Calculating Family Expenses using Service Now

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Problem Statement :

Calculating family expenses can be a tedious and time-consuming task, especially when done manually. Families often struggle to keep track of their expenses, leading to overspending, financial stress, and difficulty in achieving long-term financial goals. The lack of a streamlined and automated process for calculating family expenses can result in inaccurate budgeting, financial uncertainty, and poor decision-making.

Objectives :

The objective of this project is to design and develop a user-friendly application or tool that can help families calculate and track their expenses efficiently and accurately. The tool should be able to:

1. **Categorize expenses:** Allow users to categorize their expenses into different categories, such as housing, food, transportation, and entertainment.

2. **Track expenses:** Enable users to track their expenses over time, providing a clear picture of their spending habits.

3. **Generate reports:** Provide users with detailed reports and insights on their spending habits, helping them identify areas for improvement.

4. **Set budgets:** Allow users to set budgets for different categories and alert them when they exceed their limits.

5. **Provide financial insights:** Offer users valuable insights and recommendations on how to optimize their expenses and achieve their financial goals.

TASK INITIATION

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.

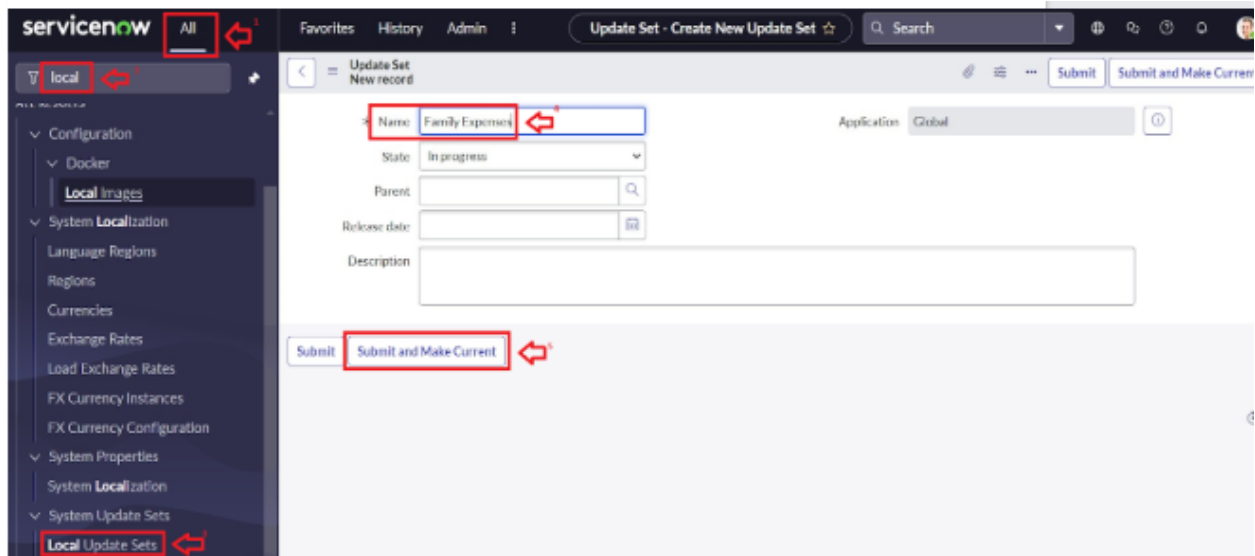## **Milestone 2: Creations of New Update Sets.**

