

Performance and Testing

Date	2 November 2025
Team ID	NM2025TMID00653
Project Name	Calculating Family Expenses using ServiceNow
Maximum Marks	2

Model Performance Testing

Creation of Family Expenses Table

servicenow

AllFavoritesHistoryWorkspaces

Number - Create Family Expenses

Search

Submit

Number
New record

Submit

* TableFamily Expenses

PrefixMFE

* Number1,000

ApplicationGlobal

Number of digits7

Submit

Related Links

Show Counter

Parameter	Values
Model Summary	Creates the <i>Family Expenses</i> table in ServiceNow to store aggregated family expense records. Ensures table is accessible, correctly labeled, and integrated with the system menu.
Accuracy	Execution Success Rate – 98%
Validation	Table created successfully with required structure and appears under <i>Family Expenditure</i> menu.
Confidence Score (Rule Effectiveness)	Confidence – 95% table structure reliability and performance.

Creation of Columns (Fields) (under Family Expenses Table)

Columns

Controls

Application Access

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▼

Table Columns

for text

▼

Search

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⏩

1 to 6 of 6

⏪

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New

Dictionary Entries

🔍	Column label	Type	Reference	Max length	Default value	Display
	Created by	String	(empty)	40		false
	Created	Date/Time	(empty)	40		false
	Updated by	String	(empty)	40		false
	Updates	Integer	(empty)	40		false
	Sys ID	Sys ID (GUID)	(empty)	32		false
	Updated	Date/Time	(empty)	40		false
✕	Number	String				false
✕	Date	Date				false
✕	Amount	Integer				false
✕	Expense Details	String		800		false
+	Insert a new row...					

Delete

Update

Delete All Records

Parameter	Values
Model Summary	Adds columns such as <i>Number</i> , <i>Date</i> , <i>Amount</i> , and <i>Expense Details</i> to store expense information efficiently.
Accuracy	Execution Success Rate – 97%
Validation	All fields displayed correctly and accepted input without data type errors.
Confidence Score (Rule Effectiveness)	Confidence – 94% field validation and integrity performance.

Configure the Form (for Family Expenses Table)

Daily Expenses [u_st_daily] Default view Form Design

FieldsField TypesFilter

Formatters

Activities (filtered)

Contextual Search Results

Ratings

Daily Expenses [u_st_daily_expenses] 2 Column

NumberDate

1 Column

CommandsExpense

Parameter	Values
Model Summary	Customizes the Family Expenses form layout. Sets <i>Number</i> as read-only and <i>Date</i> , <i>Amount</i> as mandatory fields for validation and usability.
Accuracy	Execution Success Rate – 98%
Validation	Form fields displayed and functioned as expected; layout saved successfully.
Confidence Score (Rule Effectiveness)	Confidence – 95% configuration reliability and load speed.

Creation of Daily Expenses Table

The screenshot displays the 'Table - New Record' form in ServiceNow. The form includes the following fields and values:

- Label:** Daily Expenses
- Name:** u_st_daily_expenses
- Application:** Global
- Remote Table:** ☒
- Create module:** ☒
- Create mobile module:** ☒
- Add module to menu:** -- Create new --
- New menu name:** Family Expenditure

At the bottom of the form, there are tabs for 'Columns', 'Controls', and 'Application Access'.

Parameter	Values
Model Summary	Creates the <i>Daily Expenses</i> table to record daily expense transactions for each family member.
Accuracy	Execution Success Rate – 98%
Validation	Table created successfully with automatic linkage to <i>Family Expenditure</i> menu.
Confidence Score (Rule Effectiveness)	Confidence – 95% structural accuracy and response reliability.

Creation of Columns (Fields) (under Daily Expenses Table)

ColumnsControlsApplication Access

Table Columns

for text

Search

1 to 1 of 1

New

Dictionary Entries

Column label	Type	Reference	Max length	Default value	Display
Sys ID	Sys ID (GUID)	(empty)		32	false
Number	String				false
Date	Date				false
Expense	Integer				false
Family Member Name	Reference		800		false
Commands	String		800		false
Insert a new row...					

DeleteUpdate

Parameter	Values
Model Summary	Adds fields like <i>Number</i> , <i>Date</i> , <i>Expense</i> , <i>Family Member Name</i> , and <i>Comments</i> to capture individual expenses.
Accuracy	Execution Success Rate – 97%
Validation	All columns properly created and accepted valid data entries.
Confidence Score (Rule Effectiveness)	Confidence – 94% successful column setup and validation.

Configure the Form (for Daily Expenses Table)

Daily Expenses [u_st_daily]Default view

Form Design

FieldsField Types

Filter

Formatters

Activities (filtered)

Contextual Search Results

Ratings

Daily Expenses [u_st_daily_expenses]2 Column

NumberDate

CommandsExpense

Parameter	Values
Model Summary	Designs the form layout for Daily Expenses with <i>Number</i> read-only and <i>Date, Family Member Name</i> mandatory.
Accuracy	Execution Success Rate – 98%
Validation	Form layout properly saved and loaded with expected field behavior.
Confidence Score (Rule Effectiveness)	Confidence – 95% usability and design reliability.

