

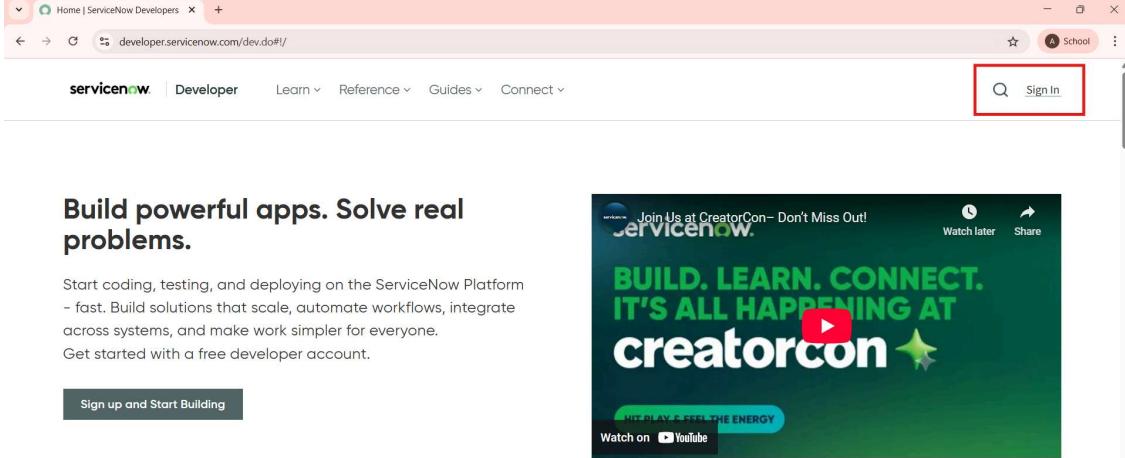
Project title : Calculating Family Expenses Using Servicenow**Team ID : LTVIP2025TMID29665****Team Leader : Gutipalli Sravanth****Team Member : Sree Harsha Raj Pasupuleti****Team Member : M Sai Datta****Team Member : Arun Kumar Talar**

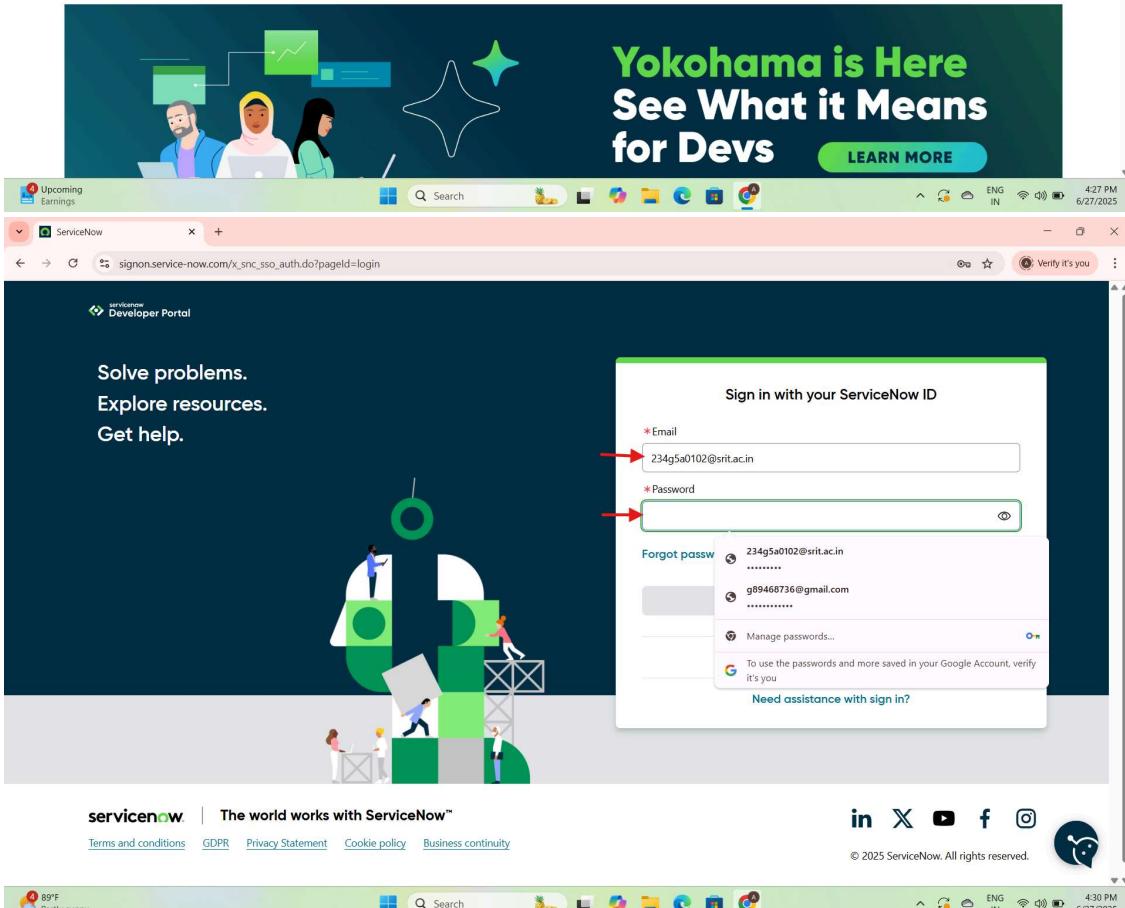
CALCULATING FAMILY EXPENSES USING SERVICENOW**Aim of the project**

