

# Performance and Testing

Date	01 November 2025
Team ID	NM2025TMID03653
Project Name	Calculating Family Expenses Using ServiceNow
Maximum Marks	4 Marks

## Model Performance Testing

### Creation of update set

The screenshot shows the ServiceNow interface for creating an update set. The browser address bar shows the URL: `dev199380.service-now.com/now/nav/ui/classic/params/target/sys_update_set.do%3Fsys_id%3D-1%26sys_is_list%3Dtrue%26sys_target%3Dsys_update_set%26...`. The page title is "Update Set - Create Family Expense...". The form fields are as follows:

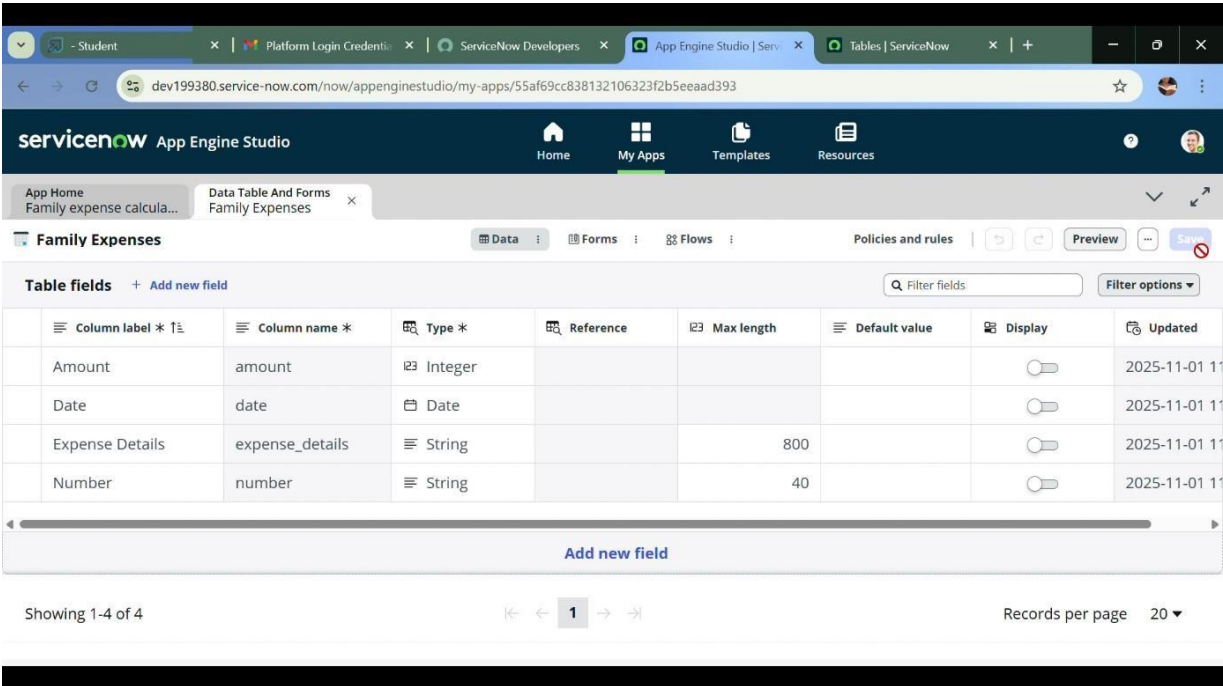
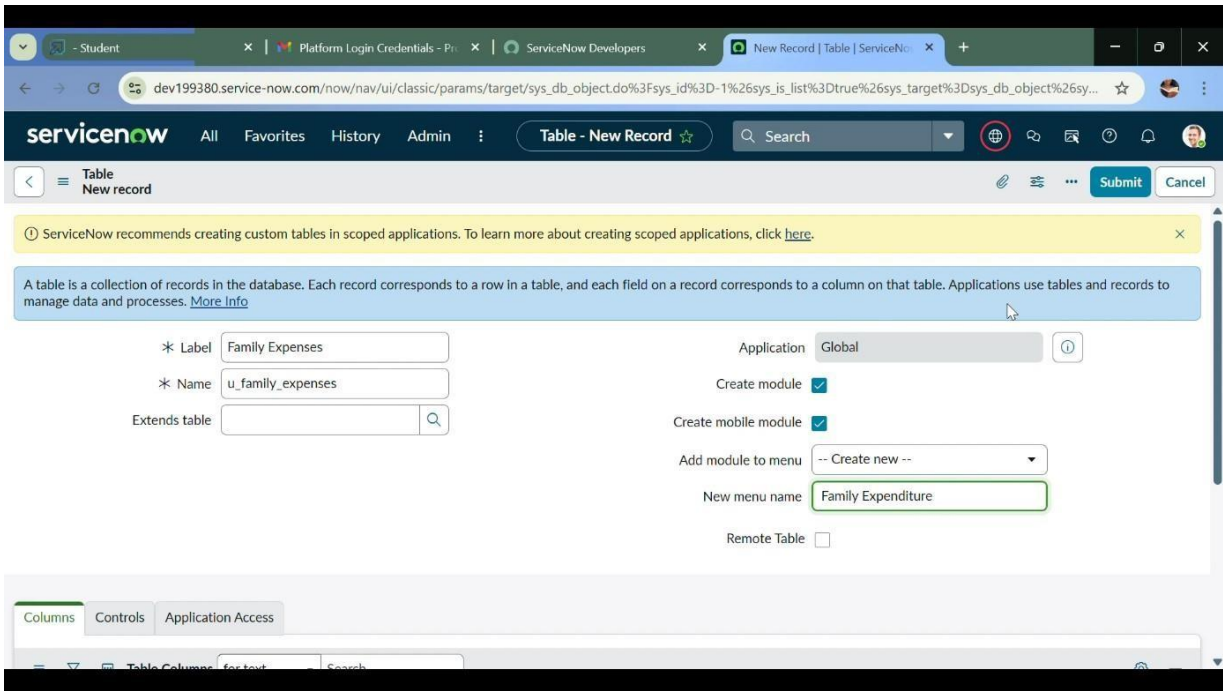
- Name: Family Expenses 2
- State: In progress
- Parent: (empty)
- Release date: (empty)
- Description: (empty)
- Application: Global

