CALCULATING FAMILY EXPENSES USING SERVICE NOW

Team Id: NM2025TMID18167

Team Members:

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Team Member : RAGHUL S

Team Member : ERAIYANBU E

Team Member : HARISH K P

Problem Statement: 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.

Objectives: The objective of this project is to develop a family expense management system on the ServiceNow platform that enables efficient tracking, categorization, and budgeting of expenses. It aims to provide real-time monitoring, user-friendly dashboards, and insightful reports to support informed financial decisions. The system will ensure scalability for different family sizes, promote financial discipline through spending analysis, and maintain data security using ServiceNow’s robust features.

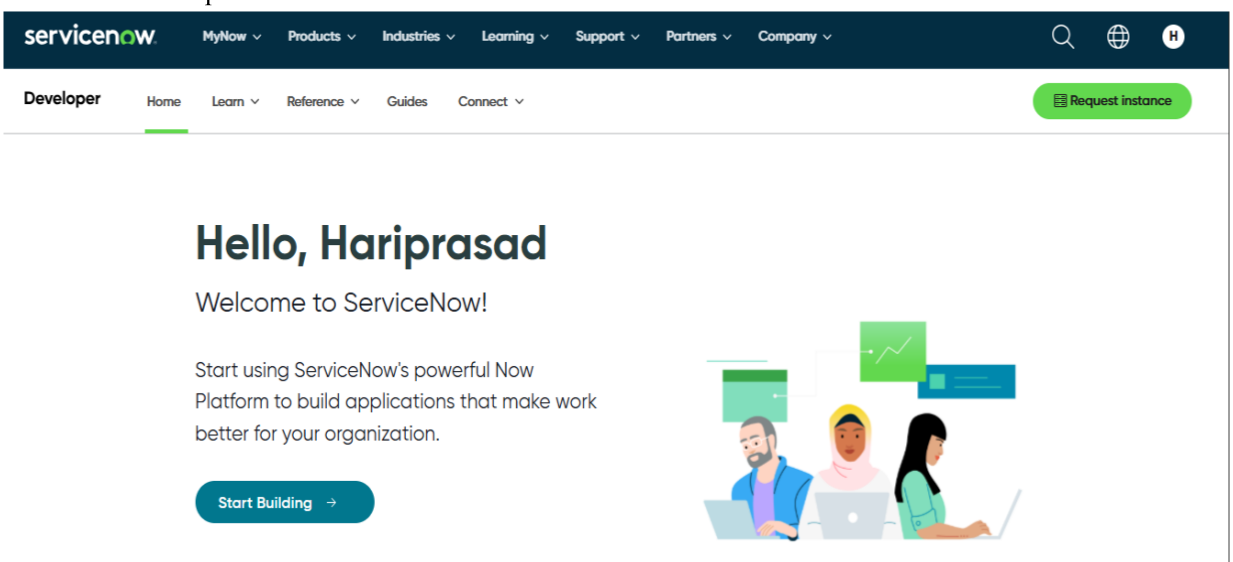
Skills:

TASK INITIATION

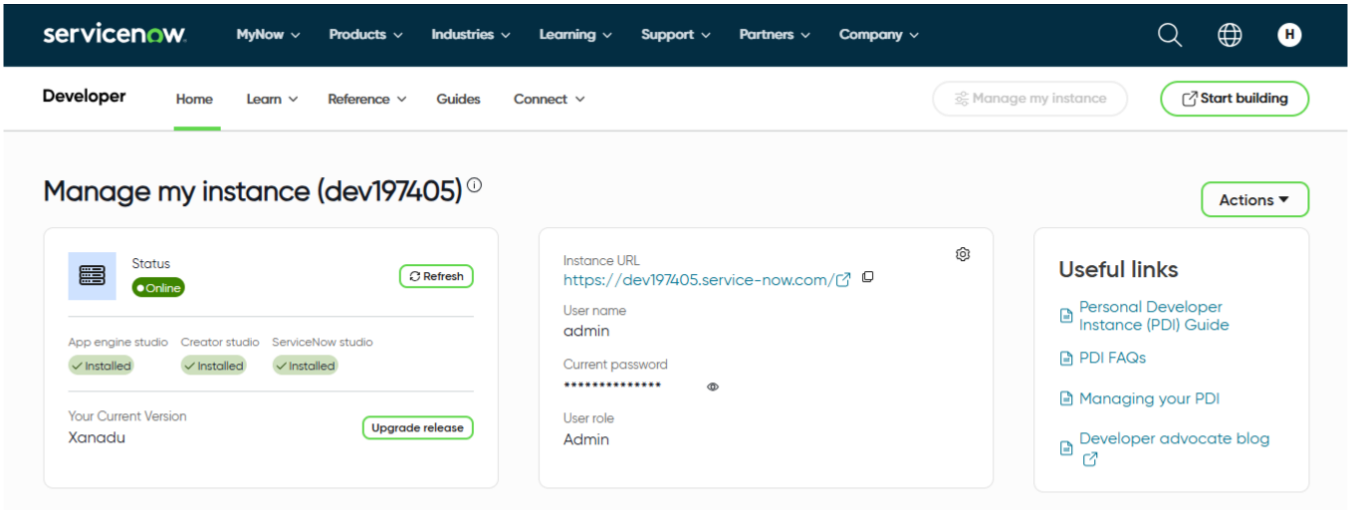
Milestone 1 : Setting up ServiceNow Instance

Activity : 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.

