CALCULATING FAMILY EXPENSES USING SERVICE NOW

TEAM ID : NM2025TMID16319

Team Size : 4

Team Leader : Essath Nisha. E
Team Member : Gomathi . G
Team Member : Dhanalakshmi. D
Team Member : Sivadharshini. R

PROBLEM STATEMENT

Managing family expenses can be a hassle, often involving disjointed methods like spreadsheets, paper receipts, or various mobile apps that don't offer a unified view. This leads to a lack of transparency, difficulty in tracking spending, and a time-consuming process for reconciling shared costs.

OBJECTIVES

- Centralized Expense Submission: Create a portal or interface where family members can easily submit expense reports with details like category, amount, date, and a brief description.

- Automated Approval Workflow: Implement a workflow that automatically routes expense reports to the appropriate family member for approval (e.g., a parent or designated family accountant). This reduces manual effort and speeds up the reimbursement process.

- Real-Time Tracking and Visibility: Provide a dashboard where family members can view the status of their submitted expenses (e.g., pending, approved, rejected) and see a real-time summary of their spending.

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PROJECT OVERVIEW

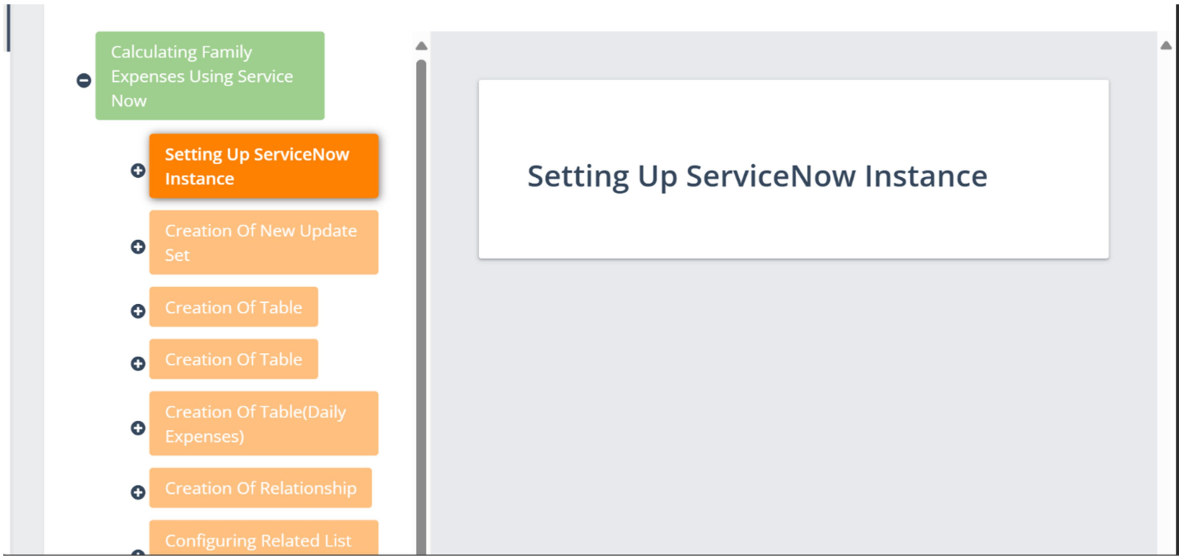
The project aims to develop a comprehensive expense calculation system using ServiceNow . This system will enable users to track and manage family expenses efficiently. It will include features such as expense categorization, budget setting, real-time tracking, and reporting capabilities. Utilizing ServiceNow's 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: ServiceNow Instance

