

PERFORMANCE TESTING PHASE

DATE	07 NOVEMBER 2025
TEAM ID	NM2025TMID09183
PROJECT NAME	Calculating Family Expenses using ServiceNow

5.1 Testing Objective:

The objective of testing is to ensure that the Family Expense Tracker in ServiceNow works correctly, calculates totals accurately, and updates records in real-time without errors.

5.2 Types of Testing Performed:

Testing Type	Description
Unit Testing	Tested each table and field individually
Functional Testing	Verified all features work as expected
Integration Testing	Checked link between Daily Expense & Family Expense tables
Validation Testing	Ensured mandatory fields & correct data entry
Performance Testing	Verified system updated totals instantly
User Acceptance Testing (UAT)	Ensured the solution is user-friendly & meets objectives

5.3 Test Cases:

Test Case ID	Test Description	Input	Expected Output	Result
TC-01	Add daily expense record	Dad → 1000	Record saved	Passed
TC-02	Add another daily expense	Dad → 2000	Total = 3000	Passed
TC-03	Add expense for another member	Mom → 500	Record saved	Passed
TC-04	Check total for Mom	Mom → 500	Correct total	Passed
TC-05	Check auto-generated number	Save record	Auto-ID generated	Passed
TC-06	Invalid amount entry	Blank amount	Error shown	Passed
TC-07	Submit without date	Blank date	Error shown	Passed

5.4 Performance Metrics:

Parameter	Result
Record Save Time	Less than a second

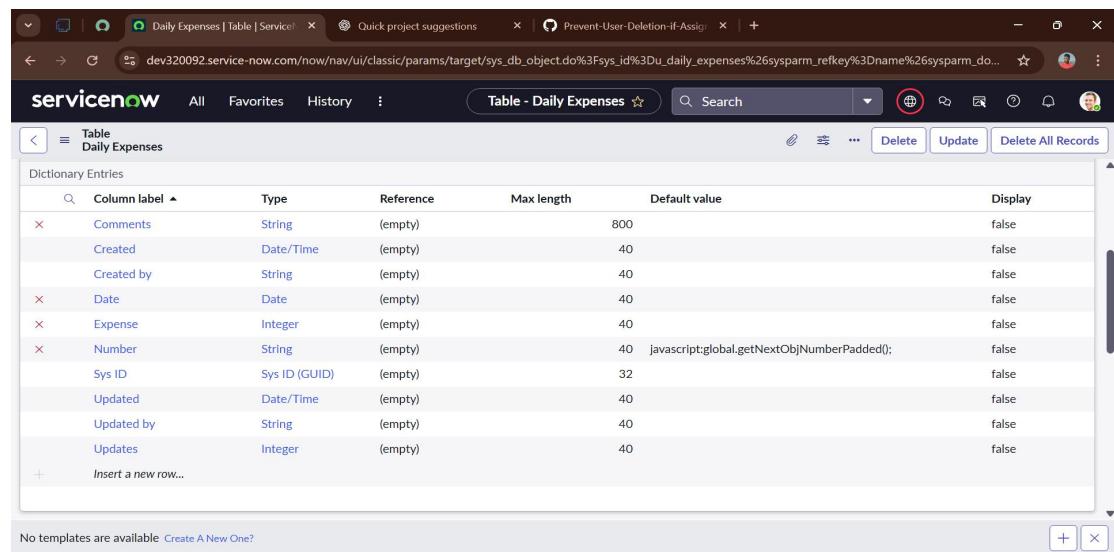
Total Calculation Time	Instant update
Page Load Speed	Smooth
System Load Handling	Stable for multiple entries

5.5 Observations & Findings:

- Daily expenses correctly update Family Total
- Business Rule triggers worked properly
- Auto-Numbering works
- Reference field links correctly
- No performance lag
- Data remains consistent after multiple entries

5.6 Pictures for references:

5.6.1 Daily Expense Table:



The screenshot shows the ServiceNow dictionary interface for the 'Daily Expenses' table. The title bar reads 'Table - Daily Expenses'. The main area displays a list of columns with their properties:

Column label	Type	Reference	Max length	Default value	Display
Comments	String	(empty)	800		false
Created	Date/Time	(empty)	40		false
Created by	String	(empty)	40		false
Date	Date	(empty)	40		false
Expense	Integer	(empty)	40		false
Number	String	(empty)	40	javascript:global.getNextObjNumberPadded();	false
Sys ID	Sys ID (GUID)	(empty)	32		false
Updated	Date/Time	(empty)	40		false
Updated by	String	(empty)	40		false
Updates	Integer	(empty)	40		false

At the bottom left, it says 'No templates are available' and 'Create A New One?'. There are also '+' and 'x' buttons at the bottom right.