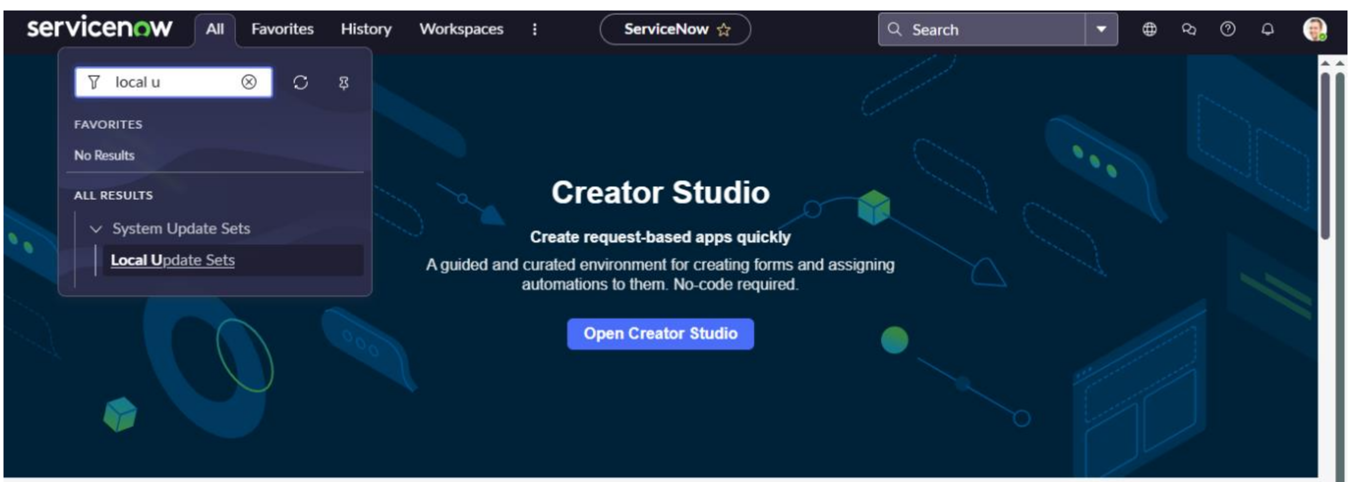


7. Now you will navigate to the ServiceNow.

Milestone 2 : Creation of New Update Set

Activity: Creation of New Update Set

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



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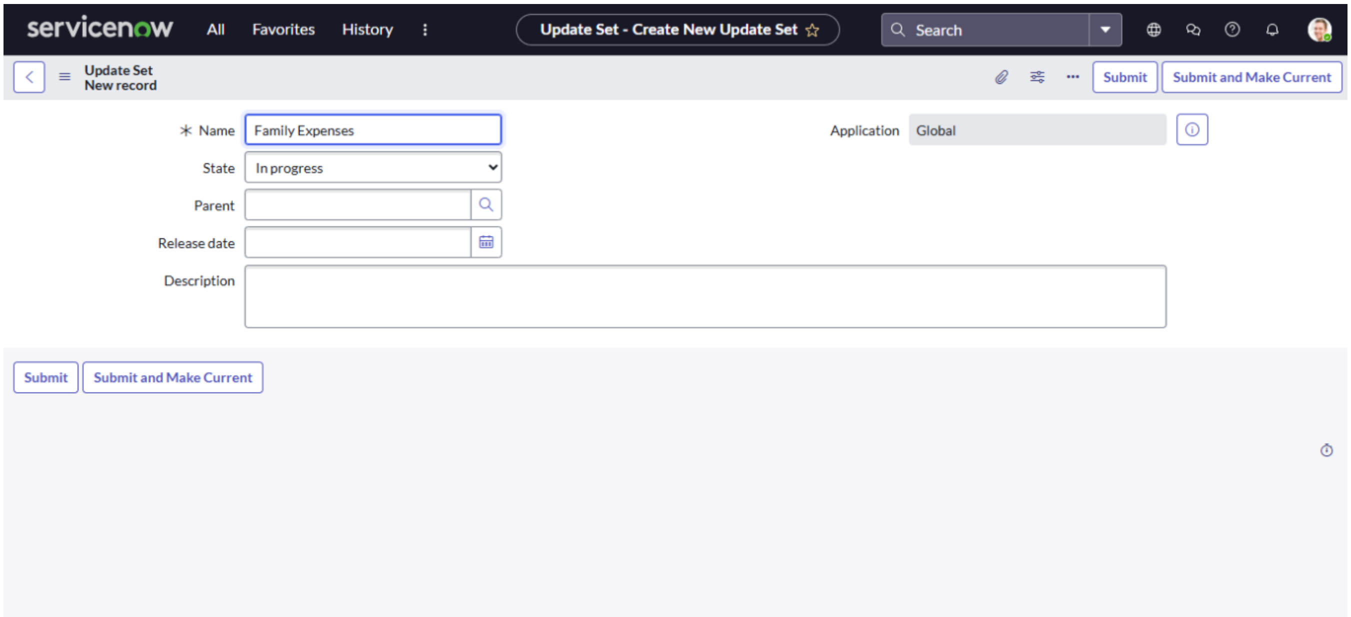
2. Enter the Details as:

   Name : Family Expenses

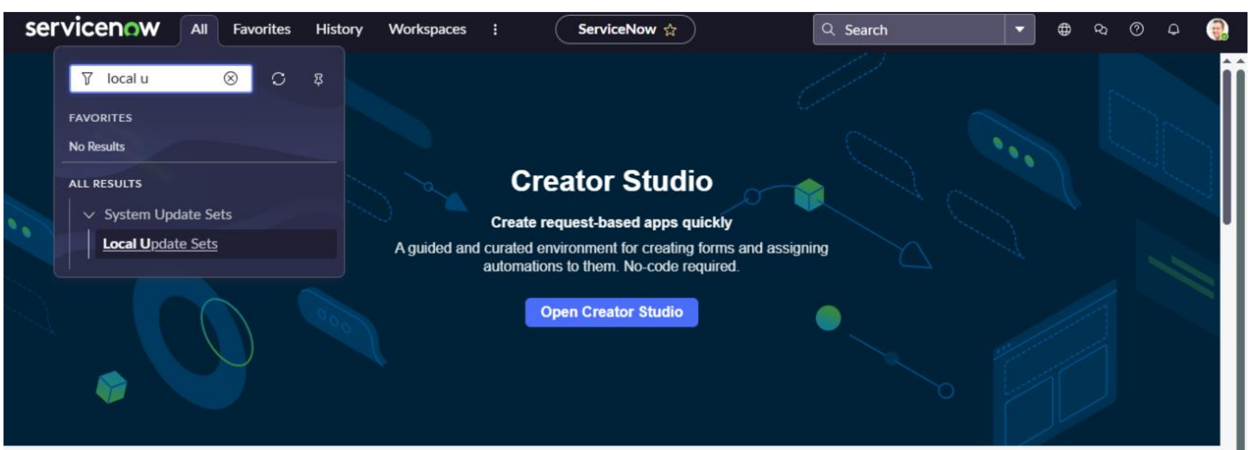
3. Then click on Submit and Make current.



Milestone 3: Creation of Table

Activity: Creation of New Update Set

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



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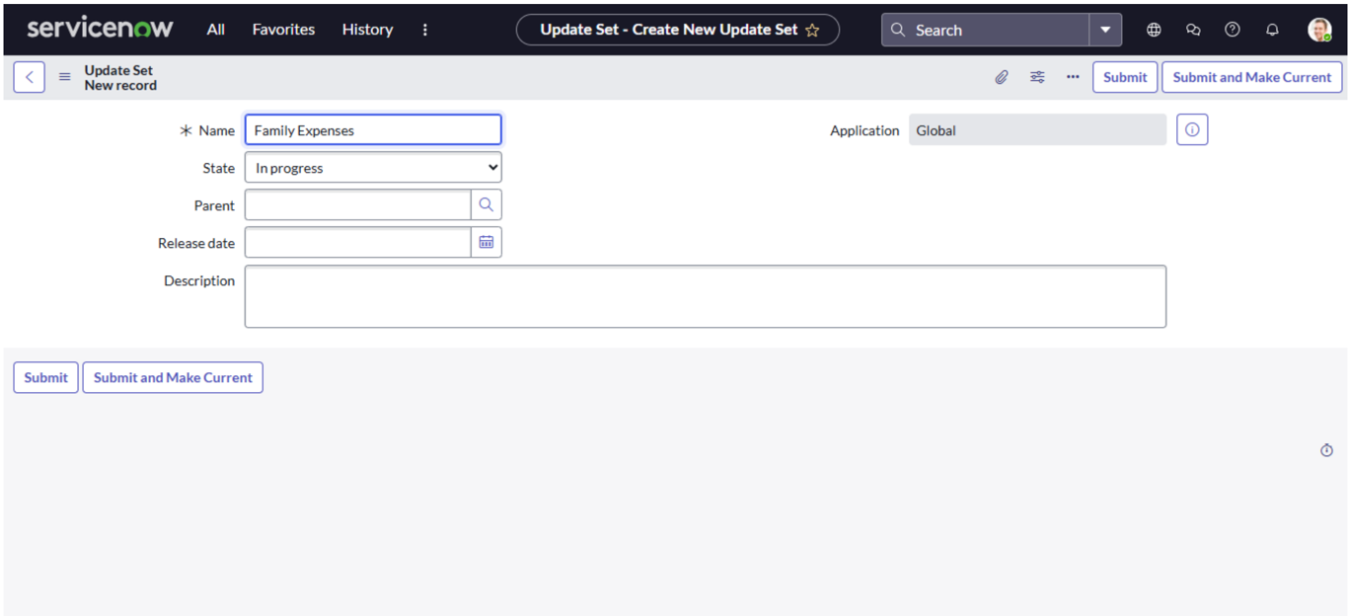
2. Enter the Details as:

