

## Performance and Testing

Date	2 November 2025
Team ID	NM2025TMID06655
Project Name	Calculating Family Expenses using ServiceNow
Maximum Marks	2

### Model Performance Testing

#### Creation of Family Expenses Table

The screenshot shows the ServiceNow interface for creating a new record in the 'Family Expenses' table. The form includes the following fields:

- Table:** Family Expenses
- Prefix:** MFE
- Number:** 1,000
- Application:** Global
- Number of digits:** 7

A 'Submit' button is located at the bottom left of the form. Below the form, there are links for 'Related Links' and '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
Table Columns for text Search		
Dictionary Entries		
Column label	Type	Reference
Created by	String	(empty)
Created	Date/Time	(empty)
Updated by	String	(empty)
Updates	Integer	(empty)
Sys ID	Sys ID (GUID)	(empty)
Updated	Date/Time	(empty)
Number	String	
Date	Date	
Amount	Integer	
Expense Details	String	800
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

Fields Field Types

Filter

Formatters

Activities (filtered)

Contextual Search Results

Ratings

Daily Expenses [u\_st\_daily\_expenses] 2 Column

Number Date

1 Column

Commands

Expense

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

## Creation of Daily Expenses Table

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

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

Columns	Controls	Application Access
Table Columns for text Search		
Dictionary Entries		
Column label	Type	Reference
Sys ID	Sys ID (GUID)	(empty)
Number	String	
Date	Date	
Expense	Integer	
Family Member Name	Reference	800
Commands	String	800
Insert a new row...		
Delete	Update	

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

Fields

Field Types

Filter

Formatters

Activities (filtered)

Contextual Search Results

Ratings

Daily Expenses [u\_st\_daily\_expenses]

2 Column

Number

Date

Commands

Expense

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

## Creation of Relationship between Family Expenses and Daily Expenses tables

servicenow All Favorites History Workspaces Admin Relationships

Relationship New record

Name:  Application:

Advanced ☐ Applies to table:  Queries from table:

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](#).

Query with ☐ Turn on ECMAScript 2021 (ES12) mode

```

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

```

Submit

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

# Configuring Related List on Family Expenses

Available

Attachments  
Daily Expenses

>

<

Selected

Daily Expenses

^

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](#)

Name

Family Expenses BR

Table

Daily Expenses [u\_st\_daily\_expenses]

Application

Global

Active

☒

Advanced

☒

When to run

Actions

Advanced

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

When

before

Order

100

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', 'All', 'Favorites', 'History', and 'Workspaces'. The main header shows 'Relationship - Daily Expenses' with a search bar and icons for 'Run Query Diagnostics', 'Update', and 'Delete'. Below the header, there are fields for 'Name' (Daily Expenses), 'Application' (Global), 'Advanced' (checkbox), '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, 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.