

Quathera

AI Test Scenarios Guide

How AI automatically generates comprehensive test scenarios for your forms.

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1. What Are Test Scenarios?

Test Scenarios are the complete set of test cases that AI generates for each form. They define:

- What actions to perform (create, edit, delete)
- What data to enter in each field
- What to verify after each action
- What errors to test (negative cases)

Why AI-Generated Scenarios?

Manually writing test cases is time-consuming and error-prone. You might miss edge cases, forget conditional paths, or overlook validation rules. AI generates scenarios based on what it discovered during Form Mapping, ensuring complete coverage of:

- All fields and their valid/invalid values
- All junction paths (conditional logic)
- All parent-child relationships
- All validation rules and error messages

2. How AI Generates Scenarios

After Form Mapping completes, AI automatically generates test scenarios:

Step 1: Analyze Mapped Data

AI reviews all the information collected during mapping:

- Field types and properties
- Required vs optional fields
- Validation rules
- Junction paths
- Parent-child dependencies

Step 2: Generate Test Data

AI creates appropriate test data for each field type:

- Text fields: Realistic names, addresses, descriptions
- Email fields: Valid email formats
- Number fields: Within valid ranges
- Date fields: Valid dates in correct format
- Dropdowns: Selects from available options

Step 3: Create Scenario Steps

AI builds step-by-step scenarios with actions and expected results.

3. CRUD Test Cycles

For every form, AI generates a complete CRUD cycle:

Create:

1. Navigate to the form
2. Fill in all required fields with valid data
3. Fill in optional fields (varies by scenario)
4. Click Save/Submit
5. Verify success message appears
6. Verify data appears in grid/list

Read/Verify:

1. Find the created record in grid
2. Open detail view or edit form
3. Verify all field values match what was entered

Update:

1. Open the record for editing
2. Modify specific fields
3. Save changes
4. Verify changes are reflected

Delete (if applicable):

1. Select the record
2. Click Delete
3. Confirm deletion
4. Verify record no longer appears

4. Junction Path Coverage

For forms with conditional logic (junctions), AI generates scenarios for EACH path:

Example: Employee Form

If the form has an 'Employment Type' dropdown with 3 options:

Scenario Set 1: Full-Time Employee

- Select 'Full-Time' from Employment Type
- Fill Salary field (appears for Full-Time)
- Fill Benefits selection (appears for Full-Time)
- Complete CRUD cycle

Scenario Set 2: Part-Time Employee

- Select 'Part-Time' from Employment Type
- Fill Hourly Rate field (appears for Part-Time)
- Complete CRUD cycle

Scenario Set 3: Contractor

- Select 'Contractor' from Employment Type
- Fill Company Name (appears for Contractor)
- Fill Contract End Date (appears for Contractor)
- Complete CRUD cycle

This ensures every possible form configuration is tested.

5. Negative Testing

AI generates negative test cases to verify validation works correctly:

Required Field Validation:

- Leave required fields empty
- Verify error message appears
- Verify form cannot be submitted

Format Validation:

- Enter invalid email format
- Enter invalid phone format
- Enter text in number fields
- Verify appropriate error messages

Range Validation:

- Enter values below minimum
- Enter values above maximum
- Enter dates outside valid range

Length Validation:

- Exceed maximum character limits
- Test minimum length requirements

Business Rule Validation:

- End date before start date
- Duplicate unique values
- Invalid combinations

6. Multi-User Scenarios

When forms require different user types, AI generates scenarios with login cycling:

Example: Approval Workflow

Scenario: Leave Request with Manager Approval

Step 1: Employee creates request

- Login as Regular User
- Create new Leave Request
- Submit for approval
- Logout

Step 2: Manager approves request

- Login as Manager
- Find pending request
- Click Approve
- Verify status changes to Approved
- Logout

Step 3: Employee verifies approval

- Login as Regular User
- View request status
- Verify shows Approved

7. End-to-End Workflows

AI generates complete workflows that span multiple forms:

Example: Order Processing

Complete workflow scenario:

1. Create Customer (root form)
2. Verify Customer in list
3. Create Order for Customer (child form)
4. Add Order Items (grandchild form)
5. Submit Order
6. Process Payment
7. Ship Order (change status)
8. Complete Order
9. Verify final state

These workflows test the full business process, not just individual forms.

8. Viewing Generated Scenarios

To view the scenarios AI has generated:

Steps:

1. Go to 'Test Scenarios' in the sidebar
2. Select a project
3. Choose a form page
4. View list of generated scenarios

Scenario Details:

Each scenario shows:

- Scenario name and description
- Type (CRUD, Negative, Workflow)
- Junction path (if applicable)
- User type required
- Step-by-step actions
- Expected results

9. Customizing Scenarios

While AI generates comprehensive scenarios, you can customize them:

Disable Scenarios:

If a scenario isn't applicable, you can disable it without deleting.

Modify Test Data:

Change the generated test data to use specific values.

Add Custom Scenarios:

Create additional scenarios for edge cases AI might have missed.

Set Priority:

Mark scenarios as High, Medium, or Low priority for selective test runs.

Re-Generate:

If form mapping is updated, you can regenerate scenarios to include new fields or paths.