Name : Family Expenses

3. Then click on Submit and Make current.



Milestone 4: Creation of Table

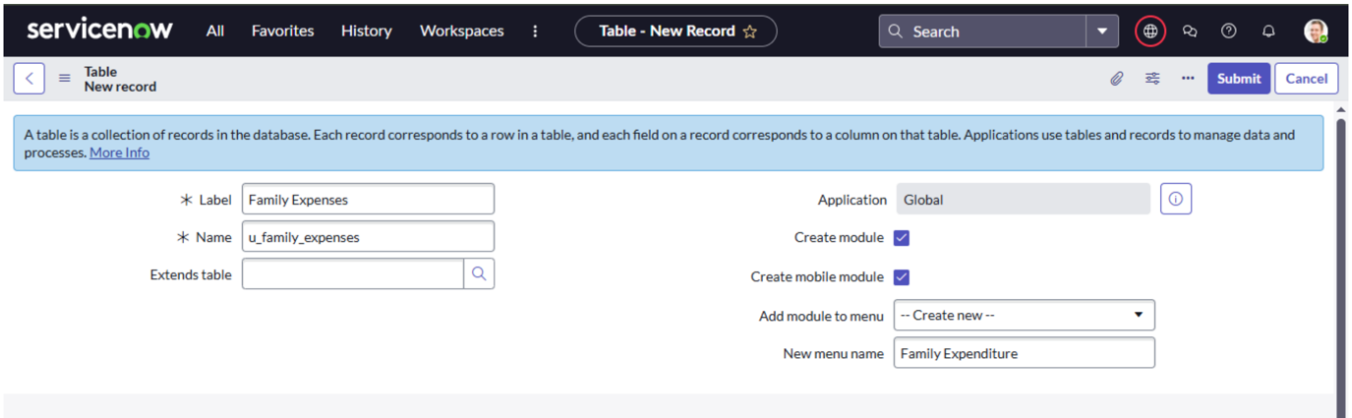
Activity 1: Creation of Family Expenses Table

1. Go to All > In the filter search for Tables > click on New.
2. Enter the Details:

   Label : Family Expenses

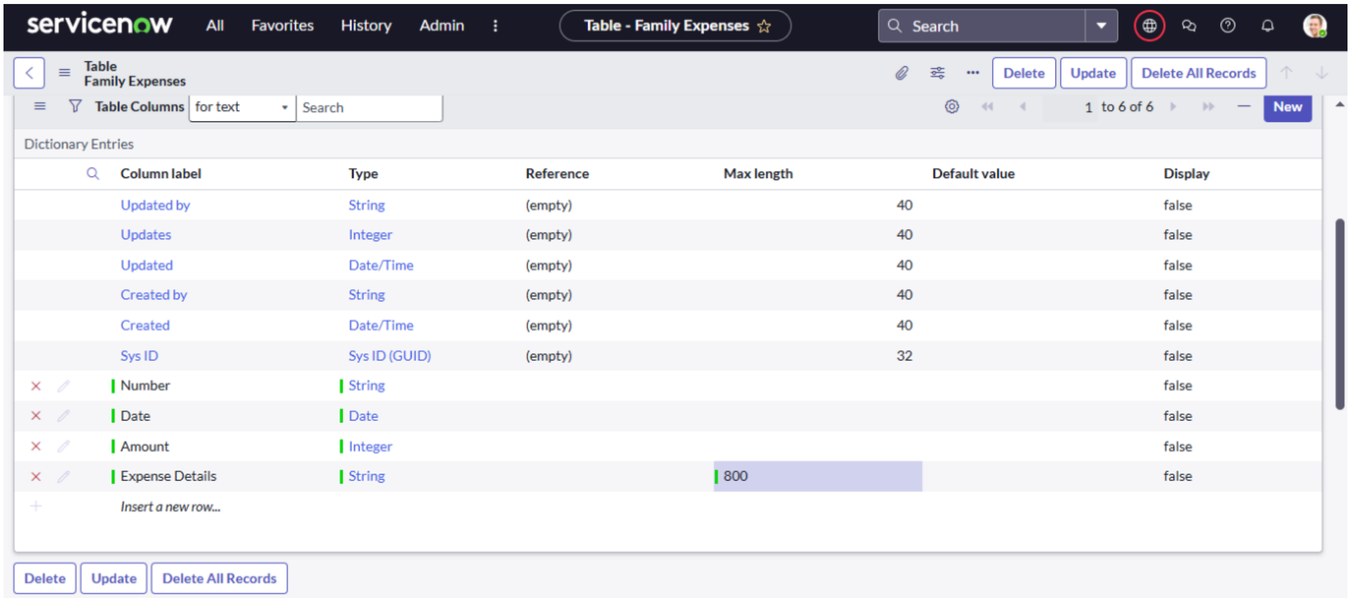
   Name : Auto-Populated

   New menu name : Family Expenditure
3. Go to the Header and right click there>> click on Save.