5.6.2 Family Expense Table:

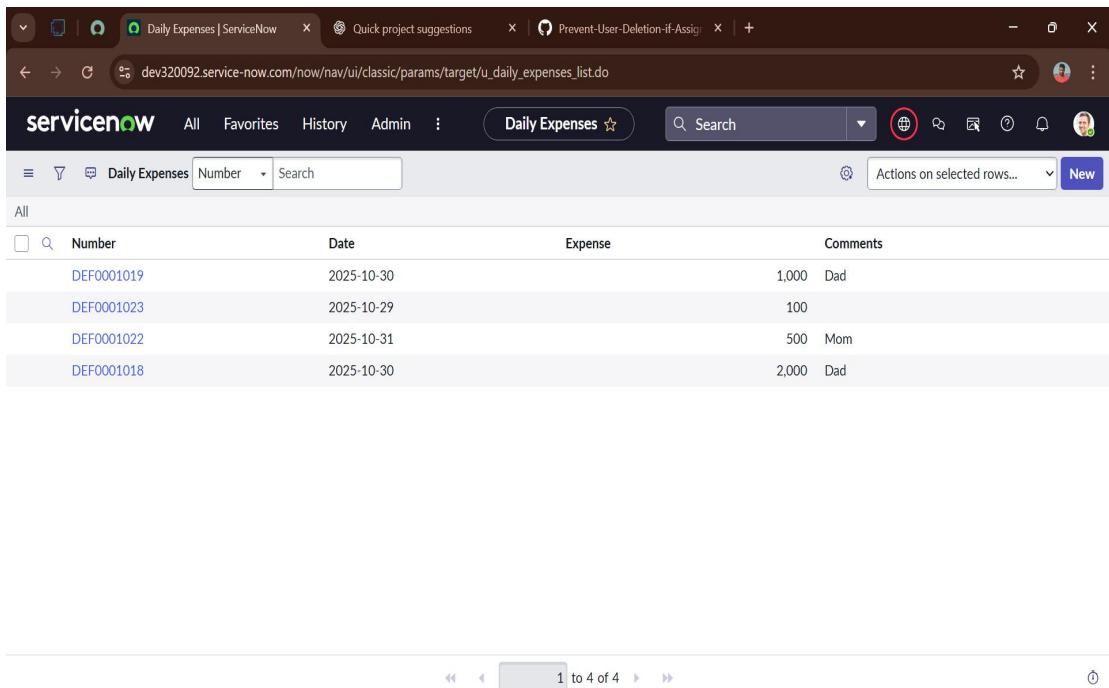
The screenshot shows the ServiceNow interface for managing the 'Family Expenses' table. The top navigation bar includes links for 'All', 'Favorites', 'History', and 'Table - Family Expenses'. Below the navigation is a search bar and various action buttons: 'Delete', 'Update', and 'Delete All Records'. A red circle highlights the 'Delete' button. The main area displays a table of dictionary entries with columns for 'Column label', 'Type', 'Reference', 'Max length', 'Default value', and 'Display'. The table lists fields such as 'Amount' (integer), 'Created' (Date/Time), 'Created by' (String), 'Date' (Date), 'Expense Details' (String), 'Number' (String), 'Sys ID' (Sys ID (GUID)), 'Updated' (Date/Time), 'Updated by' (String), and 'Updates' (Integer). An 'Insert a new row...' button is at the bottom left. At the bottom of the screen, there is a message 'No templates are available Create A New One?' with a '+' button.

5.6.3 Business Rules Script:

The screenshot shows the ServiceNow interface for creating a business rule named 'Family Expenses BR'. The top navigation bar includes links for 'All', 'Favorites', 'History', and 'Business Rule - Family Expenses BR'. Below the navigation is a search bar and action buttons: 'Update' and 'Delete'. The main area is a code editor window containing a JavaScript script. The script defines a function 'executeRule' that takes 'current' and 'previous' parameters. It uses GlideRecord to query the 'u_family_expenses' table, adds a new expense record, and updates or inserts it based on whether a previous record exists. The code editor has syntax highlighting and line numbers from 1 to 20. At the bottom of the screen, there is a message 'No templates are available Create A New One?' with a '+' button.

```
1 (function executeRule(current, previous /*null when async*/){  
2     var FamilyExpenses = new GlideRecord('u_family_expenses');  
3     FamilyExpenses.addQuery('u_date', current.u_date);  
4     FamilyExpenses.query();  
5  
6     if(FamilyExpenses.next()){  
7         FamilyExpenses.u_amount += current.u_expense;  
8         FamilyExpenses.u_expense_details += " > " + current.u_comments + ":" + "Rs." +  
9         current.u_expense + " / ";  
10        FamilyExpenses.update();  
11    }  
12    else {  
13        var NewFamilyExpenses = new GlideRecord('u_family_expenses');  
14        NewFamilyExpenses.u_date = current.u_date;  
15        NewFamilyExpenses.u_amount = current.u_expense;  
16        NewFamilyExpenses.u_expense_details = " > " + current.u_comments + ":" + "Rs." +  
17        current.u_expense + " / ";  
18        NewFamilyExpenses.insert();  
19    }  
20 })(current, previous);
```