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.





The screenshot shows two browser windows side-by-side. The top window is the ServiceNow Developers homepage, featuring a welcome message for 'Hello, ARUN KUMAR', a 'Start Building' button, and a 'New to ServiceNow' section. The bottom window is a developer workspace titled 'Creator Studio', which allows users to 'Create request-based apps quickly'. Both windows have a Windows taskbar at the bottom showing various application icons.

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.

The screenshot shows two overlapping ServiceNow browser windows. The top window is titled 'Creator Studio' and displays a 'Local Update Set' search result. The bottom window is titled 'Update Set - Family Expenses' and shows the configuration of a new update set named 'Family Expenses'. The configuration includes fields like Name, State, Parent, Release date, Install date, Installed from, Application, Created, Created by, and Merged to. Below the configuration is a 'Related Links' section with options like 'Make This My Current Set', 'Merge With Another Update Set', and 'Scan Update Set'. At the bottom is a table showing update logs for the 'Family Expenses' update set.

Created	Type	View	Target name	Updated by	Remote update set	Action
2025-06-23 00:00:25	Password Reset Process		Service-Desk Password Reset for Local ServiceNow	admin	(empty)	INSERT_OR_UPDATE
2025-06-20 23:30:00	CMDB Workspace Multisource Class Metadata			admin	(empty)	INSERT_OR_UPDATE
2025-06-20 00:14:28	Application Menu		Family Expenditure	admin	(empty)	INSERT_OR_UPDATE

Milestone-3

Creation Of Family Expenses Table

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

The screenshot shows the ServiceNow web interface. A red arrow points to the 'Tables' option in the left-hand navigation menu. The main content area features a dark blue background with white text and icons related to app creation and workflow. A prominent button labeled 'Open Creator Studio' is visible.

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.

The screenshot shows the 'Tables' screen in ServiceNow. A table named 'Family Expenses' is displayed with five columns: 'Expense Details', 'Amount', 'Sys ID', 'Date', and 'Number'. The 'Expense Details' column has a max length of 800. The 'Controls' tab is visible at the bottom of the table view.

Making Number Field An Auto-Number

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

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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' page in ServiceNow. The 'Default Value' tab is selected. A red arrow points to the 'Use dynamic default' checkbox, which is checked. A red box highlights the 'Get Next Padded Number' value in the 'Dynamic default value' field. The 'Update' button is also highlighted with a red box.

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

The screenshot shows the ServiceNow search interface with the query 'number'. The results show 'FAVORITES' with 'No Results' and 'ALL RESULTS' with 'System Definition' and 'Number Maintenance'. A red arrow points to the 'Number Maintenance' item under 'ALL RESULTS'.

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

Number - MFE

* Table: Family Expenses

Prefix: MFE

* Number: 1,000

Application: Global

Number of digits: 7

Update Delete

. 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

Family Expenses - Create MFE0001006

Configure >

Form Design

Form Layout

Related Lists

All

Date

Amount

Submit

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.

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.