Activity 2: Creation of Columns(Fields)

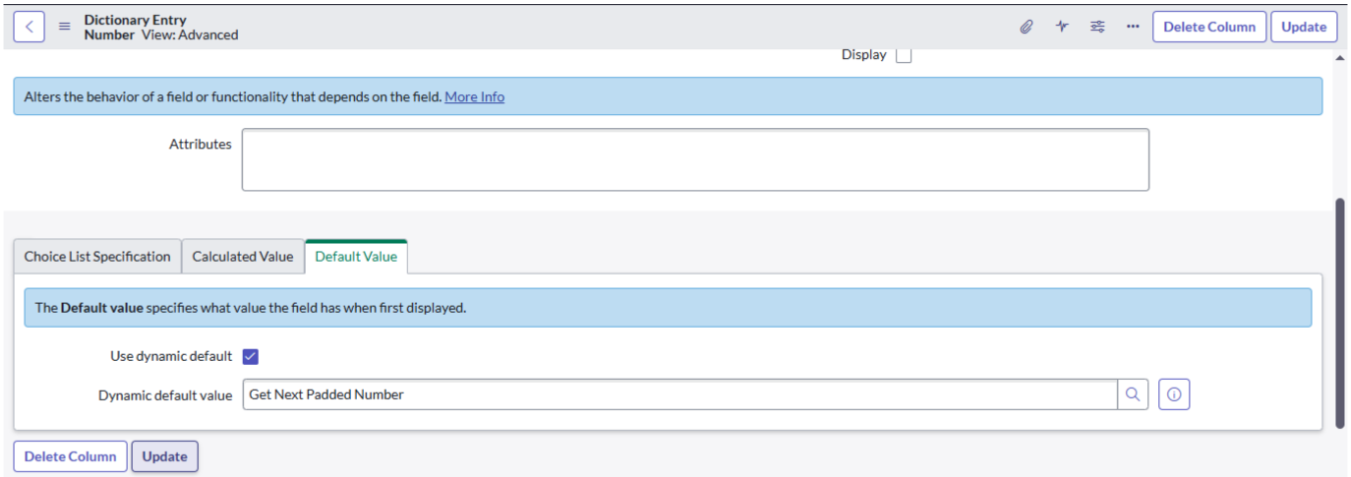
1. Near Columns Double click near insert a new row.
2. Give the details as:
   i. Column label : Number
   ii. Type : String
3. Double click on insert a new row again
4. Give the details as:
   i. Column label : Date
   ii. Type : Date
5. Double click on insert a new row again
6. Give the details as: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



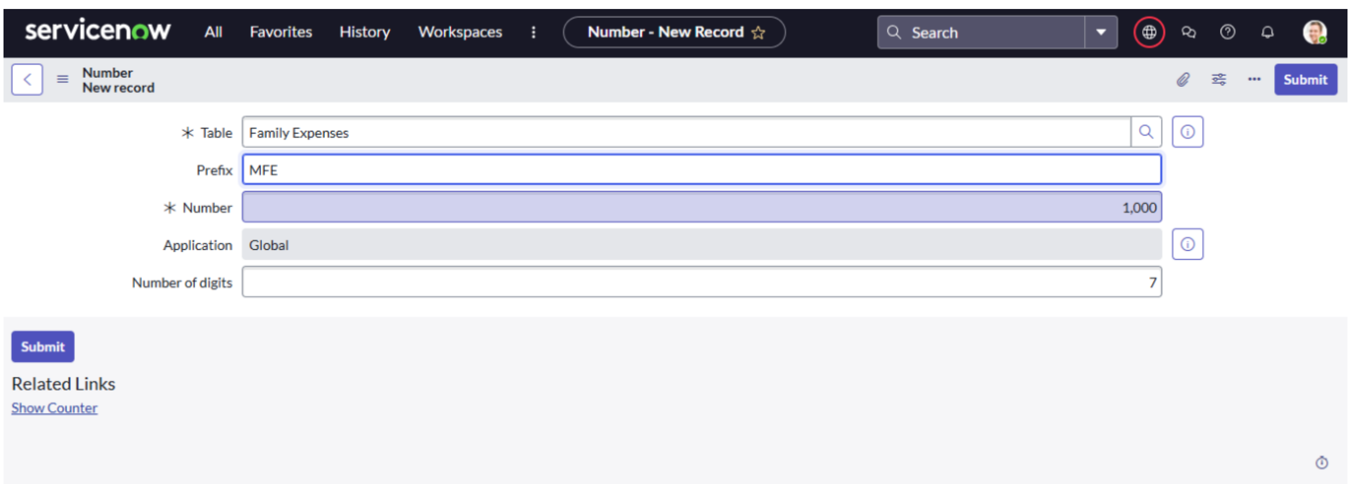
9. Go to the Header and right click there>> click on Save.

Activity 3: 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.



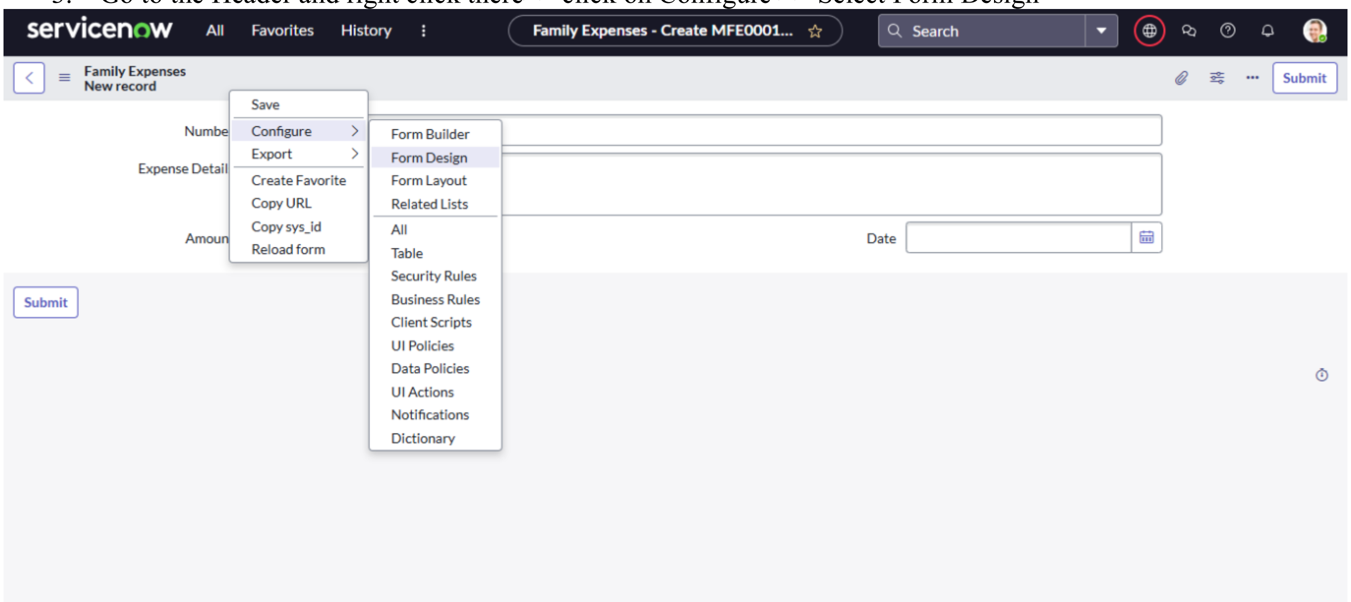
5. Go to All >> In the filter search for Number Maintenance >> select Number Maintenance
6. Click on New.
7. Enter the below Details:
    i. Table : Family Expenses
    ii. Prefix : MFE