Activity 1: Setting up ServiceNow Instance

Setting up ServiceNow Instance

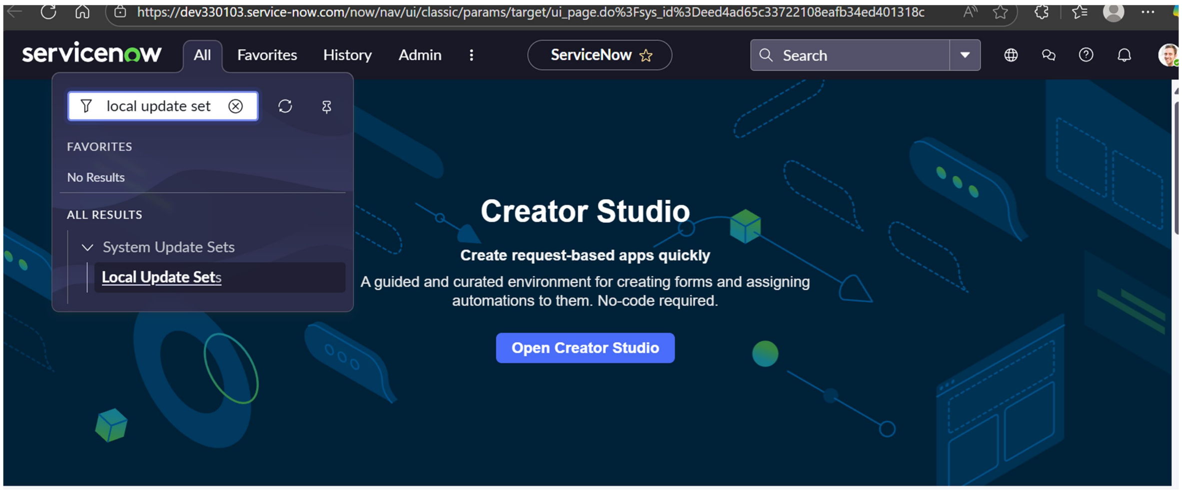
1. **Sign up for a developer account on the ServiceNow Developer site “https://developer.servicenow.com”.**
2. **Once logged in, navigate to the "Personal Developer Instance" section.**
3. **Click on "Request Instance" to create a new ServiceNow instance.**
4. **Fill out the required information and 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.**



Milestone 2: Creation of New Update Set

Activity 1: Creation of New Update Set

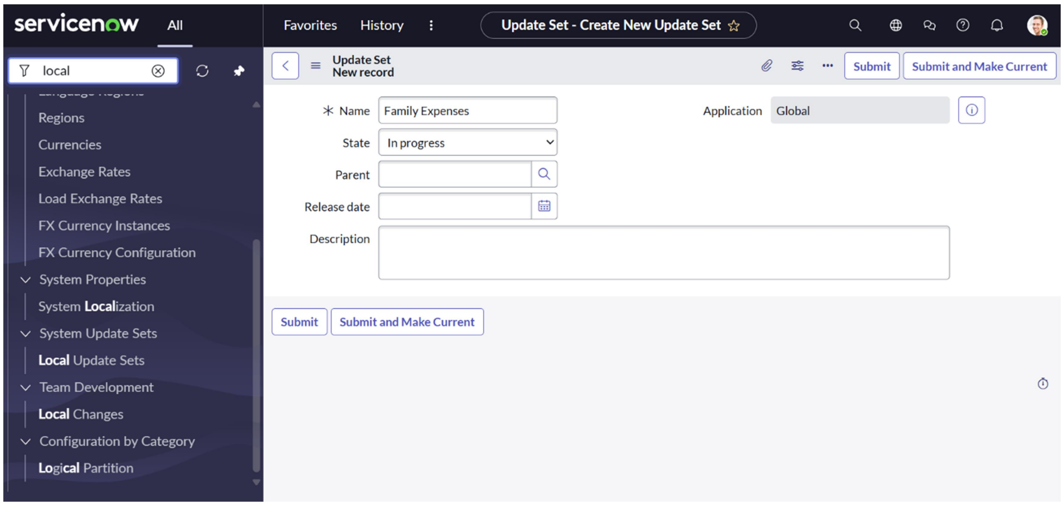
1. Go to All >> In the filter search for Local Update set > click on New.



1. Enter the Details as:

i Name: Family Expenses

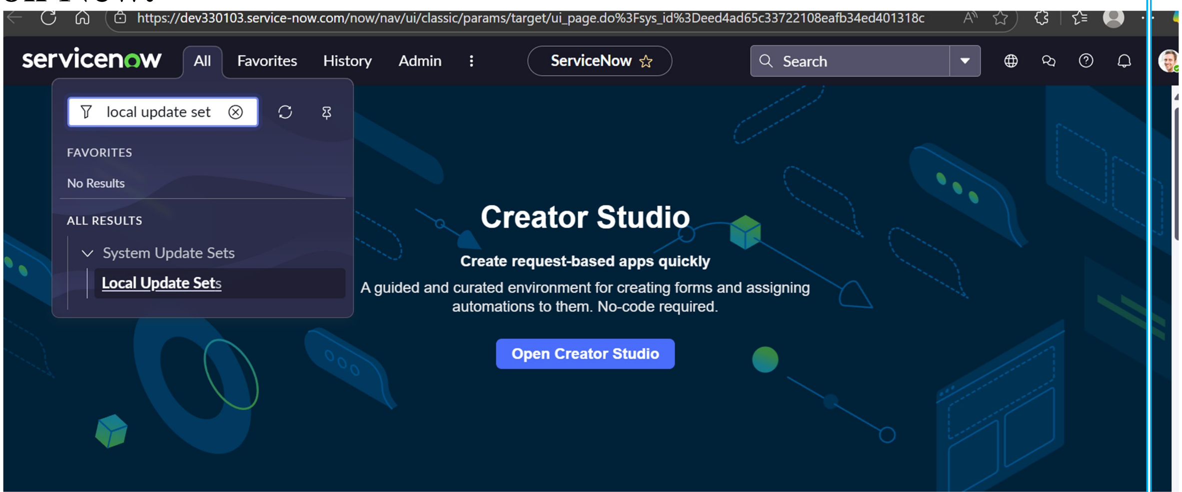
2. Then click on Submit and Make current.