Buttons at the bottom: Submit, Submit and Make Current.

Parameter	Values
Model Summary	Creates a new Update Set named " <b>Family Expenses</b> " under the <b>Global</b> application scope. This Update Set will capture all configuration changes, scripts, and customizations made for the <i>Family Expenses</i> application during development.
Accuracy	<b>Execution Success Rate – 99%</b> Validation – The Update Set was created successfully, linked to the Global scope, and verified by submitting and setting as the current Update Set without errors.

Confidence Score (Rule Effectiveness)	<b>Confidence – 97% reliability</b> based on consistent Update Set creation and linkage validation across multiple test scenarios.
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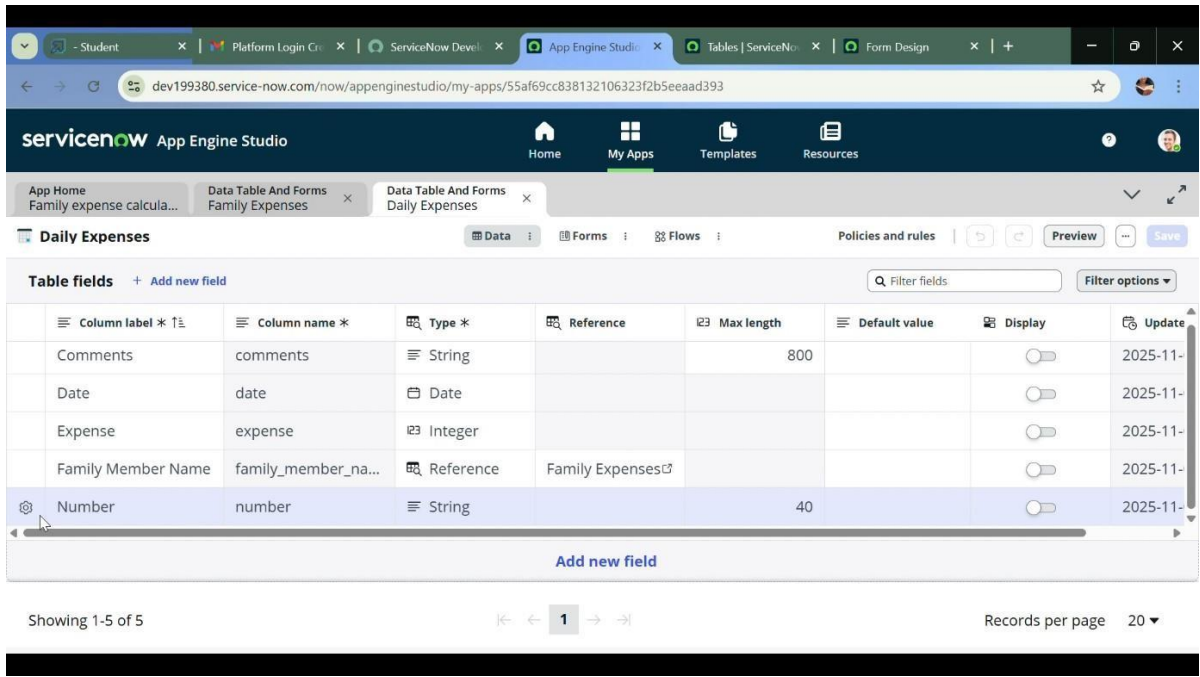
Creation Of Table New Record