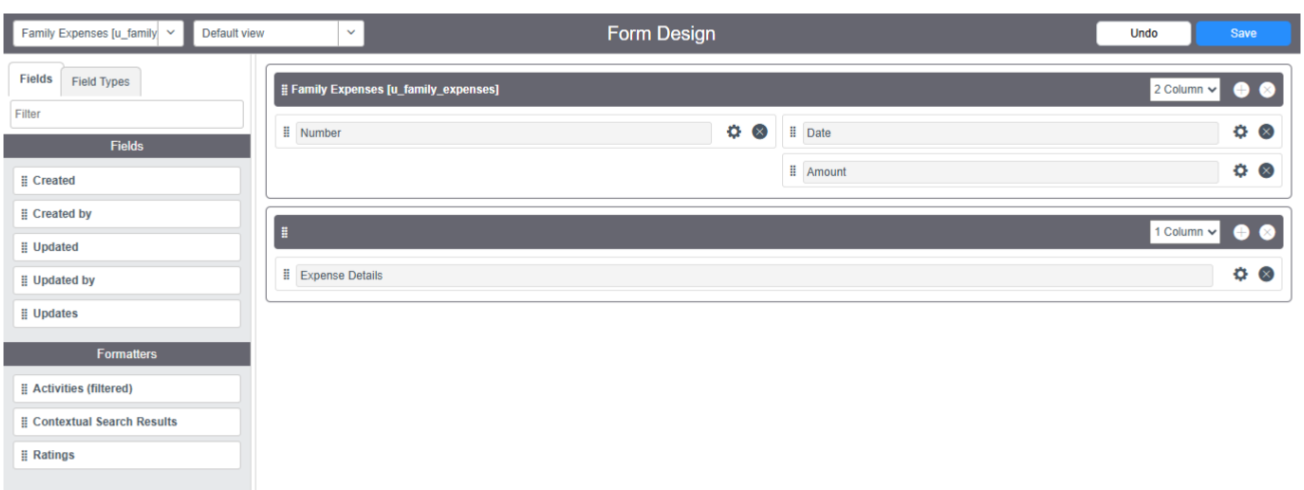
8. Click on Submit.

Activity 4: 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.
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.

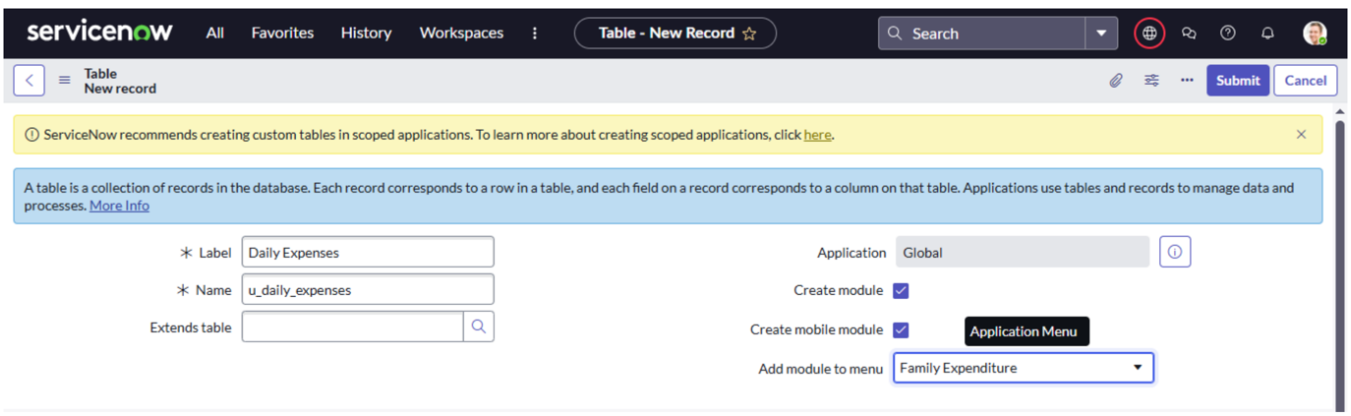


Milestone 5: Creation of Table (Daily Expenses)

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

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



Activity 2: Creation of Columns(Fields)

1. Near Columns Double click near insert a new row.
   Give the details as:
      Column label : Number
      Type : String
2. Double click on insert a new row again
   Give the details as:
      Column label : Date
      Type : Date
3. Double click on insert a new row again

Give the details as:

Column label : Expense

Type : Integer

4. Double click on insert a new row again

Give the details as:

Column label : Family Member Name

Type : Reference

Max length : 800

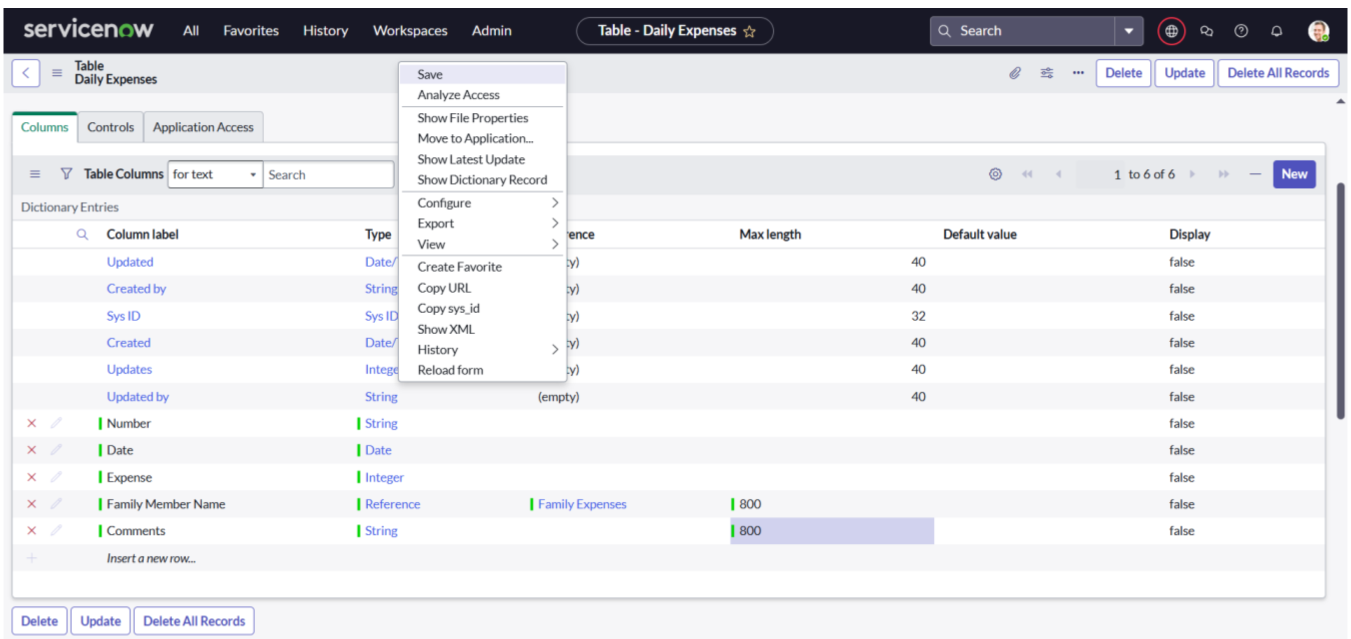
5. Double click on insert a new row again