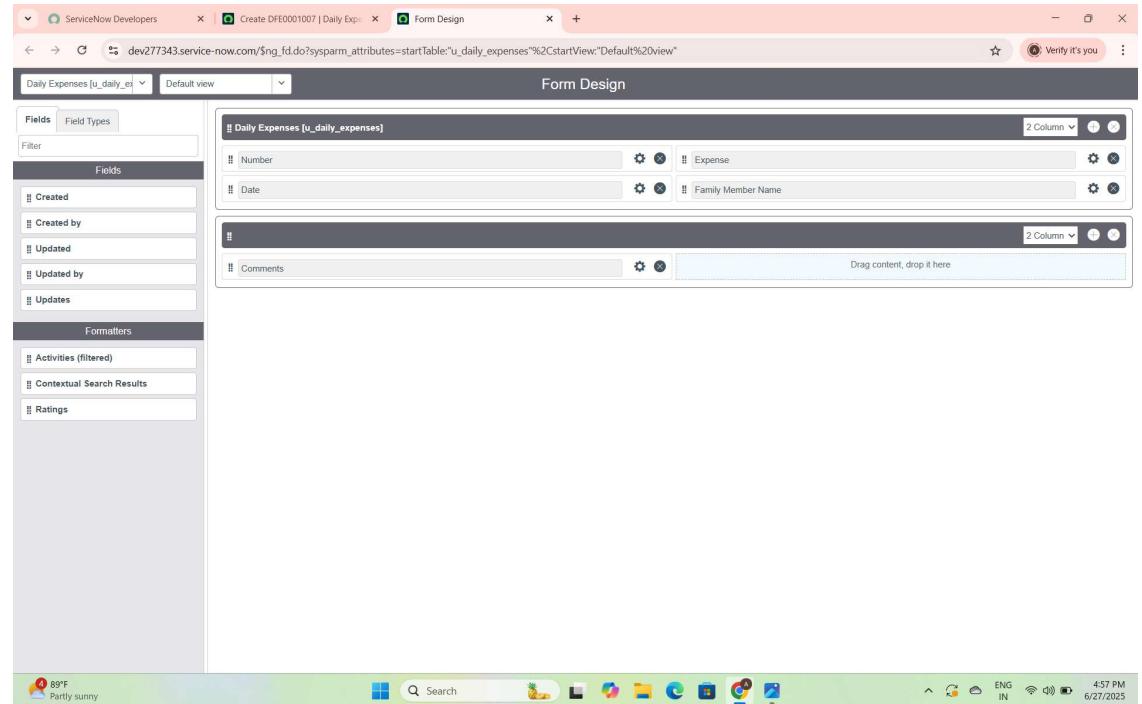
. Making Number Field An Auto-Number

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.

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.



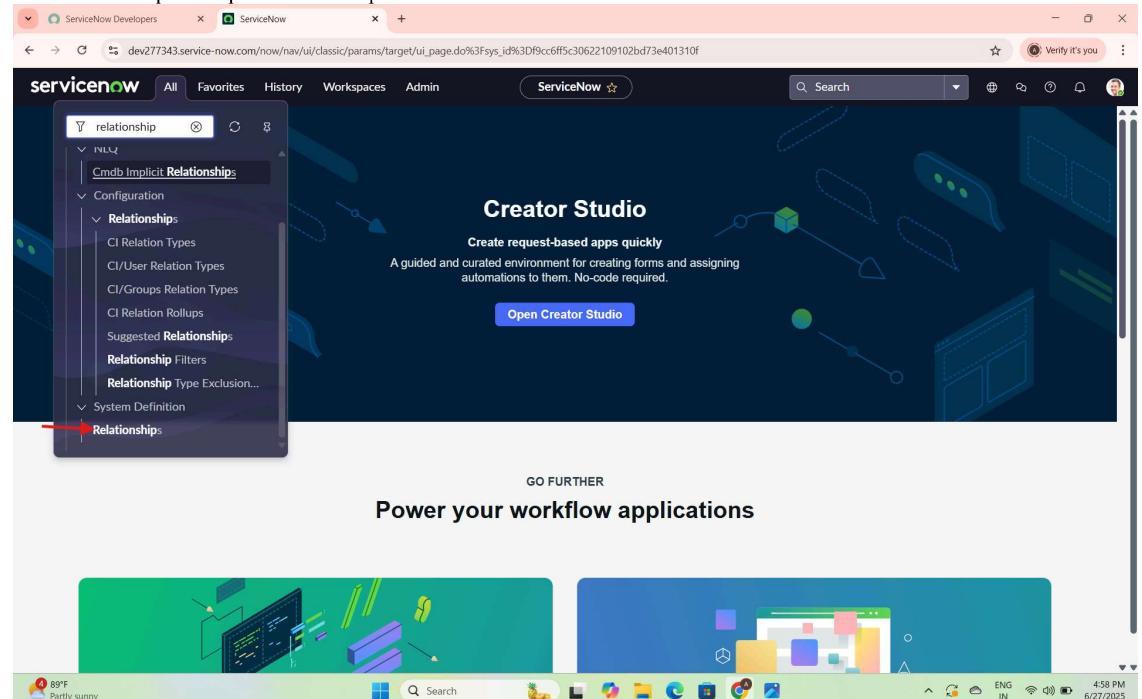
27. Make Number Read-Only Field by clicking on the gear icon and checking Read-Only
28. Make Date, Family Member Name Mandatory Field by clicking on the gear icon and checking Mandatory
29. Click on Save.

