

# **Project title : Calculating Family Expenses Using Servicenow**

**TEAM ID : LTVIP2026TMIDS35882**

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## **CALCULATING FAMILY EXPENSES USING SERVICENOW**

### **Aim of the project**

To develop a centralized and automated platform that helps individuals or families track, manage, and optimize their expenses with ease. The goal is to promote financial discipline and simplify budget planning by using the powerful features of ServiceNow like scripting, reporting, and process automation. The project aims to develop a comprehensive expense calculation system using ServiceNow. This system will enable users to track and manage family expenses efficiently. It will include features such as expense categorization, budget setting, real-time tracking, and reporting capabilities. Utilizing ServiceNow's robust platform, the project will ensure seamless integration, user-friendly interface, and scalability to accommodate varying family sizes and financial complexities. The end goal is to empower users with the tools they need to make informed financial decisions and promote financial well-being within the family unit.

### **Milestone-1**

#### **Setting up servicenow instance**

1. Sign up for a developer account on the ServiceNow Developer site "<https://developer.servicenow.com>".
2. Once logged in, navigate to the "Personal Developer Instance" section.
3. Click on "Request Instance" to create a new ServiceNow instance.
4. Fill out the required information and submit the request.
5. You'll receive an email with the instance details once it's ready.
6. Log in to your ServiceNow instance using the provided credentials.
7. Now you will navigate to the ServiceNow.

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developer.servicenow.com/dev.do#/

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ENG IN 4:27 PM 6/27/2025

ServiceNow

signon.servicenow.com/x\_snc\_sso\_auth.do?pageld=login

servicenow Developer Portal

## Solve problems. Explore resources. Get help.

Sign in with your ServiceNow ID

\*Email

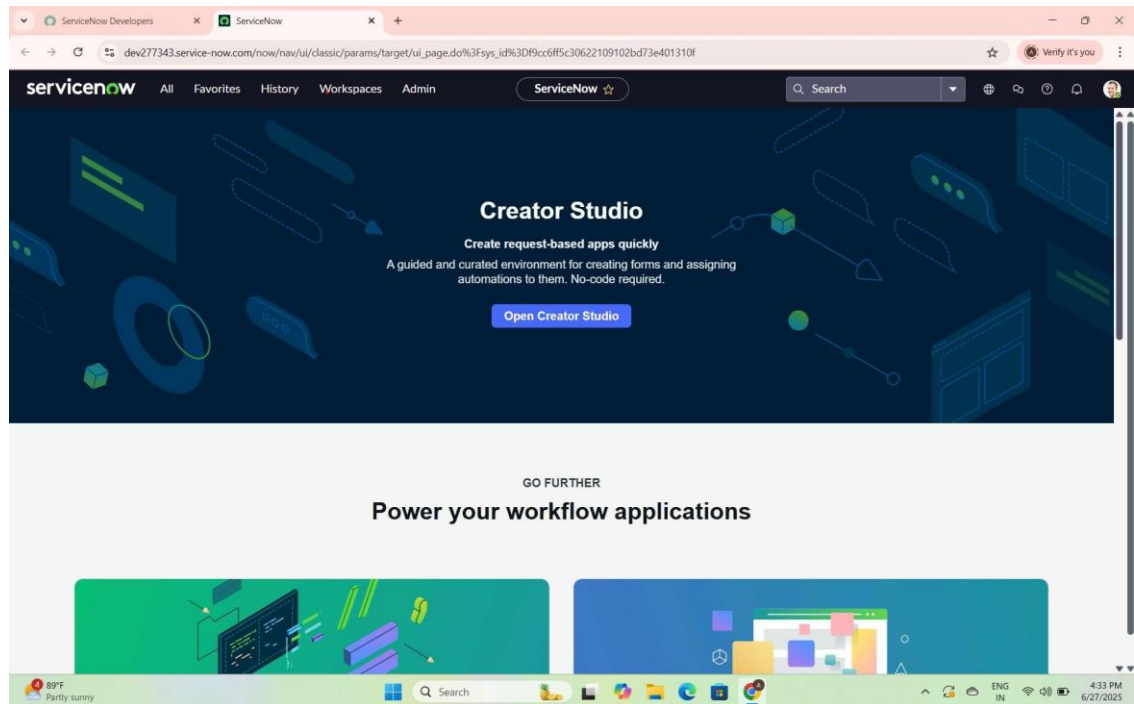
varadharajunavya@gmail.com

Next

New user? Get a ServiceNow ID

Need assistance with sign in?