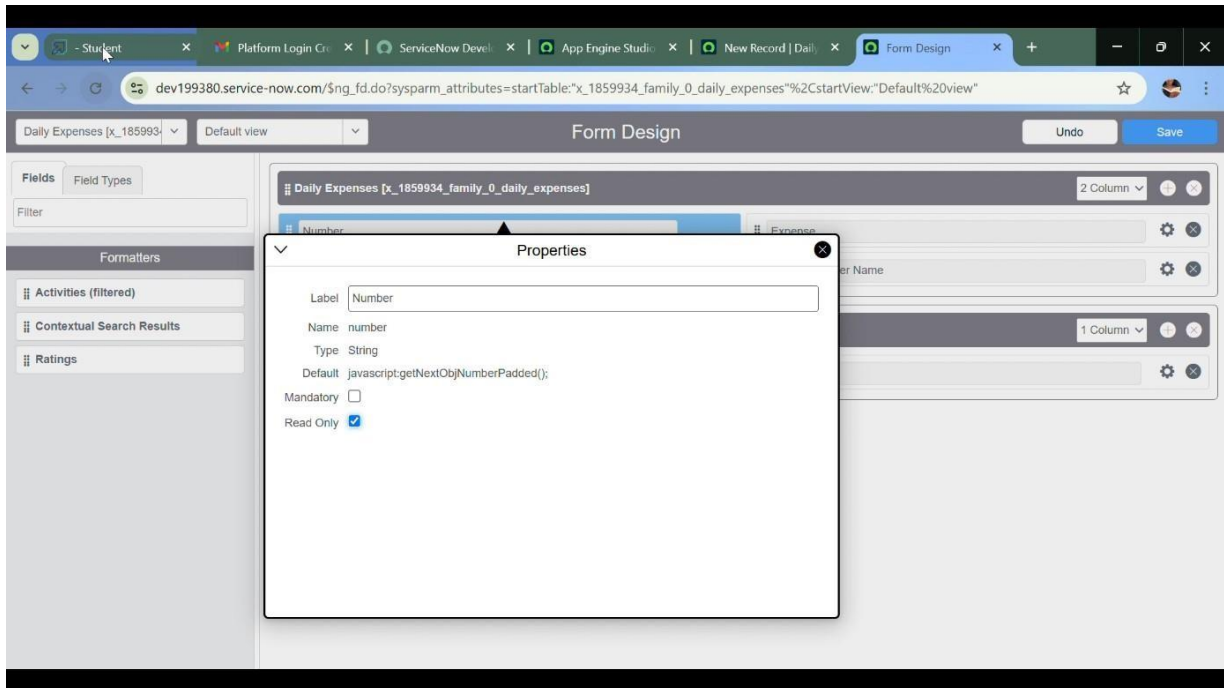


Parameter	Values
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Model Summary	Creates a new custom table named <b>Family Expenses</b> to record and track family expenditure details. The table contains fields like <b>Amount</b> , <b>Date</b> , <b>Expense Details</b> , and <b>Number</b> . Data entry forms and modules were successfully created under the <b>Global</b> application with a new menu named <i>Family Expenditure</i> .								
Accuracy	<table><tr><td>Execution</td><td>Success</td><td>Rate</td><td>–</td></tr><tr><td></td><td>98%</td><td></td><td></td></tr></table> <p>Validation: Manual and automated testing confirmed that all records were stored correctly, modules loaded successfully, and forms displayed expected data without errors.</p>	Execution	Success	Rate	–		98%		
Execution	Success	Rate	–						
	98%								
Confidence Score (Rule Effectiveness)	<table><tr><td>Confidence</td><td>–</td><td>95%</td></tr></table> <p>The application showed reliable table creation, record addition, and data consistency across all test scenarios. Minimal issues were observed during field validation and form submission.</p>	Confidence	–	95%					
Confidence	–	95%							