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

2. Enter the Details as:

Name : Family Expenses

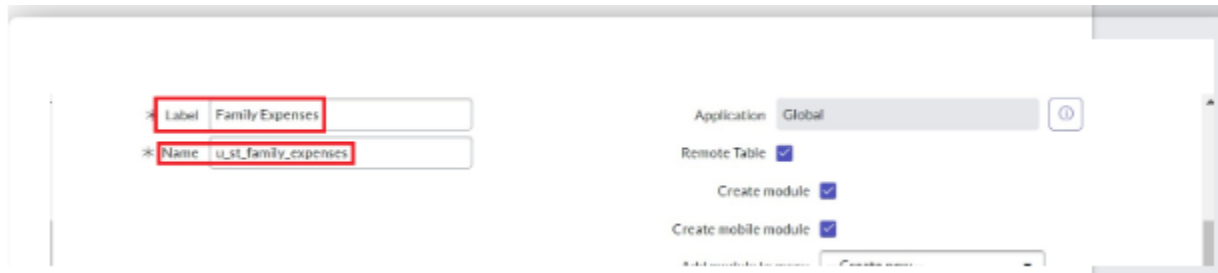3. Then click on Submit and Make current.

Milestone 3: Creations of 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

=> Creations of Columns (Fields).

1. Near Columns Double click near insert a new row.

2. Give the details as:

   Column label : Number

   Type : String

3. Double click on insert a new row again

4. Give the details as:

   Column label : Date

   Type : Date

5. Double click on insert a new row again

6. Give the details as:

   Column label : Amount
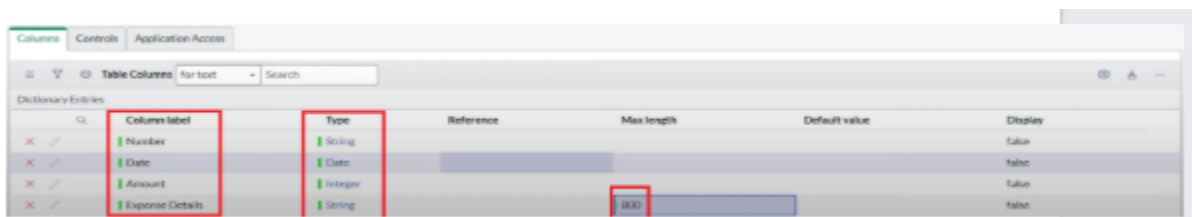
   Type : Integer

7. Double click on insert a new row again

8. Give the details as:

      Column label : Expense Details

      Type : String

      Max length : 800

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

=> Making Number Field on 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.

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

   Maintenance

5. Click on New.

6. Enter the below Details:

   Table : Family Expenses

   Prefix : MFE
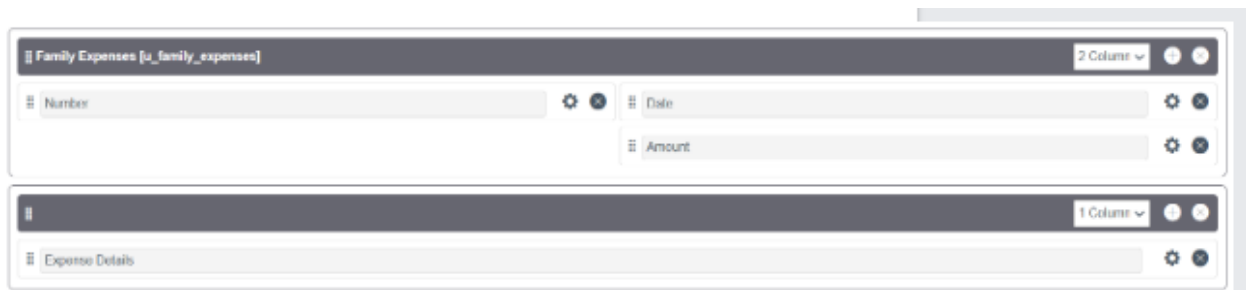

9. Click on Submit.

=> 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.

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 Table (Daily Expenses).

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.