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.

The screenshot shows the ServiceNow Developers interface with the following details:

- Name:** Daily Expenses
- Advanced:**
- Application:** Global
- Applies to table:** Family Expenses [u_st_u_family_expenses]
- Queries from table:** Daily Expenses [u_daily_expenses]
- Query 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 })(current, parent);
11

```
- Buttons:** Update, Delete
- Related Links:** Run Point Scan

Milestone-6

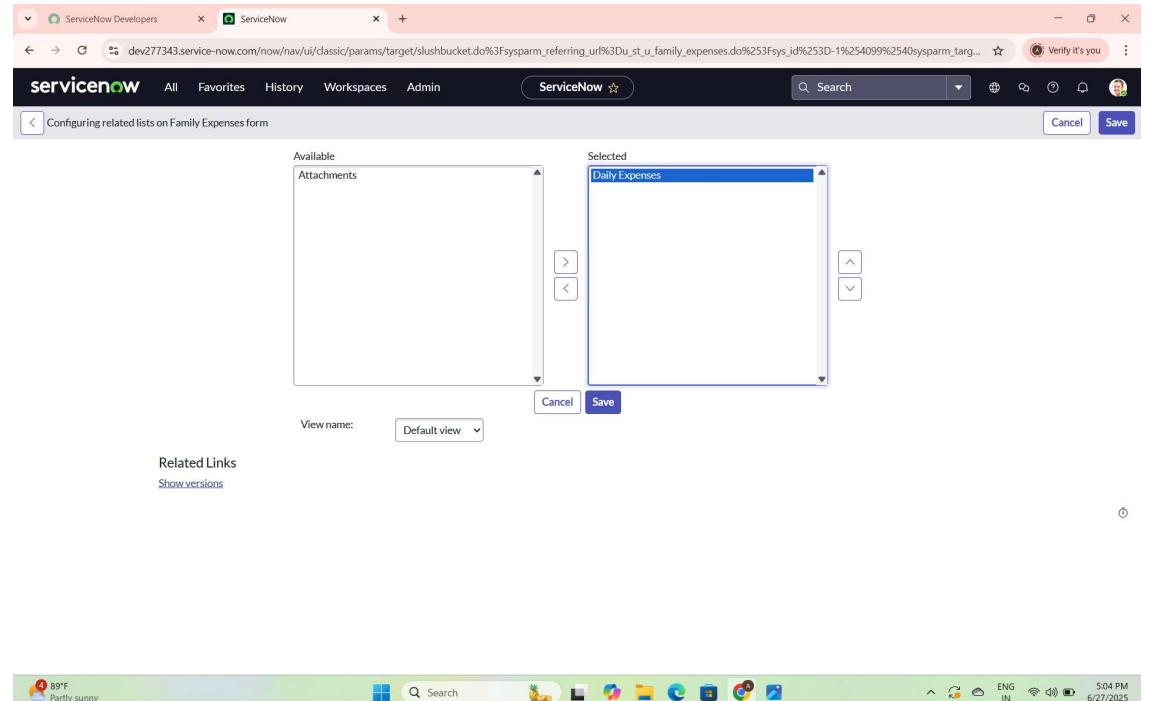
Configuring Related List On Family Expenses

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

The screenshot shows the ServiceNow Create MFE0001007 form with the following details:

- Number:** MFE0001007
- Expense Details:**
- Save Context Menu:**
 - Configure >
 - Export >
 - Create Favorite
 - Copy URL
 - Copy sys_id
 - Reload form
 - Related Lists
- Buttons:** Submit

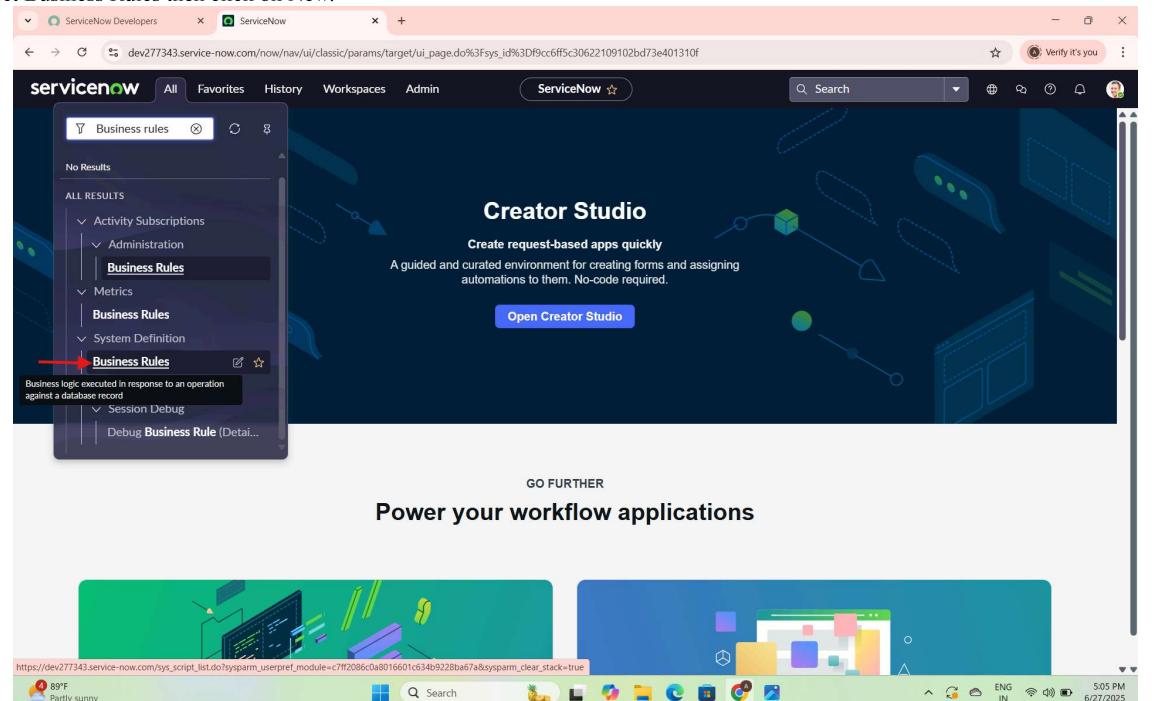
4. Add Daily Expenses to the Selected Area.
5. Click on Save



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

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
Table: Daily Expenses [u_daily_expenses]

Application: Global
 Active
 Advanced

When to run: When: before; Order: 100
 Insert
 Update
 Delete
 Query

Filter Conditions: Add Filter Condition, Add OR Clause
-- choose field -- -- oper -- -- value --

Role conditions: [Edit](#)

Actions: [Update](#), [Delete](#)

