

Date	20 Feb 2026
Team ID	LTVIP2026TMIDS24859
Project Name	Calculate Family Expenses using Service Now
Mentor Name	Dr Shaik Salma Begum
Maximum Marks	10 Marks

Calculate Family Expenses

Objective

The objective of performance testing is to ensure that the Family Expense Management System performs efficiently when handling multiple expense records. It verifies that data insertion, business rules, relationships, and automatic calculations work correctly without delays or errors.

Milestone 1: Setting Up ServiceNow Instance:

- Sign up on developer.servicenow.com and create a developer account.
- Navigate to the Personal Developer Instance section and request a new instance.
- Fill out the required information and submit the request.
- Instance details (URL, username, password) will be sent via email.
- Log in to the instance using the provided credentials.
- The instance is ready for development and customization.

The screenshot shows the ServiceNow Developer portal interface. At the top, there's a navigation bar with 'Developer' selected, followed by 'Home', 'Learn', 'Reference', 'Guides', and 'Connect'. On the right, there are buttons for 'Manage my instance' and 'Start building'.

The main area is titled 'Manage my instance (dev281092)'. It shows the following details:

- Status:** Online
- Build Agent, ServiceNow Studio, App engine studio:** All are listed as 'Installed'.
- Your Current Version:** Zurich (Latest release).
- Instance URL:** https://dev281092.service-now.com
- User name:** admin
- Current password:** (redacted)
- User role:** Admin

Useful links:

- Personal Developer Instance (PDI) Guide
- PDI FAQs
- Managing your PDI
- Developer advocate blog

Plugins for your instance (46):

Sort: A-Z	Search
All activation statuses	All demo data statuses
Not activated	Activate all Software Asset
Not activated	Cloud Management
Not activated	Customer Service Virtual Agent

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Milestone 2: Creation of Table (Family Expenses):

- Navigate to All in the application navigator.
- In the filter search bar, type Tables and select it from the results.
- Click on the New button to create a new table.
- In the form, provide the following details:
- Label: Family Expenses
- Name: Auto-populated
- New menu name: Family Expenditure
- Navigate to the header section of the form, right-click on the header, and select Save.

Update Set - Family Expenses

Field	Value
Name	Family Expenses
State	In progress
Parent	
Release date	
Install date	
Installed from	
Description	
Application	Global
Created	2026-02-19 06:26:28
Created by	admin
Merged to	

Related Links

- Merge With Another Update Set
- Scan Update Set

Customer Updates (55) Update Set Logs Child Update Sets Install History

Created	Type	View	Target name	Updated by	Remote update set	Action
2026-02-19 06:29:43	Application Menu		Family Expenditure	admin	(empty)	INSERT_OR_UPDATE

Milestone 3: Creation of Fields (Family Expenses):

After saving the table scroll down

- Create the following fields
 - Number : String
 - Date : Date
 - Amount : Integer
 - Expense Details : String
- Click Save

Column label	Type	Reference	Max length	Default value	Display
Number	String	(empty)	40	javascript:getNextObjNumberPadded();	false
Updated	Date/Time	(empty)	40		false
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
Expense Details	String	(empty)	800		false
Amount	Integer	(empty)	40		false
Date	Date	(empty)	40		false

Milestone 4: Creation of Table (Daily Expenses):

- Navigate to Tables in the application navigator.
- Click on New.
- Provide the following details:
 - Label: Daily Expenses
 - Name: Auto-populated
 - Add menu to: Family Expenditure

- Click Save.

Create the following fields:

- Number : String
- Date : Date
- Expense : Integer
- Family Member Name : Reference (Family Expenses)
- Comments : String

Click Save

Dictionary Entry - Number

* Table	Family Expenses [u_family_expenses]	Application	Global
* Type	String	Active	<input checked="" type="checkbox"/>
* Column label	Number	Function field	<input type="checkbox"/>
* Column name	u_number	Read only	<input checked="" type="checkbox"/>
* Max length	40	Mandatory	<input type="checkbox"/>
Alters the behavior of a field or functionality that depends on the field. More Info			
Attributes			
Choice List Specification Calculated Value Default Value <p>The Default value specifies what value the field has when first displayed.</p> <p>Use dynamic default <input checked="" type="checkbox"/></p> <p>Dynamic default value Get Next Padded Number</p>			

Number

* Table	Family Expenses	Prefix	MFE
* Number			1,000
Application	Global		
Number of digits		<input type="checkbox"/>	
<input type="button" value="Submit"/>			
Related Links Show Counter			

Table - Daily Expenses

Updated by	Type	(empty)	40	false
Updates	Integer	(empty)	40	false
Updated	Date/Time	(empty)	40	false
Created by	String	(empty)	40	false
Created	Date/Time	(empty)	40	false
Sys ID	Sys ID (GUID)	(empty)	32	false
x <input type="checkbox"/> Number	String			false
x <input type="checkbox"/> Date	Date			false
x <input type="checkbox"/> Expense	Integer			false
x <input type="checkbox"/> Family member	Reference			false
Insert a new row...				
<input type="button" value="Delete"/> <input type="button" value="Update"/> <input type="button" value="Delete All Records"/>				
Related Links Form Builder Design Form Layout Form Layout List Show Form Show List				

Milestone 5: Creation of Relationship:

- Navigate to System Definition → Relationships
- Click New
- Fill the following details:
 - Name: Daily Expenses
 - Applies to Table: Family Expenses
 - Related List Table: Daily Expenses
- Click Submit

Table - New Record

* Label: Daily Expenses
* Name: u_daily_expenses

Application: Global
Create module:
Create mobile module:
Add module to menu: -- Create new --
New menu name: Daily Expenses