i 

Milestone 3:New Update Set

Activity 1: Creation of New Update Set

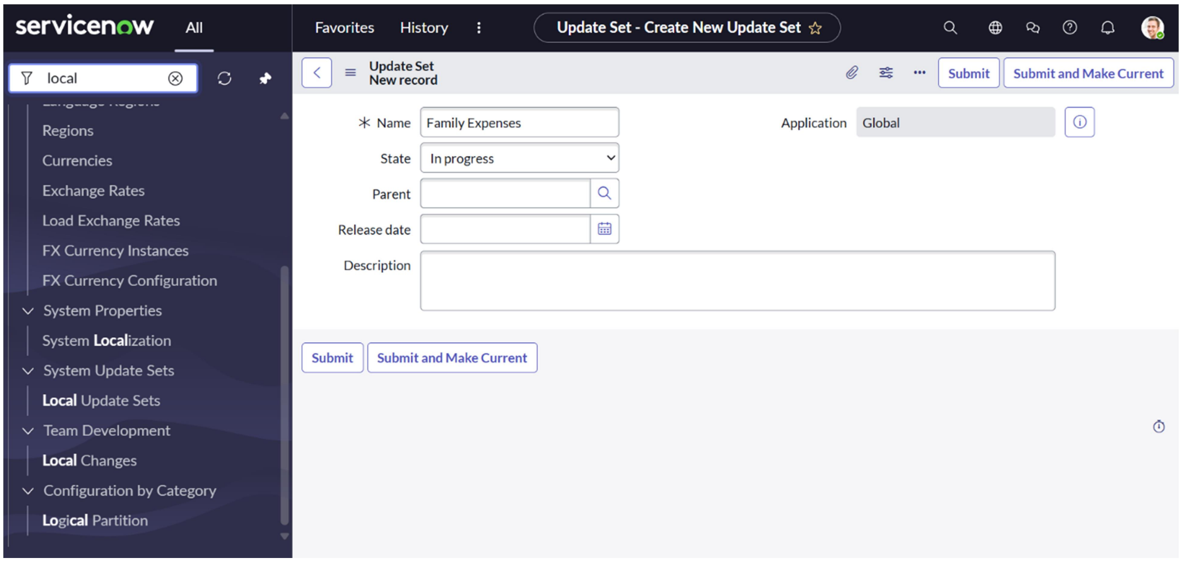
1. Go to All >> In the filter search for Local Update set > click on New.

a) 

2. Enter the Details as:

i Name: Family Expenses

3. Then click on Submit and Make current



Milestone 4: Tables

Activity 1: Creation of Family Expenses Table

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

2. Enter the Details:

i Label: Family Expenses

ii Name: Auto-Populated

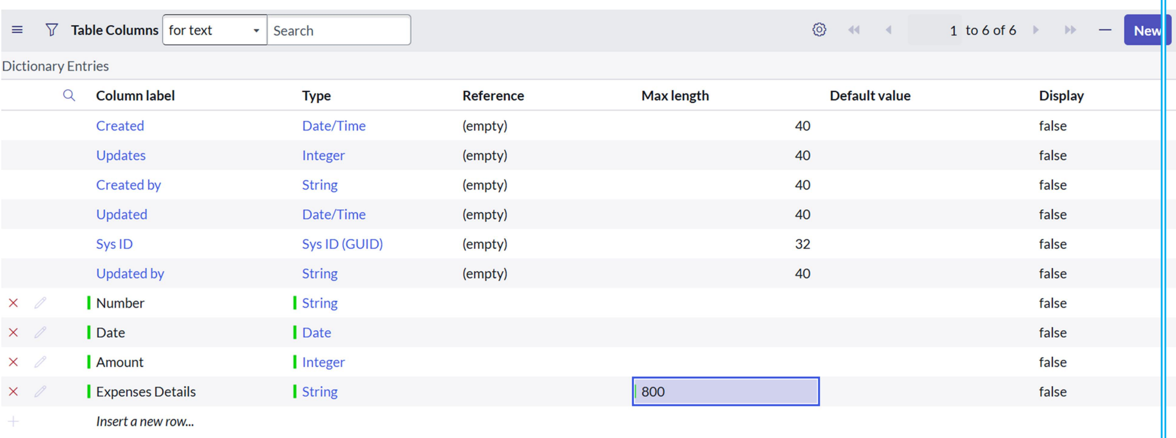
iii New menu name: Family Expenditure

3.

