tariff)**.
2. Set the contract start date to **July 2025** (mid-year).
3. Input a monthly deposit of **EUR 500**.
4. Verify that only **six months of contributions** are considered for 2025.
5. Ensure that the state premium is calculated correctly based on the partial-year contributions.
6. Verify that interest calculations and KESt deductions are applied correctly. **Expected Result:** The calculator should adjust savings, interest, and state premiums accordingly for a mid-year start.

Test Case 9: Verify Early Termination Scenario

Objective: Ensure correct handling of early contract termination before the 6-year minimum term.
Steps:

1. Select the **Classic Building Savings (Saver Tariff)**.
2. Set the contract start date to **04.03.2025**.
3. Set an early termination date to **04.03.2028** (3 years).
4. Verify how interest and state premiums are affected.

5. Check if any penalties or deductions apply. **Expected Result:** The calculator should reflect any penalties or deductions for early termination.

Test Case 10: Verify UI Responsiveness on Different Devices

Objective: Ensure the calculator displays and functions correctly across different screen sizes.
Steps:

1. Open the calculator on a **desktop** browser.
2. Open the calculator on a **tablet**.
3. Open the calculator on a **mobile device**.
4. Verify that all elements are visible and properly aligned.
5. Ensure that calculations work correctly on all devices. **Expected Result:** The calculator should maintain proper UI layout and usability across all devices.

Test Case 11: Verify Maximum and Minimum Input Limits

Objective: Ensure the calculator correctly enforces minimum and maximum input constraints.
Steps:

1. Input a monthly savings amount of **EUR 0** and check if the calculator prevents calculation.
2. Input a monthly savings amount of **EUR 10,000+** and verify handling of excessive input.
3. Input negative values and verify error messages.
4. Enter extremely large numbers and check for system stability. **Expected Result:** The calculator should validate inputs and prevent unrealistic entries.

Test Case 12: Verify Browser Compatibility

Objective: Ensure the calculator functions correctly across different web browsers.
Steps:

1. Open the calculator in **Google Chrome**.
2. Open the calculator in **Mozilla Firefox**.
3. Open the calculator in **Microsoft Edge**.
4. Open the calculator in **Safari**.
5. Perform basic calculations and verify consistency. **Expected Result:** The calculator should produce consistent and accurate results across all major browsers.