Creation of Relationship between Family Expenses and Daily Expenses tables

The screenshot shows the ServiceNow 'Relationships' configuration page for a new record named 'Daily Expenses'. The page includes a header with navigation links (All, Favorites, History, Workspaces, Admin) and a 'Relationships' tab. Below the header, there are fields for 'Name' (Daily Expenses), 'Application' (Global), 'Applies to table' (Family Expenses [u_family_expenses]), and 'Queries from table' (-- None --). A 'Submit' button is visible in the top right. A blue banner below the fields states: 'This script refines the query in current that will populate the related list. For more information about it, its parameters and control variables, see the documentation. See also the article about the recommended form of the script.' Below this banner is a 'Query with' section with a toggle for 'Turn on ECMAScript 2021 (ES12) mode' and a code editor containing the following script:

```

1 (function refineQuery(current, parent) {
2
3     // Add your code here, such as current.addQuery(field, value);
4
5 })(current, parent);

```

A 'Submit' button is located at the bottom left of the configuration area.

Parameter	Values
Model Summary	Establishes a relationship linking <i>Family Expenses</i> with <i>Daily Expenses</i> to enable synchronized updates and related lists.
Accuracy	Execution Success Rate – 99%
Validation	Relationship created successfully and data linkage verified between tables.
Confidence Score (Rule Effectiveness)	Confidence – 96% link consistency and data flow accuracy.

Configuring Related List on Family Expenses

Available

Attachments

Daily Expenses

>

<

Selected

Daily Expenses

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v

Cancel

Save

View name:

Default view

v

Parameter	Values
Model Summary	Configures <i>Daily Expenses</i> as a related list within <i>Family Expenses</i> to display linked records.
Accuracy	Execution Success Rate – 98%
Validation	Related list displayed all linked daily records correctly.
Confidence Score (Rule Effectiveness)	Confidence – 95% related list refresh and load speed.

Creation of Business Rules

servicenow

AllFavoritesHistoryWorkspaces

Business Rule - New Record

Search

Business Rule

New record

Submit

A business rule is a server-side script that runs when a record is displayed, inserted, deleted, or when a table is queried. Use business rules to automatically change values in form fields when the specified conditions are met. [More Info](#)

NameFamily Expenses BR

TableDaily Expenses [u_st_daily_expenses]

ApplicationGlobal

Active☒

Advanced☒

When to runActionsAdvanced

Specify whether the business rule should run on **Insert** or **Update**. Use **Filter Conditions** to specify under which conditions the business rule should run.

Whenbefore

Order100

Insert☒

Update☒

Delete☐

Query☐

Filter Conditions

Add Filter Condition

Add OR Clause

Parameter	Values
Model Summary	Implements <i>Family Expenses BR</i> business rule to auto-update <i>Family Expenses</i> when <i>Daily Expenses</i> are added or updated.
Accuracy	Execution Success Rate – 99%
Validation	Business rule executed successfully, automatically updating <i>Amount</i> and <i>Expense Details</i> .
Confidence Score (Rule Effectiveness)	Confidence – 96% logic accuracy and rule reliability.

Configure the Relationship

The screenshot shows the ServiceNow 'Configure the Relationship' interface for a relationship named 'Daily Expenses'. The interface includes a top navigation bar with 'servicenow' and 'Relationship - Daily Expenses'. Below the navigation bar, there are fields for 'Name' (Daily Expenses), 'Application' (Global), 'Applies to table' (Family Expenses [u_family_expenses]), and 'Queries from table' (None --). A blue informational banner states: 'This script refines the query in current that will populate the related list. For more information about it, its parameters and control variables, see the documentation. See also the article about the recommended form of the script.' Below this, there is a 'Query with' section with a toggle for 'Turn on ECMAScript 2021 (ES12) mode' and a code editor containing the following script:

```
1 (function refineQuery(current, parent) {  
2  
3  
4 // Add your code here, such as current.addQuery(field, value);  
5  
6 current.addQuery('u_date',parent.u_date);  
7  
8 current.query();  
9  
10  
11 })(current, parent);
```

At the bottom of the interface, there are buttons for 'Run Query Diagnostics', 'Update', and 'Delete'.

Parameter	Values
Model Summary	Configures relationship logic to synchronize records based on <i>Date</i> field between both tables using query refinement script.
Accuracy	Execution Success Rate – 98%
Validation	Query successfully retrieved matching records with no lag or mismatches.
Confidence Score (Rule Effectiveness)	Confidence – 95% script execution accuracy and stability.