Relationship - Daily Expenses

Name: Daily Expenses
Advanced:

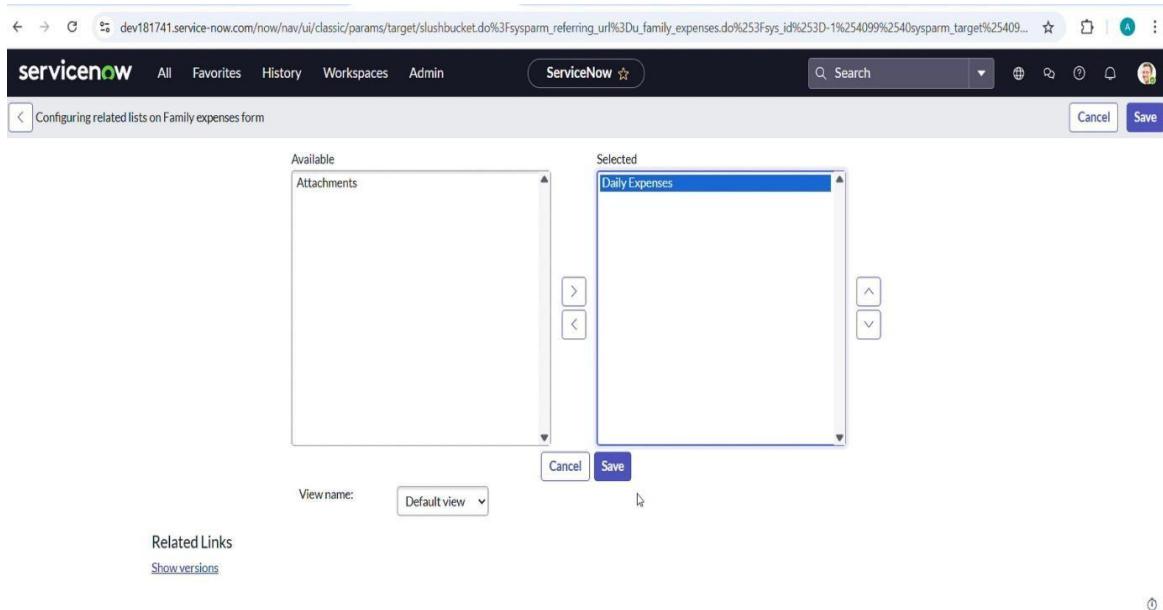
Applies to table: Family expenses [u.family_expenses]
Queries from table: Daily Expenses [u.daily_expenses]

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);

```



Milestone 6: Creation of Business Rule:

- Navigate to System Definition → Business Rules
- Click New
- Fill the following details:
 - Name: Family Expenses Business Rule
 - Table: Daily Expenses
 - When: Before
 - Insert: Checked
 - Update: Checked
- **Add the script:**

```
(function executeRule(current, previous) {

    var family = new GlideRecord('u_family_expenses');

    family.addQuery('u_date', current.u_date);

    family.query();

    if (family.next()) {

        family.u_amount = parseInt(family.u_amount) + parseInt(current.u_expense);

        family.u_expense_details = family.u_expense_details +
        ">" + current.u_comments + ":Rs." + current.u_expense;

        family.update();
    }
})
```

```

}

else {

var newFamily = new GlideRecord('u_family_expenses');

newFamily.initialize();

newFamily.u_date = current.u_date;

newFamily.u_amount = current.u_expense;

newFamily.u_expense_details =
">" + current.u_comments + ":Rs." + current.u_expense;

newFamily.insert();

}

})(current, previous);

```

Click Submit

The screenshot shows the ServiceNow interface for creating a new business rule. The top navigation bar includes links for All, Favorites, History, Workspaces, and a search bar. The main title is "Business Rule - New Record". Below the title, there are fields for "Name" (set to "Family expenses BR"), "Table" (set to "Daily Expenses [u_daily_expenses]"), and checkboxes for "Application" (set to "Global"), "Active" (checked), and "Advanced" (checked). The "Advanced" tab is currently selected. Under the "Actions" tab, there is a "Condition" field which is empty. The "Script" section is expanded, showing the ECMAScript 2021 (ES12) mode. The script code is identical to the one provided in the text above.

Milestone 7: Creation of Relationship Query Script:

- o Navigate to System Definition → Relationships
- o Open Daily Expenses relationship
- o Check Advanced

- In Query with section, enter:

```
(function refineQuery(current, parent) {
```

```
current.addQuery('u_date', parent.u_date);
```

```
current.query();
```

```
})(current, parent);
```

Click Update

Relationship - Daily Expenses

Name: Daily Expenses Application: Global

Advanced: Applies to table: Family expenses [u_family_expenses]

Queries from table: Daily Expenses [u_daily_expenses]

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

```
// Add your code here, such as current.addQuery(field, value);
current.addQuery('u_date',parent.u_date);
current.query();
})(current, parent);
```

Update Delete

Milestone 8: Testing of Family Expenses Application:

- Navigate to All → Daily Expenses
 - Click New
 - Enter details:
 - Date: 20-02-2026
 - Expense: 500
 - Family Member Name: Select record
 - Comments: Food Expense
 - Click Submit

Verification:

 - Navigate to Family Expenses
 - Check that Amount is automatically updated
 - Check Expense Details is automatically updated
 - Verify related Daily Expenses records are displayed

servicenow All Favorites History Workspaces : Family Expenses - MFE0001004 ⚡

Family Expenses
MFE0001004

Number: MFE0001004 * Date: 2026-02-19 * Amount: 1,000

Expense Details: Food-food:Rs.500/-

[Update](#) [Delete](#)