4. Go to the Header and right click there>> click on Save.

Creation of Columns (Fields)

1. **Near Columns Double click near insert a new row.**
2. **Give the details as:**
   a) **Column label: Number**
   b) **Type: String**
3. **Double click on insert a new row again**
4. **Give the details as:**
   a) **Column label: Date**
   b) **Type: Date**
5. **Double click on insert a new row again**
6. **Give the details as:**
   a) **Column label: Amount**
   b) **Type: Integer**
7. **Double click on insert a new row again**
8. **Give the details as:**
   a) **Column label: Expense Details**
   b) **Type: String**
   c) **Max length: 800**

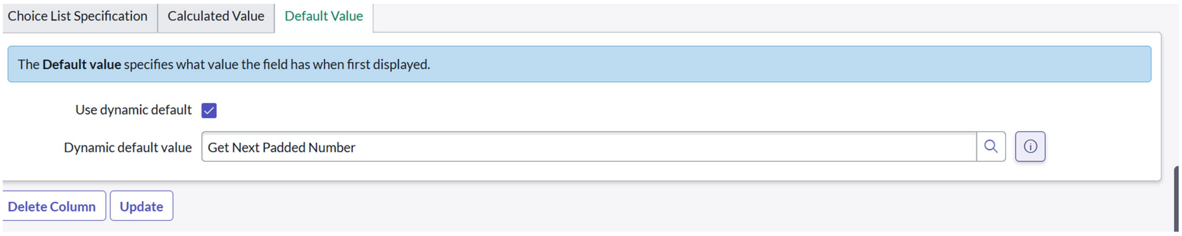


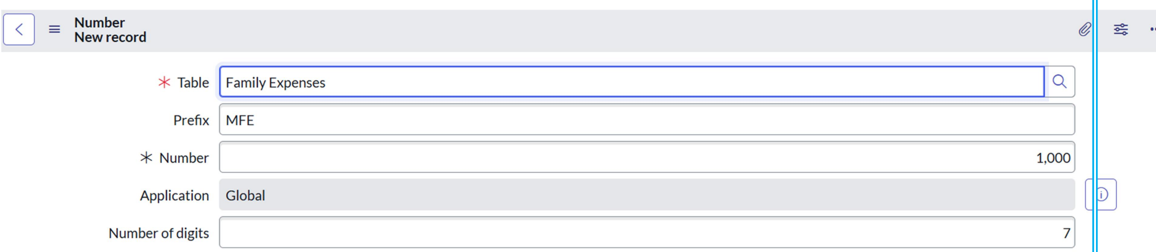
Column label	Type	Reference	Max length	Default value	Display
Created	Date/Time	(empty)	40		false
Updates	Integer	(empty)	40		false
Created by	String	(empty)	40		false
Updated	Date/Time	(empty)	40		false
Sys ID	Sys ID (GUID)	(empty)	32		false
Updated by	String	(empty)	40		false
Number	String				false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

9.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
3. In Default Value:
   - i Use dynamic default: check the box
   - ii Dynamic default value: Get Next Padded Number
4. Click on Update.

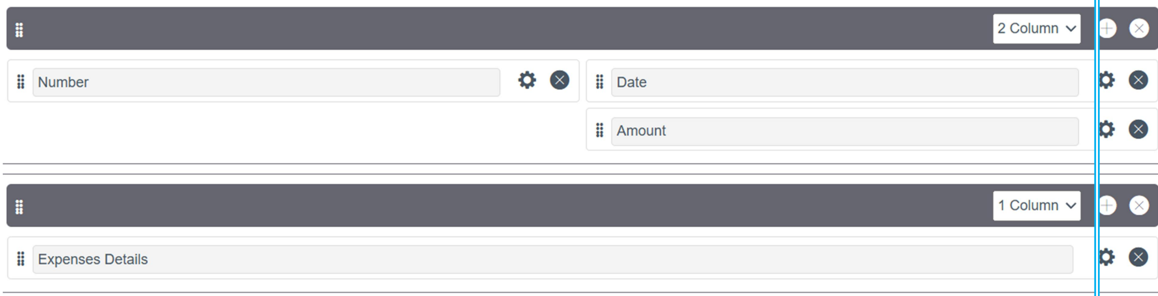
5. 