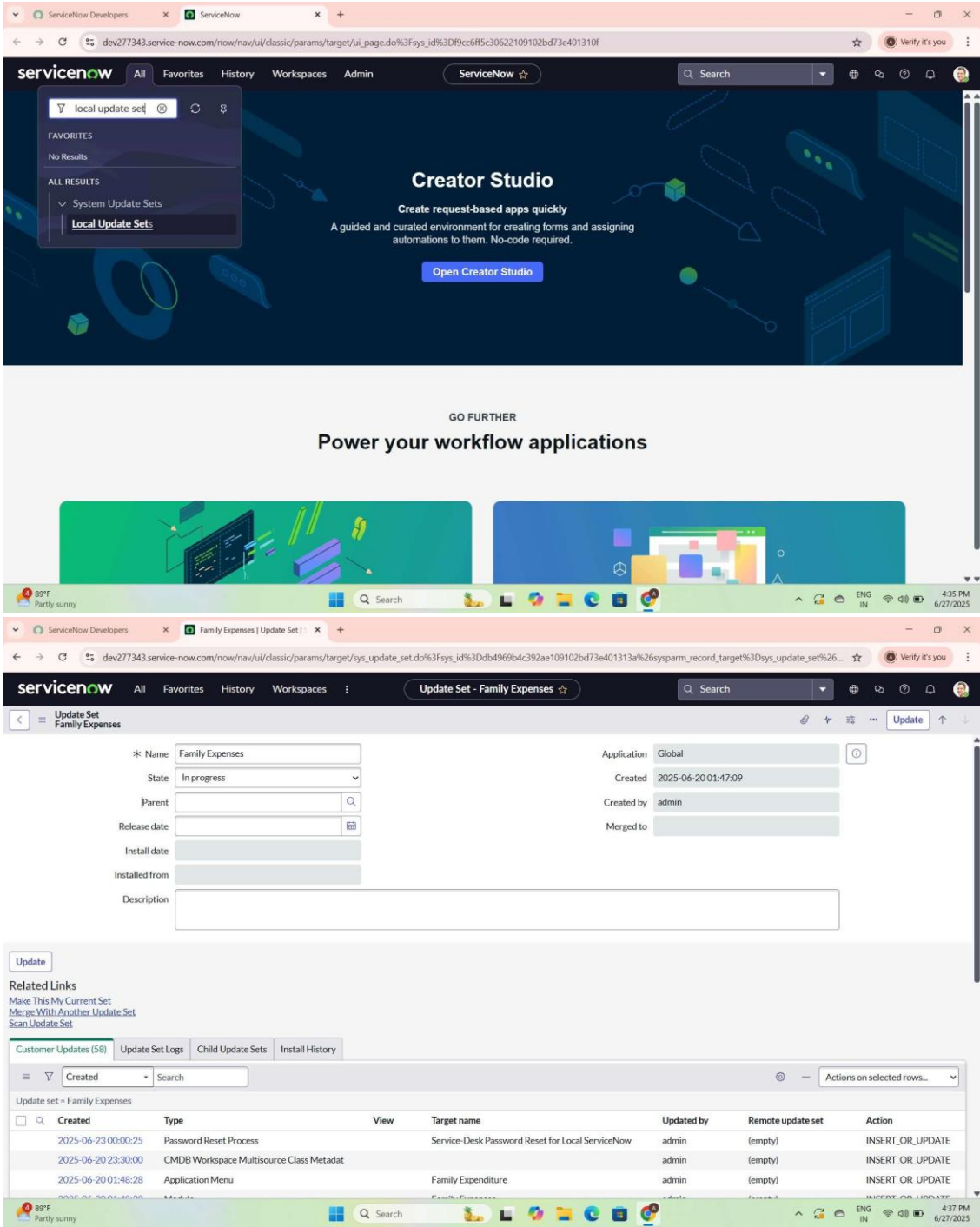
ENG IN 18:06 19-02-2026



## Milestone-2

### Creation Of New Update Set

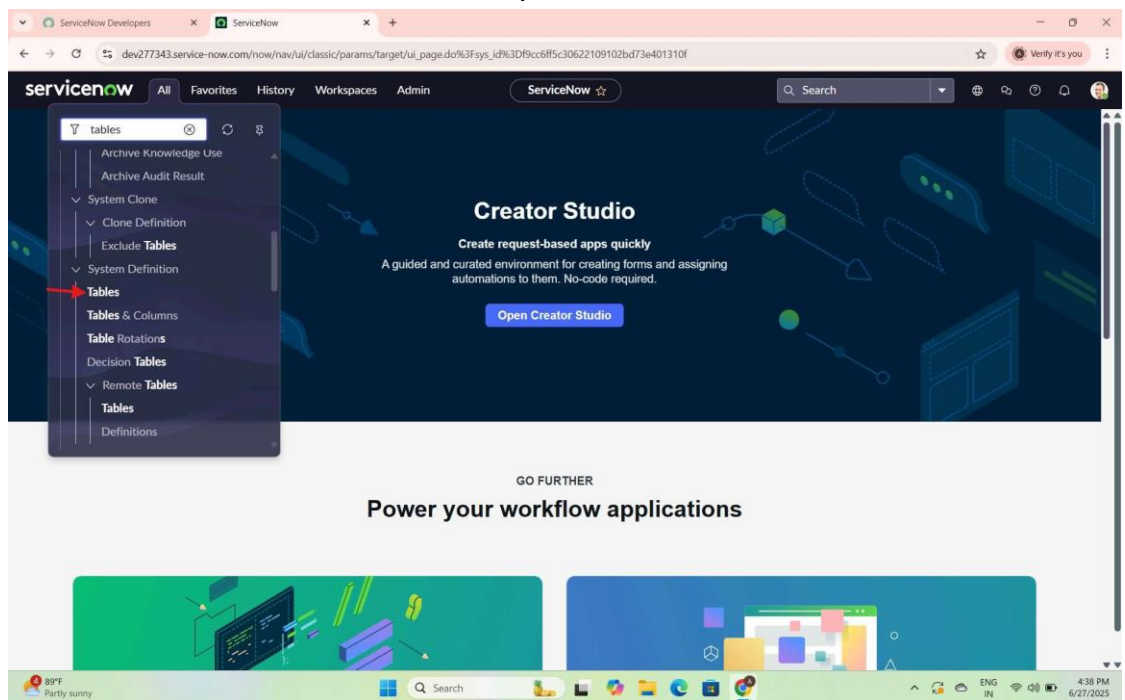
1. Go to All >> In the filter search for Local Update set > click on New.
2. Enter the Details as: Name : Family Expenses
3. Then click on Submit and Make current.



### Milestone-3

### Creation Of Family Expenses Table

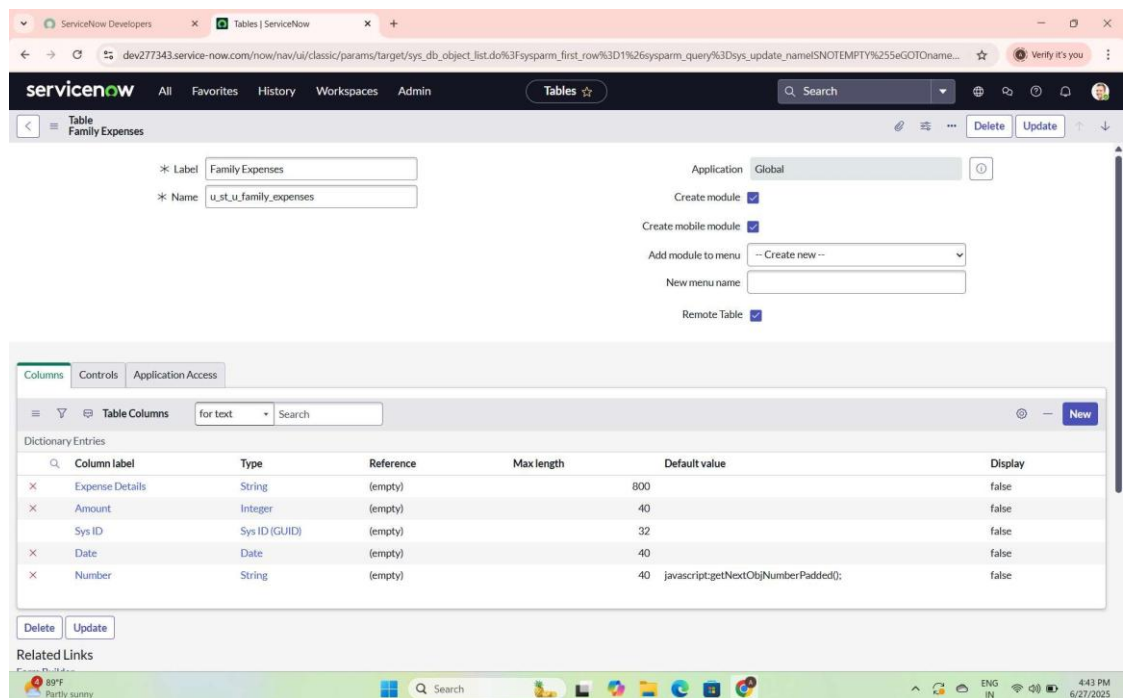
1. Go to All > In the filter search for Tables > click on New.



2. Enter the Details: Label : Family Expenses Name : Auto-Populated New menu name : Family Expenditure
3. Go to the Header and right click there>> click on Save.

### Creation of columns(fields)

4. Near Columns Double click near insert a new row.
5. Give the details as: Column label : Number Type : String
6. Double click on insert a new row again
7. Give the details as: Column label : Date Type : Date
8. Double click on insert a new row again
9. Give the details as: Column label : Amount Type : Integer
10. Double click on insert a new row again
11. Give the details as: Column label : Expense Details Type : String Max length : 800
12. Go to the Header and right click there>> click on Save.