Give the details as:

Column label : Comments

Type : String

Max length : 800



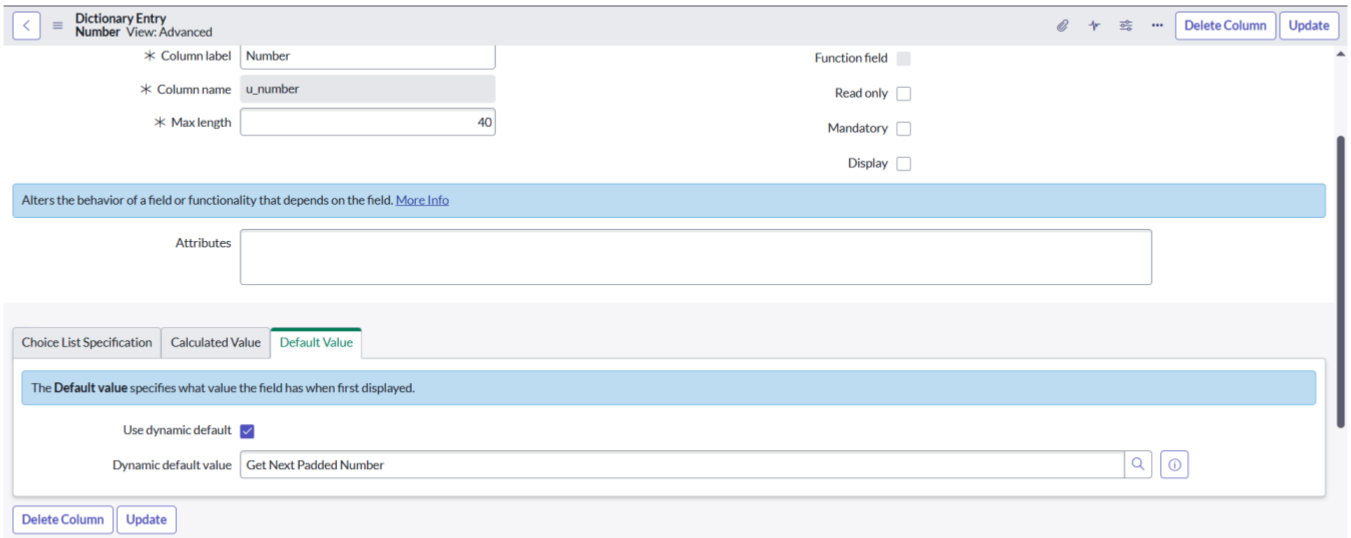
6. Go to the Header and right click there>> click on Save.

Activity 3: 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:

    Use dynamic default : check the box

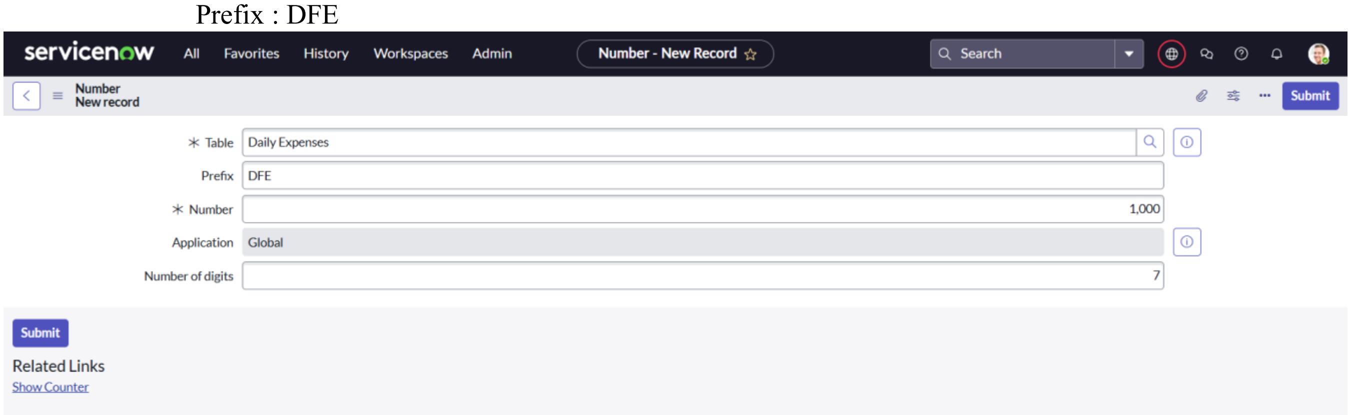
    Dynamic default value : Get Next Padded Number



4. Click on Update.
5. Go to All >> In the filter search for Number Maintenance >> select Number Maintenance
6. Click on New.
7. Enter the below Details:

    Table : Daily Expenses

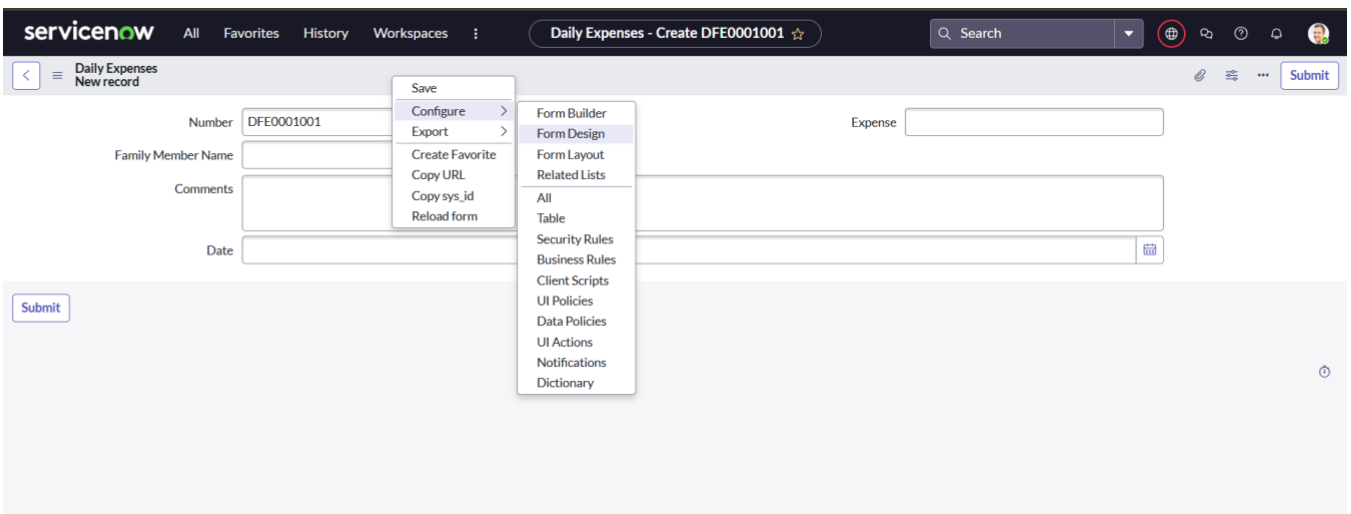
    Prefix : DFE



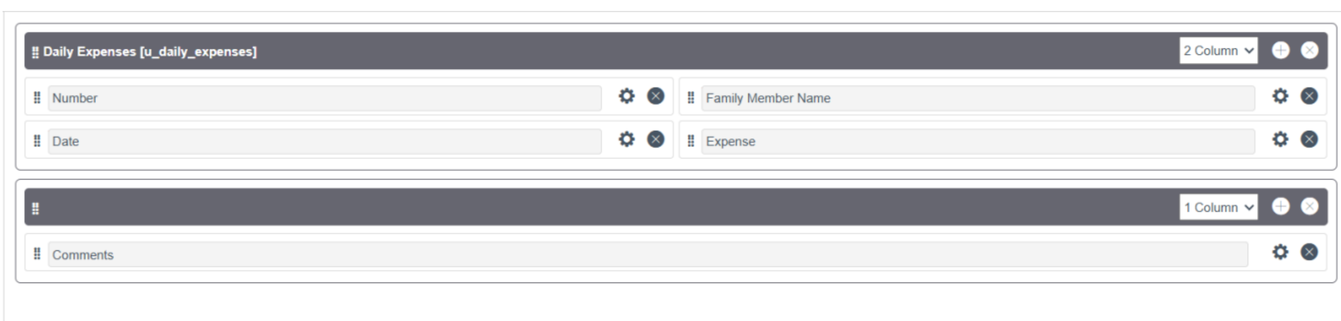
8. Click on Submit

Activity 4 : 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.
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

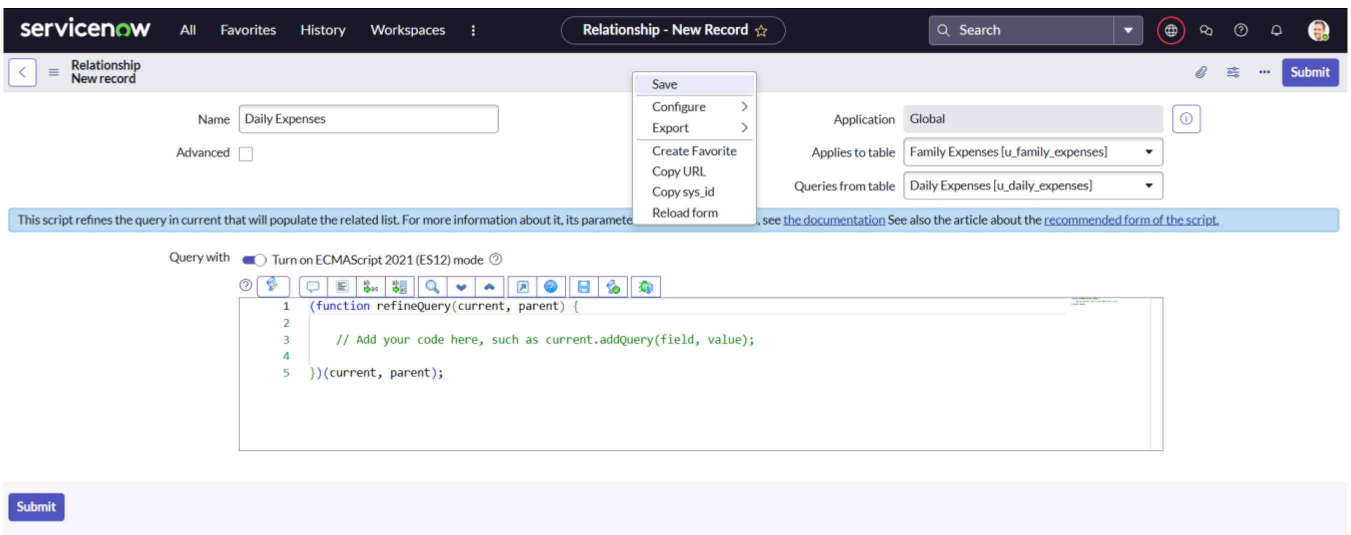
Activity : Creation of Relationship between Family Expenses and Daily Expenses tables.

1. Go to All >> In the filter search for Relationships >> Open Relationships
2. Click on New.
3. Enter the details:

   Name : Daily Expenses

   Applies to table : Select Family Expenses

   Daily Expenses : Select Daily Expenses
4. Click Save.