6. Go to All >> In the filter search for Number Maintenance >> select Number Maintenance
7. Click on New.
8. Enter the below Details:
   - i Table: Family Expenses
   - ii Prefix: MFE
   - iii 

9. Click on Submit.

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
4. Customize or Drag Drop the form as per your requirement.

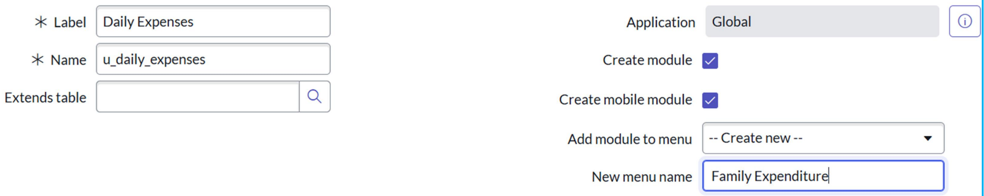
i 

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 5: Create of table

Activity 1: Creation of Daily Expenses Table

1. Go to All > In the filter search for Tables > click on New.
2. Enter the Details:
   i Label: Daily Expenses
   ii Name: Auto-Populated
   iii Add Module to menu: Family Expenditure



iv

3. Go to the Header and right click there>> click on Save.

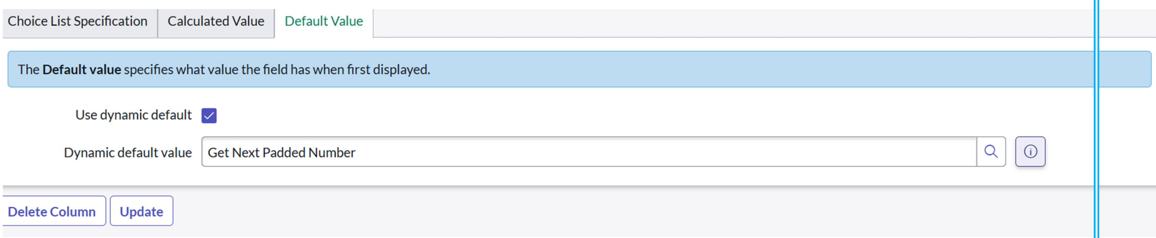
Creation of Columns(Fields)

1. Near Columns Double click near insert a new row.
2. Give the details as:
    a) Column label: Number
    b) Type: String
3. Double click on insert a new row again
4. Give the details as:
    a) Column label: Date
    b) Type: Date
5. Double click on insert a new row again
6. Give the details as:
    a) Column label: Expense
    b) Type: Integer
7. Double click on insert a new row again
8. Give the details as:
    a) Column label: Family Member Name
    b) Type: Reference
    c) Max length: 800
9. Double click on insert a new row again
10. Give the details as:
    a) Column label: Comments
    b) Type: String
    c) Max length: 800

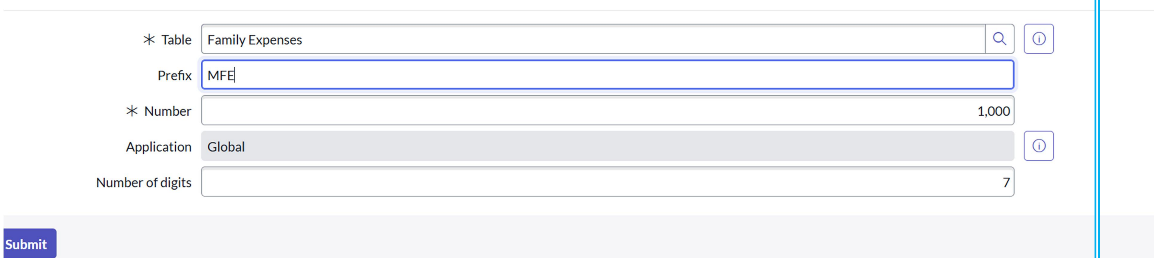
11.Go to the Header and right click there>> click on Save.