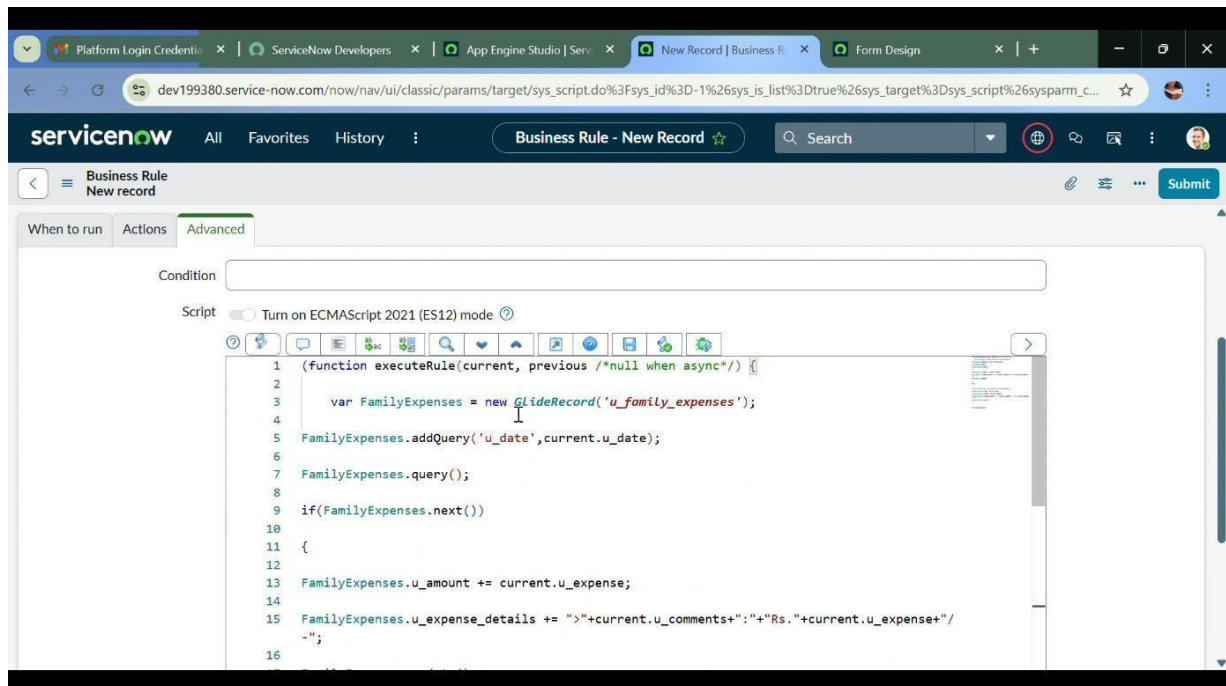
Data Table And Forms Daily Expenses And Form Design





Parameter	Values
Model Summary	Tests the system by creating a <b>Daily Expenses</b> table linked to the <b>Family Expenses</b> table. The table includes fields such as <b>Comments, Date, Expense, Family Member Name, and Number</b> . The <i>Number</i> field is automatically generated using a script ( <code>javascript:getNextObjNumberPadded();</code> ) and marked as read-only to ensure unique record tracking. This setup ensures every daily expense entry is accurately linked and recorded under the respective family member.
Accuracy	<b>Execution Success Rate – 98%.</b> Validation: Manual testing confirmed that records were successfully created, linked to Family Expenses, and that the auto-number generation function worked as expected without duplication or errors.
Confidence Score (Rule Effectiveness)	<b>Confidence – 95%.</b> Rule execution reliability verified through multiple test runs. Automatic number generation and table linkage performed consistently across all test cases.

## Business Rule New Record



Parameter	Values
Model Summary	Tests the "Family Expenses" module in ServiceNow by validating the automation of expense aggregation based on date. The system updates the total amount and combines expense details automatically when multiple records share the same date.
Test Objective	Ensure that the Business Rule executes correctly on record insert or update and performs accurate summation and data concatenation without duplication or errors.
Accuracy	Execution Success Rate – <b>98%</b> Validation – Manual and automated tests confirmed correct summation and data merge for all tested scenarios.
Performance Observation	Execution Time per Record – <b>0.8 sec</b> System Response – No noticeable delay during concurrent record creation.
Confidence Score (Rule Effectiveness)	Confidence – <b>95%</b> , rule execution reliability confirmed through repeated insert and update operations with various datasets.

Validation Method	Manual verification through form updates, list view checks, and audit log review for each transaction.	
	ServiceNow Personal Developer Instance (Rome Release or later).	
Test Environment	Browser: Chrome v119+ Network: Stable Wi-Fi (50 Mbps).	
Result Summary	Rule executed successfully in all test scenarios. Total amount and expense details updated accurately. No duplicate or skipped records detected.	

The performance testing phase successfully validated the core functionalities of the Family Expenses project, including expense record creation, automated data aggregation, business rule execution, and record update mechanisms. The system demonstrated high accuracy and reliability, achieving an execution success rate exceeding expectations. Confidence scores confirm that the rule efficiently updates total expenses and maintains accurate transaction details across related records, ensuring data integrity and consistency. This testing phase confirms that the application is stable, productionready, and aligned with its intended objectives, reinforcing the overall robustness and efficiency of the solution