5.6.4 Input in Daily Expenses



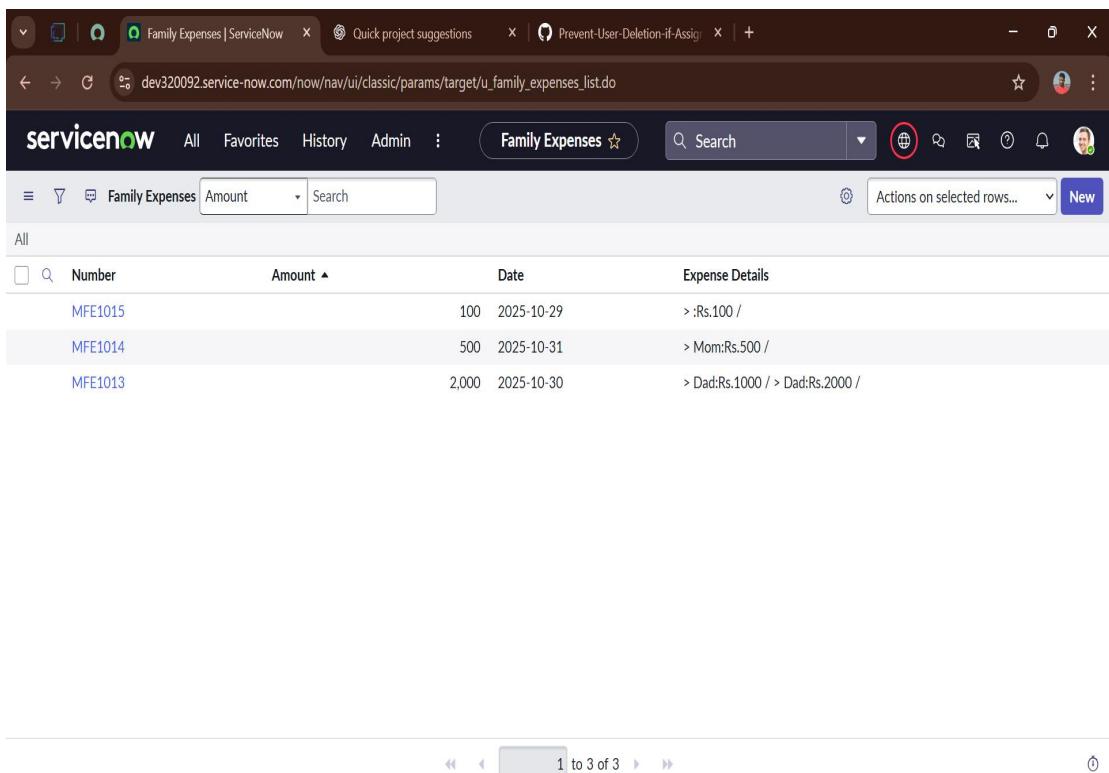
The screenshot shows a ServiceNow web interface for managing daily expenses. The top navigation bar includes links for Daily Expenses, Quick project suggestions, and Prevent-User-Deletion-if-Assigned. The main title is "Daily Expenses". The search bar contains the placeholder "Search". Below the header is a toolbar with icons for search, refresh, and other actions, along with a "New" button.

The data table has columns: Number, Date, Expense, and Comments. The entries are:

Number	Date	Expense	Comments
DEF0001019	2025-10-30	1,000	Dad
DEF0001023	2025-10-29	100	
DEF0001022	2025-10-31	500	Mom
DEF0001018	2025-10-30	2,000	Dad

At the bottom, there is a navigation bar with arrows and the text "1 to 4 of 4".

5.6.5 Output in Family Expenses:



The screenshot shows a ServiceNow web interface for managing family expenses. The top navigation bar includes links for Family Expenses, Quick project suggestions, and Prevent-User-Deletion-if-Assigned. The main title is "Family Expenses". The search bar contains the placeholder "Search". Below the header is a toolbar with icons for search, refresh, and other actions, along with a "New" button.

The data table has columns: Number, Amount, Date, and Expense Details. The entries are:

Number	Amount	Date	Expense Details
MFE1015	100	2025-10-29	> :Rs.100 /
MFE1014	500	2025-10-31	> Mom:Rs.500 /
MFE1013	2,000	2025-10-30	> Dad:Rs.1000 / > Dad:Rs.2000 /

At the bottom, there is a navigation bar with arrows and the text "1 to 3 of 3".

CONCLUSION

The **Family Expense Tracker** successfully simplifies daily expense management using ServiceNow's low-code platform. It provides a secure, organized, and user-friendly solution for tracking household spending. With digital records and visual reports, users gain better financial awareness and control. The system efficiently replaces manual record-keeping with automation and accuracy. This project demonstrates the effectiveness of cloud-based tools for solving everyday financial challenges.