Making Number Field an Auto-Number

1. Double click on the Number Field/Column.
2. Go down and double click on Advanced view
3. In Default Value:
   i Use dynamic default: check the box
   ii Dynamic default value: Get Next Padded Number
4. Click on Update.

i 

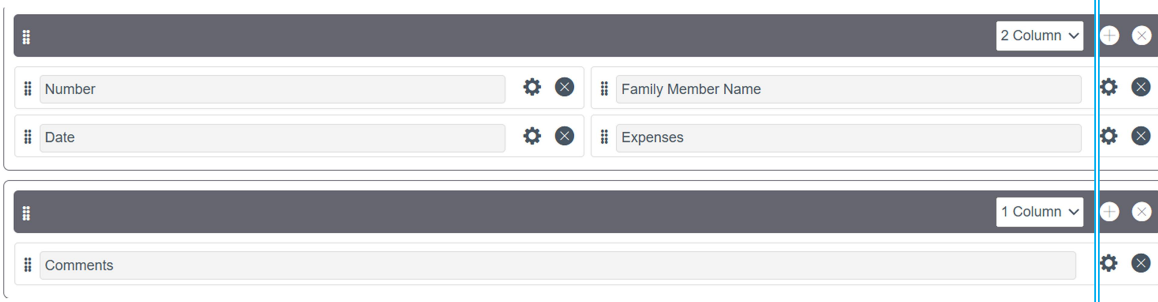
5. Go to All >> In the filter search for Number Maintenance >> select Number Maintenance
6. Click on New.
7. Enter the below Details:
   i Table: Family Expenses
   ii Prefix: MFE

iii 

8. Click on Submit.

Configure the Form

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

i 

5. Make Number Read-Only Field by clicking on the gear icon and checking Read-Only
6. Make Date, Family Member Name Mandatory Field by clicking on the gear icon and checking Mandatory
7. Click on Save

Milestone 6: Creation of Relationship

Activity 1: Creation of Relationship between Family Expenses and Daily Expenses tables

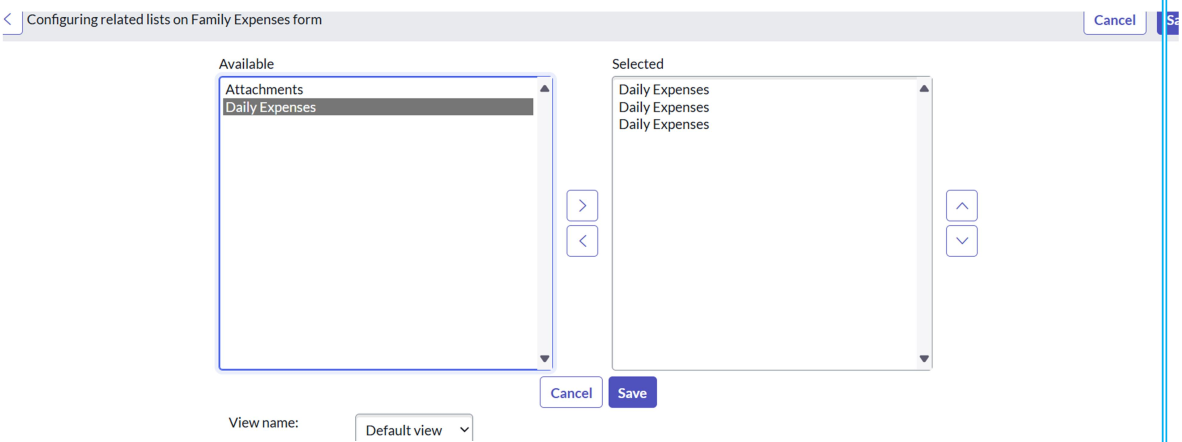
1. Go to All >> In the filter search for Relationships >> Open Relationships

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

Milestone 7: Configuring Related List

Activity 1: Configuring Related List on Family Expenses

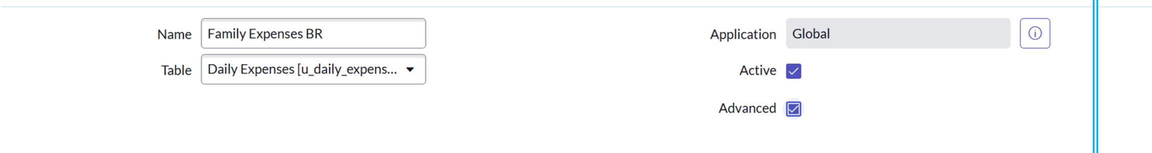
1. Go to All >> In the filter search for Family Expenses >> Open Family Expenses
2. Click on New
3. Go to the Header and right click there>> click on Configure >> Select Related Lists
4. Add Daily Expenses to the Selected Area.
5. Click on Save