### . Making Number Field An Auto-Number

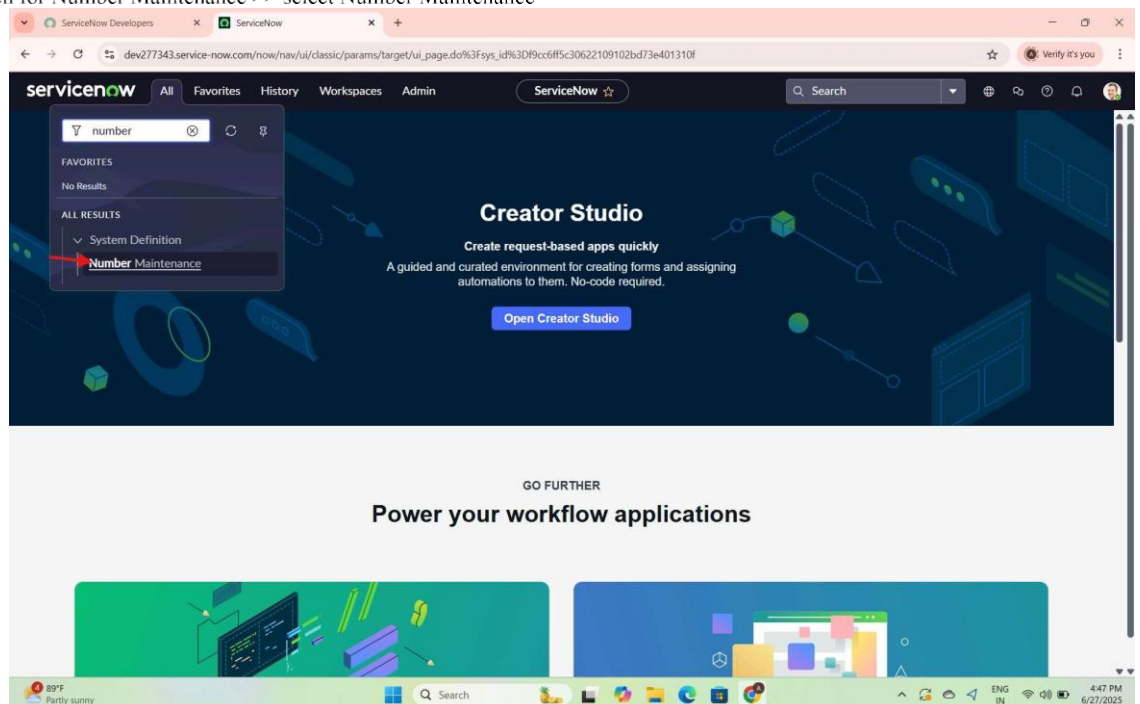
1. Double click on the Number Field/Column.
2. Go down and double click on Advanced view

## Project

3. In Default Value: Use dynamic default : check the box Dynamic default value : Get Next Padded Number
4. Click on Update.

The screenshot shows the 'Dictionary Entry - Number' form in the 'Default Value' tab. The 'Use dynamic default' checkbox is checked, and the 'Dynamic default value' is set to 'Get Next Padded Number'. The 'Update' button is highlighted with a red box. The 'Attributes' section is empty. The 'Related Links' section shows 'Show Table' and 'Run Point Scan'. The 'Access Controls' section shows a table with columns: Name, Decision Type, Operation, Type, Active, Updated by, and Updated. The table is currently empty, displaying 'No records to display'.

5. Go to All >> In the filter search for Number Maintenance >> select Number Maintenance



6. Click on New.
7. Enter the below Details: Table : Family Expenses Prefix : MFE
8. Click on Submit.



## Project

The screenshot shows the ServiceNow configuration page for the 'Family Expenses' table. The table name is 'Family Expenses', the prefix is 'MFE', the number is '1,000', the application is 'Global', and the number of digits is '7'. There are 'Update' and 'Delete' buttons at the top right. Below the configuration fields, there is a 'Related Links' section with a 'Show Counter' link. The bottom of the page shows a taskbar with various application icons and a system clock indicating 4:50 PM on 6/27/2025.

### . Configure the form

1. Go to All >> In the filter search for Family Expenses >> Open Family Expenses
2. Click on New
3. Go to the Header and right click there>> click on Configure >> Select Form Design

The screenshot shows the 'Family Expenses - Create MFE0001006' form in ServiceNow. The configuration menu is open, showing options like 'Form Builder', 'Form Design', 'Form Layout', 'Related Lists', 'All', 'Table', 'Security Rules', 'Business Rules', 'Client Scripts', 'UI Policies', 'Data Policies', 'UI Actions', 'Notifications', and 'Dictionary'. The form fields include 'Date' and 'Amount', both marked as mandatory with an asterisk. The bottom of the page shows a taskbar with various application icons and a system clock indicating 4:53 PM on 6/27/2025.