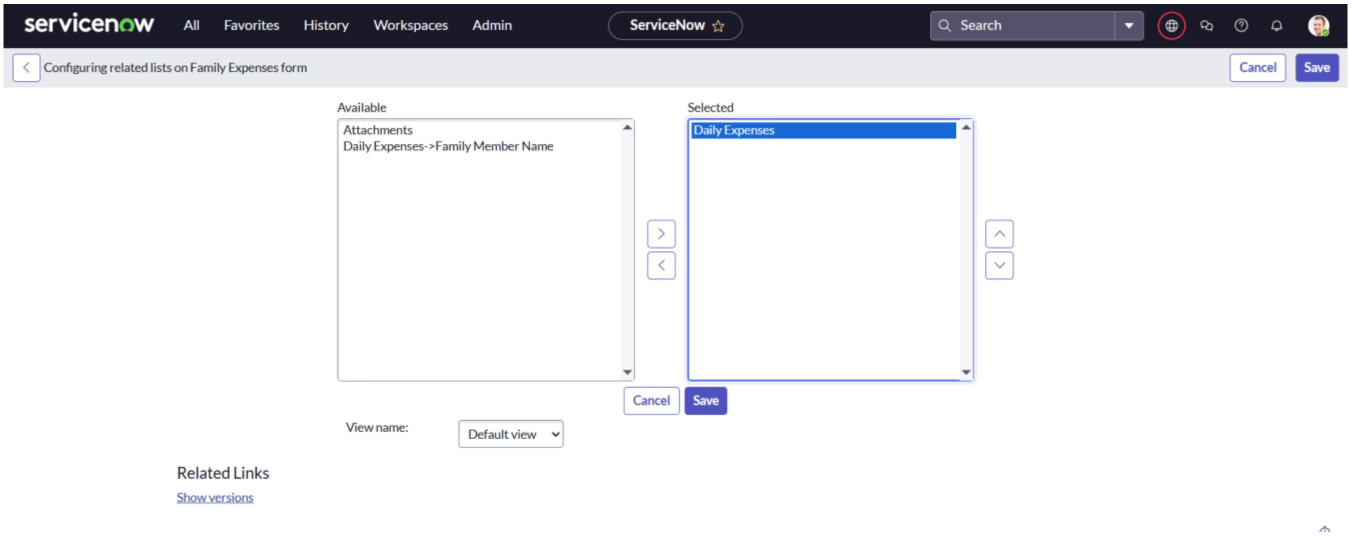


Milestone 7: Configuring Related List on Family Expenses

Activity : 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 Rules

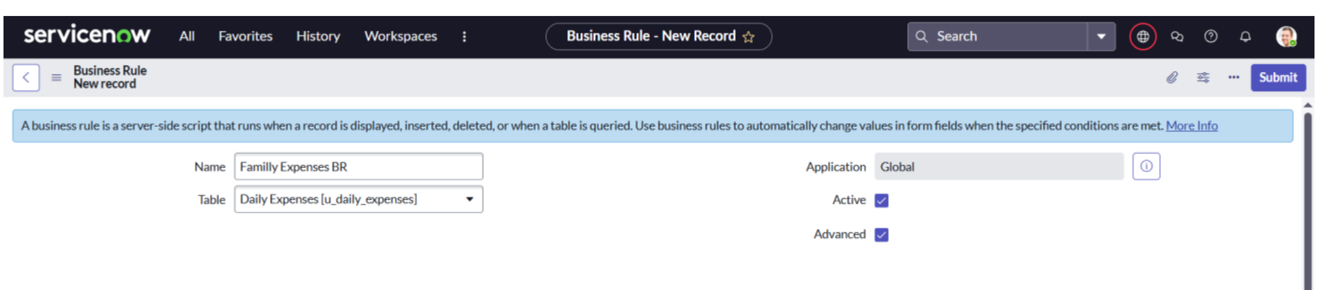
Activity : Creation of Business Rules

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

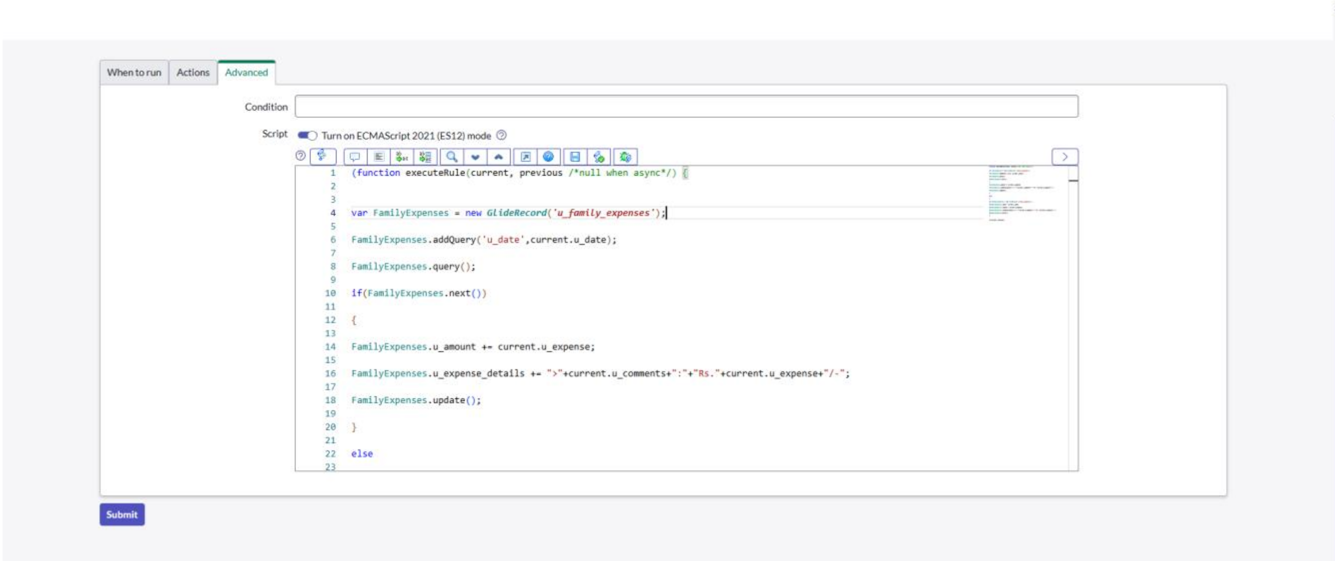


4. In when to run Check Insert and Update
5. In Advance(we write the code): Write the below code >>

```
(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.

Milestone 9 : Configure the Relationship

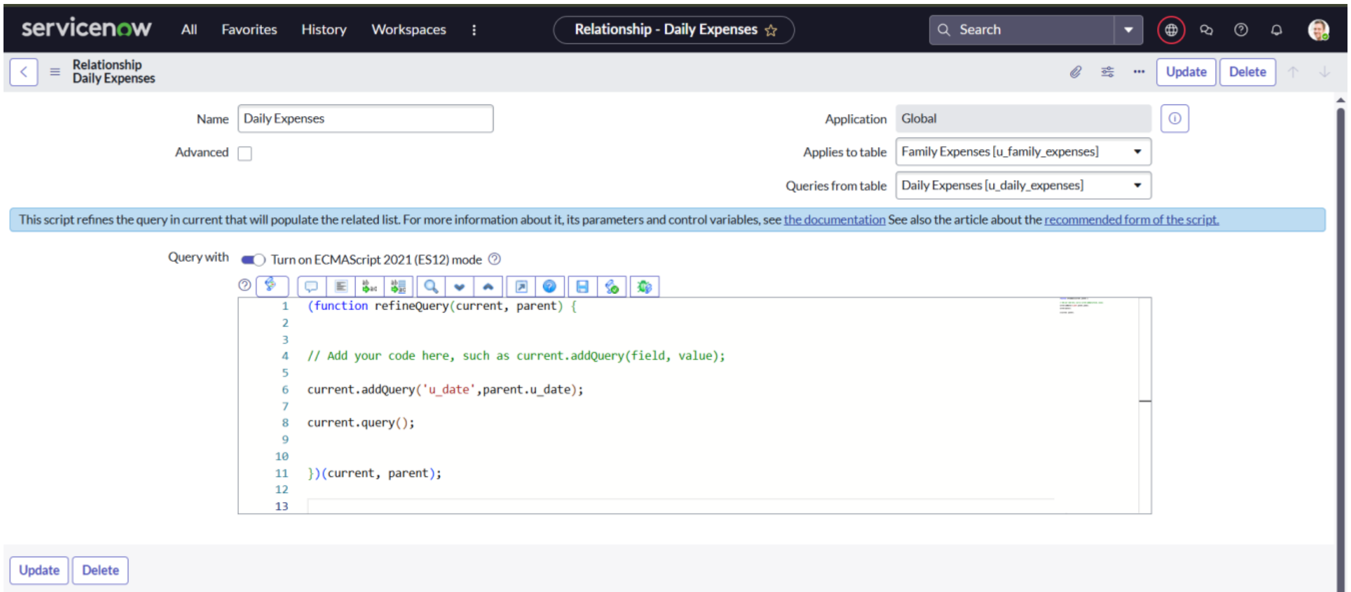
Activity : Configure the Relationship

1. 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 :

The project **"Calculating Family Expenses using ServiceNow"** successfully demonstrates how technology can simplify and streamline the process of managing household finances. By leveraging the features of ServiceNow, the system enables effective expense tracking, categorization, and reporting, while maintaining scalability and security. Through the creation of customized tables, forms, relationships, and business rules, the project provides a user-friendly solution that empowers families to monitor their spending patterns and make informed financial decisions. Ultimately, this initiative not only promotes financial discipline but also highlights the potential of ServiceNow as a platform for developing practical, real-world applications beyond its traditional IT service management scope.