5. In Advance(we write the 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.

Name: Family Expenses
Table: Daily Expenses [u_daily_expenses]

Application: Global
 Active
 Advanced

Advanced:

Condition:

Script: Turn on ECMAScript 2021 (ES12) mode

```

1 (function executeRule(current, previous /*null when async*/){  

2  

3  

4 var FamilyExpenses = new GlideRecord('u_family_expenses');  

5  

6 FamilyExpenses.addQuery('u_date',current.u_date);  

7  

8 FamilyExpenses.query();  

9  

10 if(FamilyExpenses.next())  

11 {  

12  

13 FamilyExpenses.u_amount += current.u_expense;  

14 FamilyExpenses.u_expense_details += ">" + current.u_comments + ":" + "Rs." + current.u_expense + "-";  

15 FamilyExpenses.update();  

16  

17 FamilyExpenses.insert();  

18
}
})(current, previous);

```

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.

The screenshot shows the ServiceNow interface for creating a relationship named "Daily Expenses". The "Applies to table" dropdown is set to "Family Expenses [u_st_u_family_expenses]" and the "Queries from table" dropdown is set to "Daily Expenses [u_daily_expenses]". A red arrow points to the "Applies to table" dropdown. Below it, a code editor window contains the following JavaScript code:

```

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 })(current, parent);

```

The "Update" button at the bottom left of the main form is highlighted with a red box.

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.