4. Customize or Drag Drop the form as per your requirement.
5. Make Number Read-Only Field by clicking on the gear icon and checking Read-Only
6. Make Date, Amount Mandatory Field by clicking on the gear icon and checking Mandatory
7. Click on Save.

The screenshot shows the ServiceNow Form Designer interface for the 'Family Expenses' table. The interface is divided into a sidebar on the left and a main workspace on the right. The sidebar contains a 'Fields' tab and a 'Field Types' tab. The 'Fields' tab is active, showing a list of fields: 'Number', 'Date', 'Amount', and 'Expense Details'. The 'Field Types' tab is also visible. The main workspace shows a table structure with two columns: 'Number' and 'Date'. The 'Number' column is set to 'Integer' and the 'Date' column is set to 'Date'. The 'Amount' column is set to 'Integer'. The 'Expense Details' column is set to 'Text'. The table is titled 'Family Expenses [u\_st\_u\_family\_expenses]'.

## Milestone-4

### Creation Of Daily Expenses Table

1. Go to All > In the filter search for Tables > click on New.
2. Enter the Details: Label : Daily Expenses Name : Auto-Populated Add Module to menu : Family Expenditure
3. Go to the Header and right click there>> click on Save.

#### Creation of columns(fields)

4. Near Columns Double click near insert a new row.
5. Give the details as: Column label : Number Type : String
6. Double click on insert a new row again
7. Give the details as: Column label : Date Type : Date
8. Double click on insert a new row again
9. Give the details as: Column label : Expense Type : Integer
10. Double click on insert a new row again
11. Give the details as: Column label : Family Member Name Type : Reference Max length : 800
12. Double click on insert a new row again
13. Give the details as: Column label : Comments Type : String Max length : 800
14. Go to the Header and right click there>> click on Save.



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

### . Making Number Field An Auto-Number

15. Double click on the Number Field/Column.
16. Go down and double click on Advanced view
17. In Default Value: Use dynamic default : check the box Dynamic default value : Get Next Padded Number
18. Click on Update.

Alters the behavior of a field or functionality that depends on the field. [More Info](#)

Attributes

Choice List Specification | Calculated Value | **Default Value**

The **Default value** specifies what value the field has when first displayed.

☒ Use dynamic default

Dynamic default value: Get Next Padded Number

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

Related Links

[Show Table](#)

[Run Point Scan](#)

19. Go to All >> In the filter search for Number Maintenance >> select Number Maintenance
20. Click on New.
21. Enter the below Details: Table : Family Expenses Prefix : DFE
22. Click on Submit.

### . Configure the form

23. Go to All >> In the filter search for Daily Expenses >> Open Daily Expenses
24. Click on New
25. Go to the Header and right click there>> click on Configure >> Select Form Design
26. Customize or Drag Drop the form as per your requirement.

## Project

The screenshot shows the ServiceNow Form Design interface for a form named 'Daily Expenses [u\_daily\_expenses]'. The interface is divided into two main sections: a left sidebar and a main design area. The sidebar contains a 'Fields' section with a search filter and a list of fields including 'Created', 'Created by', 'Updated', 'Updated by', and 'Updates'. Below this is a 'Formatters' section with options like 'Activities (filtered)', 'Contextual Search Results', and 'Ratings'. The main design area shows the form layout with two columns. The first column contains fields for 'Number', 'Date', and 'Family Member Name'. The second column contains a 'Comments' field. Each field has a gear icon for configuration. The top of the interface shows the browser address bar with the URL 'dev277343.service-now.com/\$ng\_fd.do?sysparm\_attributes=startTable=u\_daily\_expenses%2CstartView:Default%20view' and a 'Verify it's you' button. The bottom of the interface shows a Windows taskbar with various application icons and a system tray with the date and time '4:57 PM 6/27/2025'.