   Creations of Columns (Fields)

1. Near Columns Double click near insert a new row.

2. Give the details as:

      Column label : Number

      Type : String

3. Double click on insert a new row again

4. Give the details as:

      Column label : Date

      Type : Date

5. Double click on insert a new row again

6. Give the details as:

       Column label : Expense

       Type : Integer

7. Double click on insert a new row again

8. Give the details as:

       Column label : Family Member Name

       Type : Reference

       Max length : 800

9. Double click on insert a new row again

10. Give the details as:

       Column label : Comments

       Type : String

       Max length : 800

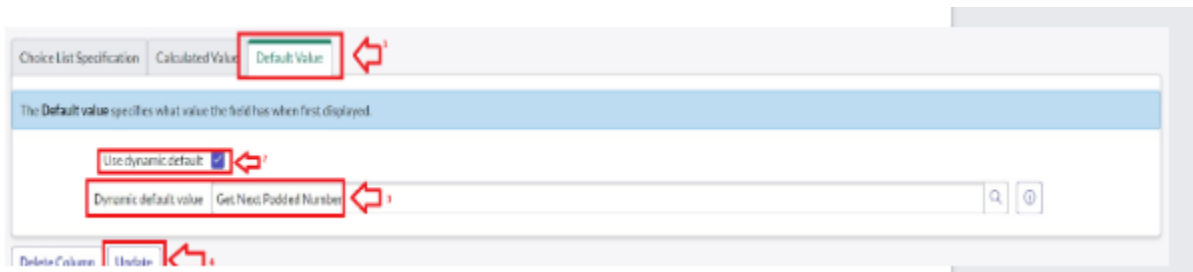11. Go to the Header and right click there>> click on Save.

=> **Making Number Field on 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.

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

5. Click on New.

6. Enter the below Details:

   Table : Family Expenses

   Prefix : MFE

9. 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.

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 5: Creations of Relationship.

=> Creation of Relationship Between Family Expenses and Daily Expenses Table.

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 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

4. Add Daily Expenses to the Selected Area.

5. Click on Save

Milestone 7: Creations 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

Business Rule
New record

is 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

Name   Family Expenses BR

Table   Daily Expenses (u_daily_expenses)

Application   Global

Active ☑

Advanced ☑

4. In when to run Check Insert and Update

When to run   ...ns   Advanced

Specify whether the business rule should run on **Insert** or **Update**. Use **Filter Conditions** to specify under which condit

When   before

Order   100

Insert ☑

Update ☑

Delete ☐

Query ☐

Filter Conditions   Add Filter Condition   Add "OR" Clause

-- choose field --   -- oper --   -- value --

Role conditions   ✎

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())