Milestone 8: creation of Business

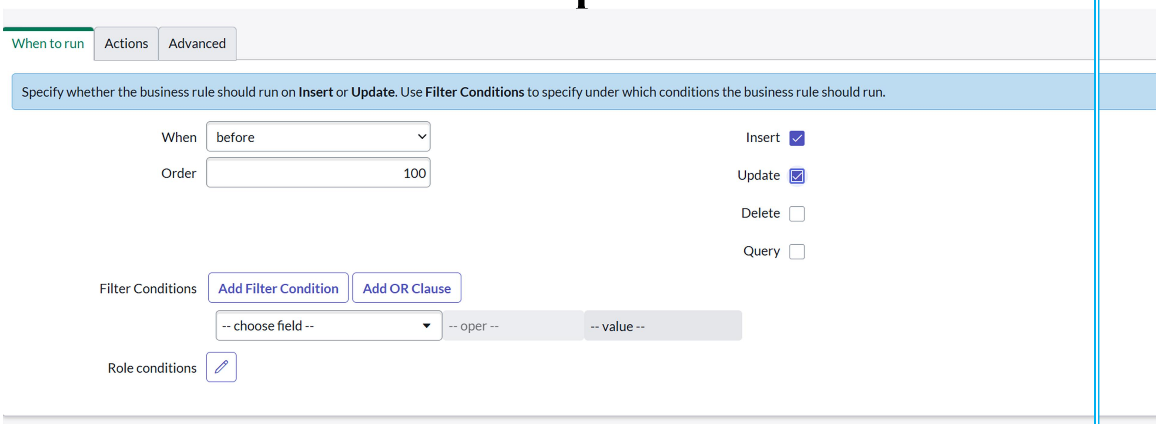
Activity 1: Creation of Business Rules

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:
   i. Name: Family Expenses BR
   ii. Table: Select Daily Expenses
   iii. Check Advanced



   iv.

4. In when to run Check Insert and Update



   i.

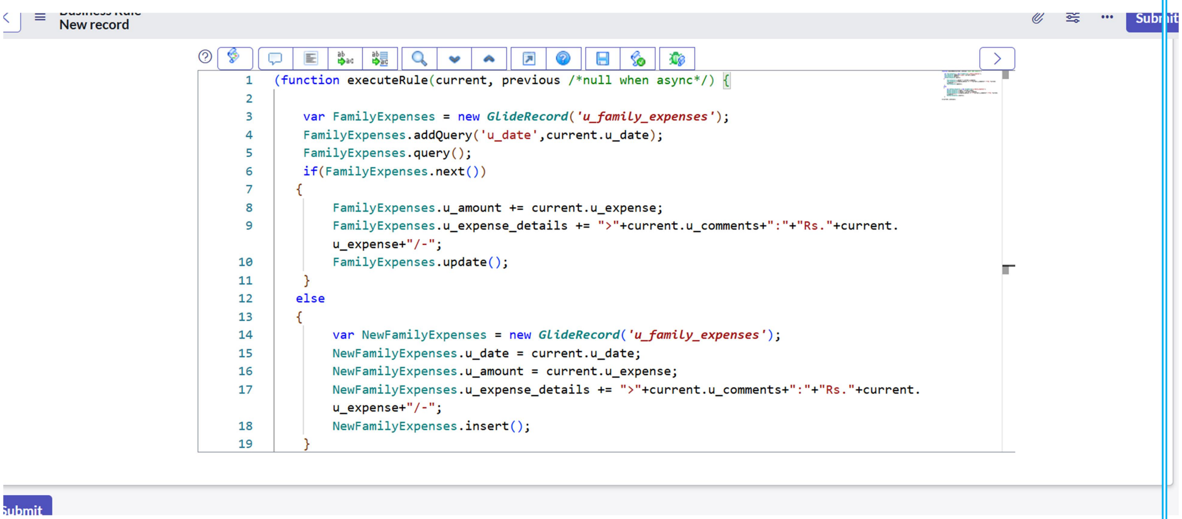
5. In Advance(we write the code): Write the below code >>
6.
   i. (function executeRule(current, previous /*null when async*/) {
7.
   i. var Family Expenses = new GlideRecord('u_family_expenses');

ii FamilyExpenses.addQuery('u_date',current.u_date);
iii FamilyExpenses.query();
iv if(FamilyExpenses.next())
v {
vi FamilyExpenses.u_amount += current.u_expense;
vii FamilyExpenses.u_expense_details += ">"+current.u_comments+":"+"Rs."+current.u_expense+"/-";
viii FamilyExpenses.update();
ix }
x else
xi {
xii var NewFamilyExpenses = new GlideRecord('u_family_expenses');
xiii NewFamilyExpenses.u_date = current.u_date;
xiv NewFamilyExpenses.u_amount = current.u_expense;
xv NewFamilyExpenses.u_expense_details += ">"+current.u_comments+":"+"Rs."+current.u_expense+"/-";
xvi NewFamilyExpenses.insert();
xvii }

8.

i })(current, previous);