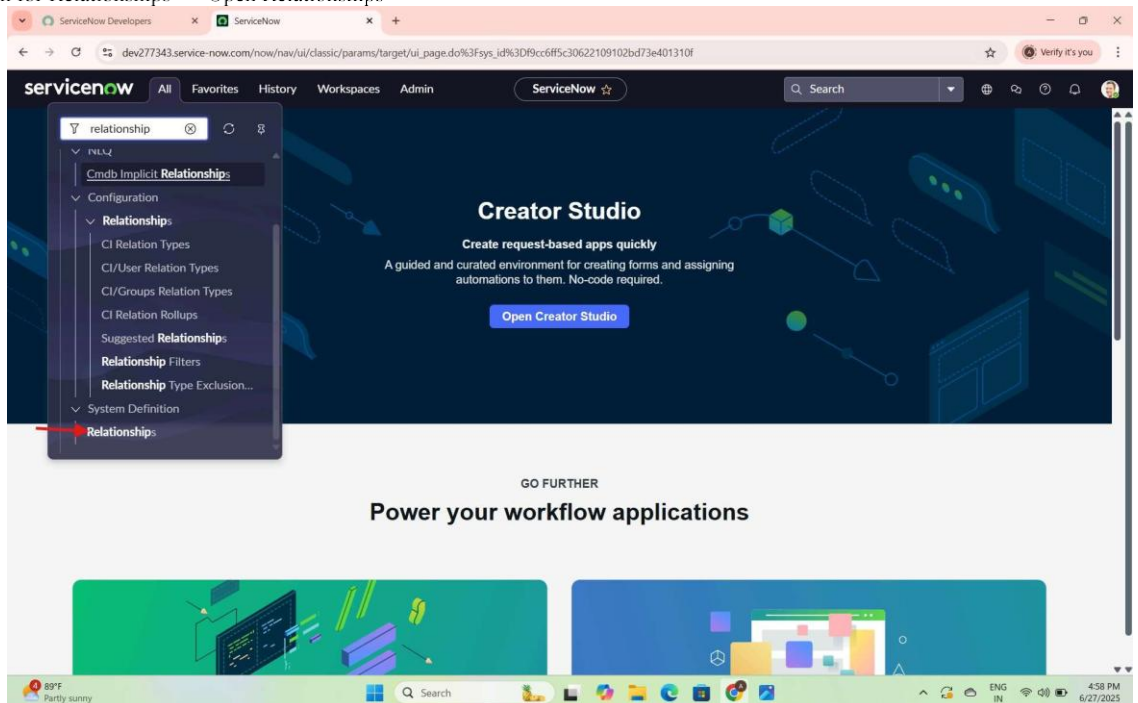
27. Make Number Read-Only Field by clicking on the gear icon and checking Read-Only
28. Make Date, Family Member Name Mandatory Field by clicking on the gear icon and checking Mandatory
29. Click on Save.

## Milestone-5

### Creation Of Relationship

#### . Creation Of Relationship Between Family Expenses And Daily Expenses

1. Go to All >> In the filter search for Relationships >> Open Relationships



2. Click on New.
3. Enter the details: Name : Daily Expenses Applies to table : Select Family Expenses Daily Expenses : Select Daily Expenses
4. Click Save.

ServiceNow Relationship - Daily Expenses

Name:

Advanced: ☐

Application:

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
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);
  
```

Update Delete

Related Links

[Run Point Scan](#)

## Milestone-6

### Configuring Related List On Family Expenses

1. Go to All >> In the filter search for Family Expenses >> Open Family Expenses
2. Click on New
3. Go to the Header and right click there>> click on Configure >> Select Related Lists

ServiceNow Family Expenses - Create MFE0001007

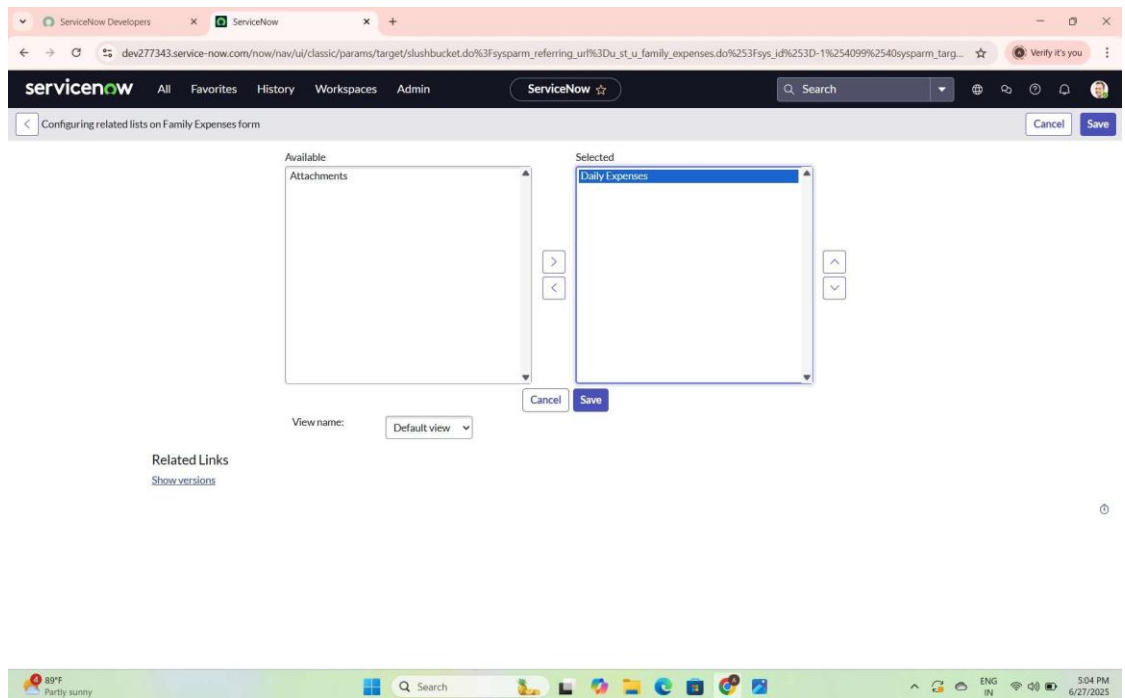
Number:

Expense Details:

Submit

Save  
Configure  
Export  
Create Favorite  
Copy URL  
Copy sys\_id  
Reload form  
Form Builder  
Form Design  
Form Layout  
Related Lists  
All  
Table  
Security Rules  
Business Rules  
Client Scripts  
UI Policies  
Data Policies  
UI Actions  
Notifications  
Dictionary

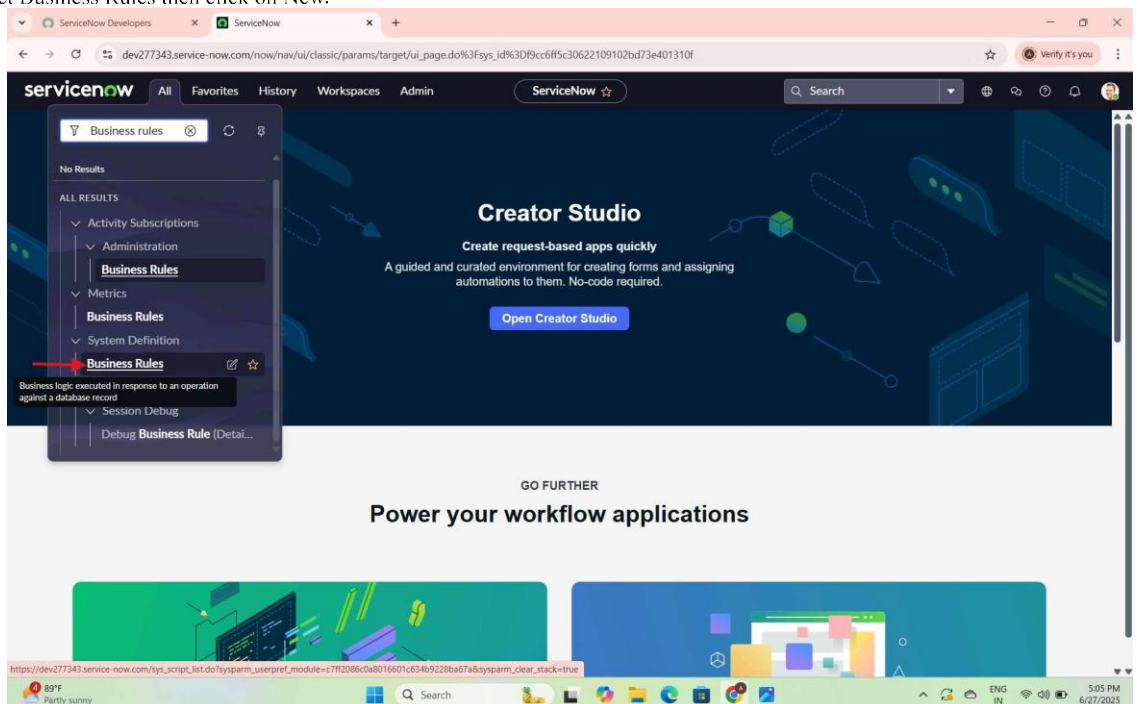
4. Add Daily Expenses to the Selected Area.
5. Click on Save



## Milestone-7

### Creation Of Business Rules

1. Go to All >> In the filter search for Business Rules.
2. Under System Definition Select Business Rules then click on New.



3. Enter the Details: Name : Family Expenses BR Table : Select Daily Expenses Check Advanced
4. In when to run Check Insert and Update

The screenshot shows the ServiceNow Business Rule configuration page for 'Family Expenses'. The 'Name' field is 'Family Expenses' and the 'Table' is 'Daily Expenses [u\_daily\_expenses]'. The 'Application' is 'Global'. The 'Active' and 'Advanced' checkboxes are checked. The 'When to run' tab is selected, showing 'When' as 'before' and 'Order' as '100'. The 'Filter Conditions' section has 'Add Filter Condition' and 'Add OR Clause' buttons. The 'Role conditions' section has a 'Role conditions' button. The 'Update' and 'Delete' buttons are at the bottom.

5. In Advance (we write the code): Write the below code >> (function executeRule(current, previous /\*null when async\*/) { var FamilyExpenses = new GlideRecord('u\_family\_expenses'); FamilyExpenses.addQuery('u\_date', current.u\_date); FamilyExpenses.query(); if (FamilyExpenses.next()) { FamilyExpenses.u\_amount += current.u\_expense; FamilyExpenses.u\_expense\_details += ">" + current.u\_comments + "Rs." + current.u\_expense + "/-"; FamilyExpenses.update(); } else { var NewFamilyExpenses = new GlideRecord('u\_family\_expenses'); NewFamilyExpenses.u\_date = current.u\_date; NewFamilyExpenses.u\_amount = current.u\_expense; NewFamilyExpenses.u\_expense\_details += ">" + current.u\_comments + "Rs." + current.u\_expense + "/-"; NewFamilyExpenses.insert(); } })(current, previous);
6. Go to the Header and right click there >> click on Save.

The screenshot shows the ServiceNow Business Rule configuration page for 'Family Expenses' with the 'Advanced' tab selected. The 'Condition' field is empty. The 'Script' section is checked, and the code is written in ECMAScript 2021 (ES12) mode. The code is as follows:

```

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

```

## Milestone-8

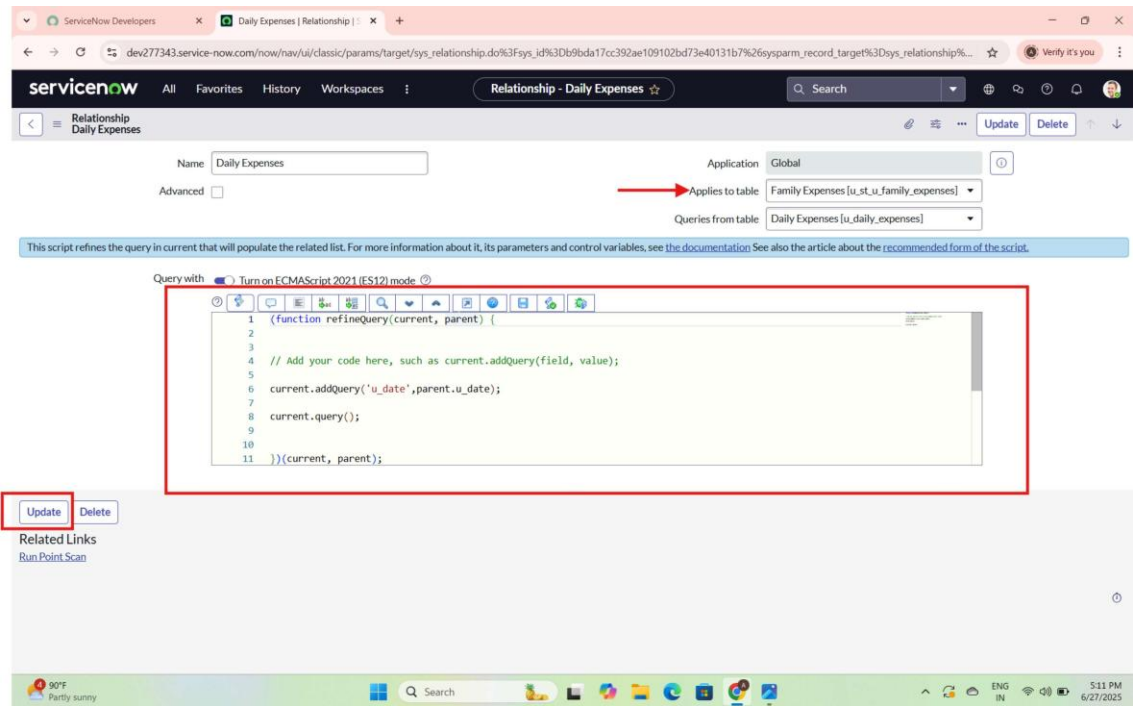
### Configure The Relationship

1. Go to All >> In the filter search for Relationships >> Open Relationships.
2. In that, open Daily Expenses Relationship.
3. For Applies to table : Select Family Expenses.
4. In Query with : write the below Query. (function refineQuery(current, parent) { // Add your code here, such as current.addQuery(field, value); current.addQuery('u\_date', parent.u\_date); current.query(); })(current, parent);





5. Click on Update.



## Conclusion

In conclusion, implementing the "Calculation of Family Expenses Using ServiceNow" project offers numerous benefits to the household. By leveraging the robust capabilities of ServiceNow, family members can efficiently submit, track, and manage their expenses in a centralized and streamlined manner.