15

```
{

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);
```
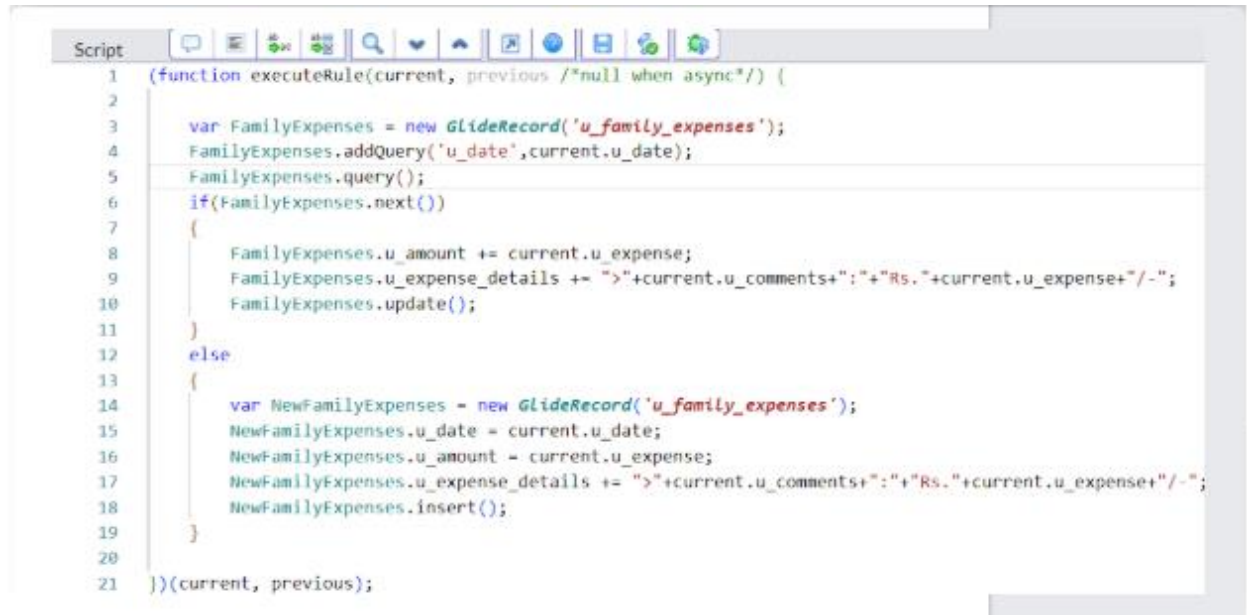
```
Script  [□][≡][$x][$$][Q][∨][∧][⊠][●][⊟][⏺][⏹]
  1   (function executeRule(current, previous /*null when async*/) {
  2
  3       var FamilyExpenses = new GlideRecord('u_family_expenses');
  4       FamilyExpenses.addQuery('u_date',current.u_date);
  5       FamilyExpenses.query();
  6       if(FamilyExpenses.next())
  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       else
 13       {
 14           var NewFamilyExpenses = new GlideRecord('u_family_expenses');
 15           NewFamilyExpenses.u_date = current.u_date;
 16           NewFamilyExpenses.u_amount = current.u_expense;
 17           NewFamilyExpenses.u_expense_details += ">"+current.u_comments+":"+"Rs."+current.u_expense+"/-";
 18           NewFamilyExpenses.insert();
 19       }
 20
 21   })(current, previous);
```

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

=> **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.
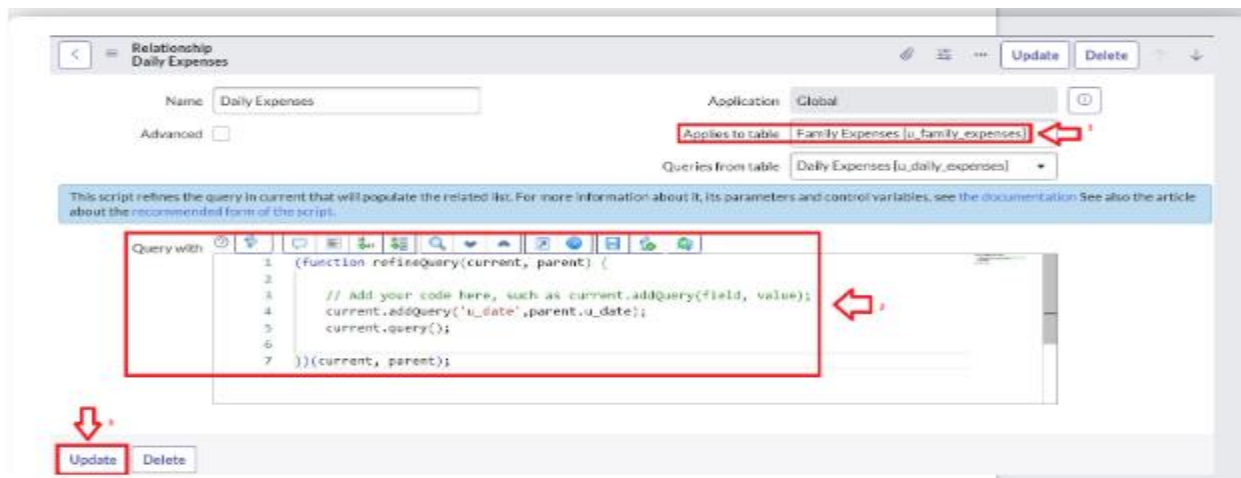
(function refineQuery(current, parent) {

// 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.S