9. Go to the Header and right click there>> click on Save



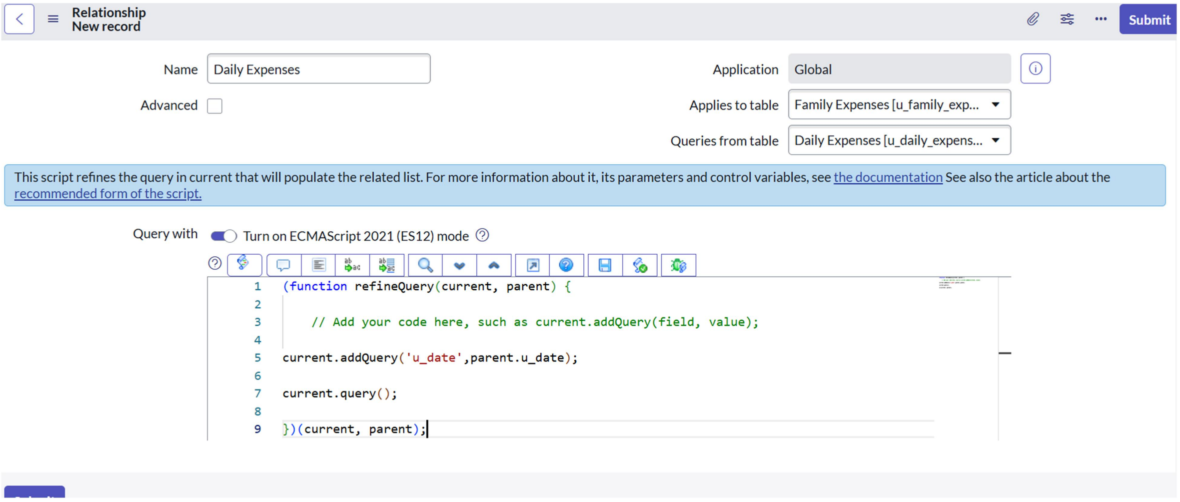
Milestone 9: Configure the Relationship

Activity 1: Configure the Relationship

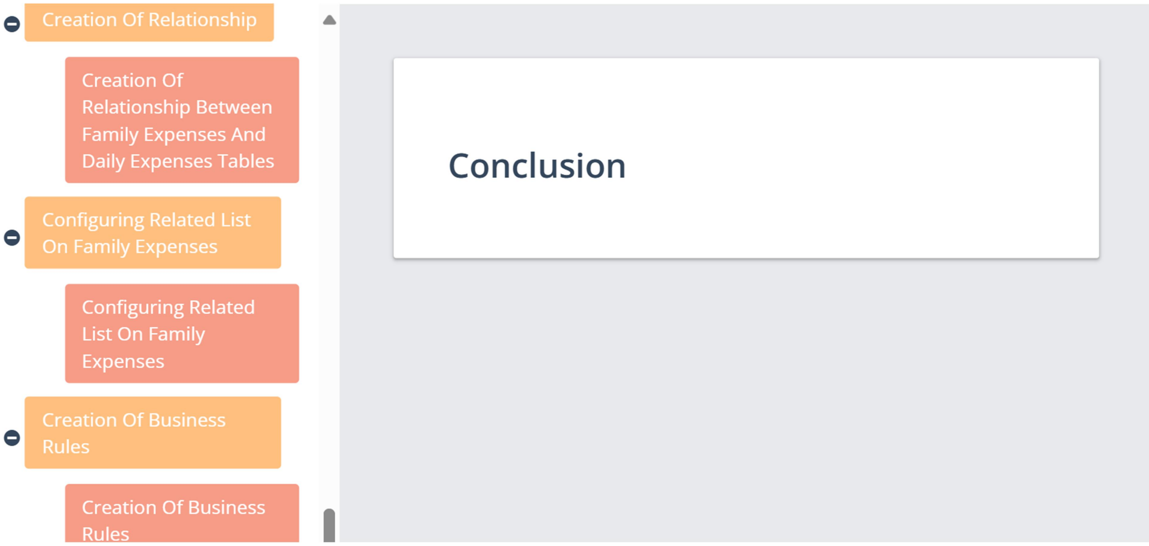
1. Go to All >> In the filter search for Relationships >> Open Relationships.
2. In that, open Daily Expenses Relationship.
3. For Applies to table: Select Family Expenses.
4. In Query with: write the below Query.

```
(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.



6.Go to the Header and right click there>> click on Save.


Creation Of Relationship
Creation Of Relationship Between Family Expenses And Daily Expenses Tables
Configuring Related List On Family Expenses
Configuring Related List On Family Expenses
Creation Of Business Rules
Creation Of Business Rules
Conclusion