CALCULATING FAMILY EXPENSES USING SERVICENOW

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Team size : 4

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Problem Statement:

Managing and tracking family expenses manually often leads to errors, lack of transparency, and difficulty in budgeting. Using ServiceNow, we can build an application to record, categorize, and analyze family expenses for better financial planning.

Objectives:

Automate the process of tracking family expenses.

Provide real-time reports and dashboards on spending patterns.

Categorize expenses (Food, Rent, Utilities, Education, Entertainment, etc.).

Ensure better decision-making with ServiceNow workflows and analytics.

Skills:

With these ServiceNow skills, you can design an app that records family expenses, auto-calculates totals, and provides dashboards for financial planning.
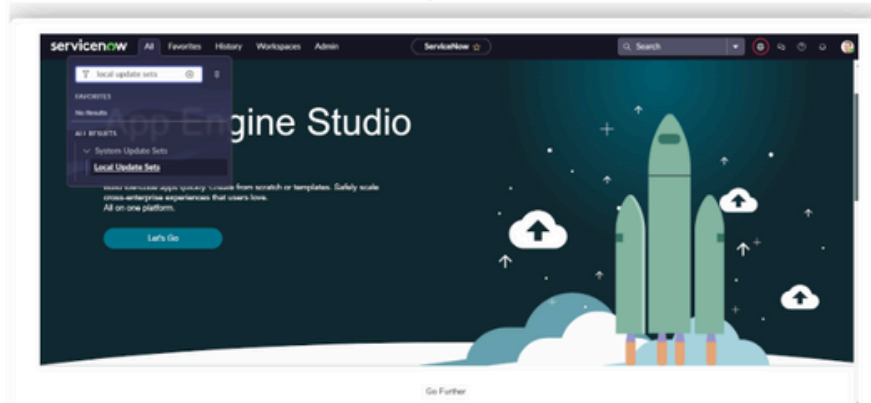
TASK INITIATION

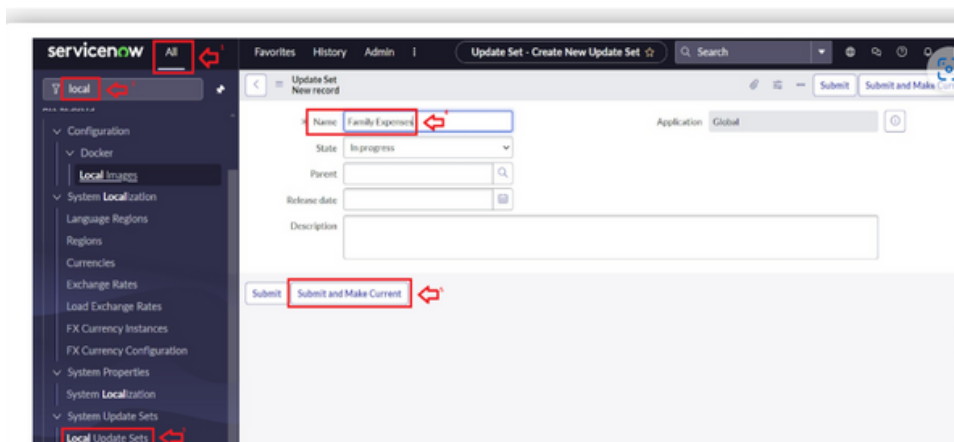## Task 1:Creation of new update set

Activity :

Creation of new update set

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.

Task 2: Creation of table

Activity : Creation of new update set

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
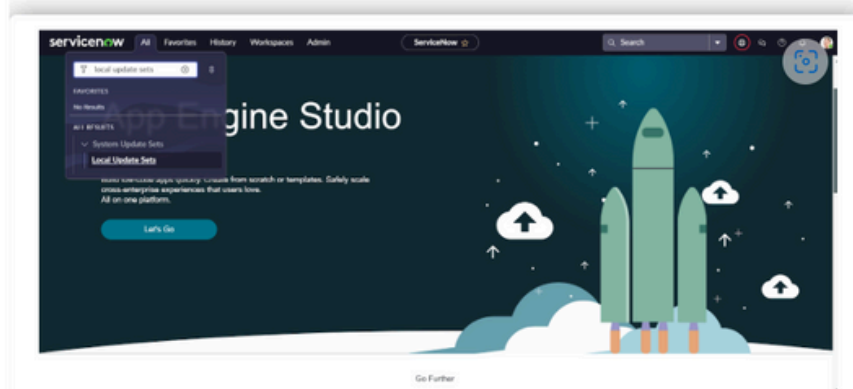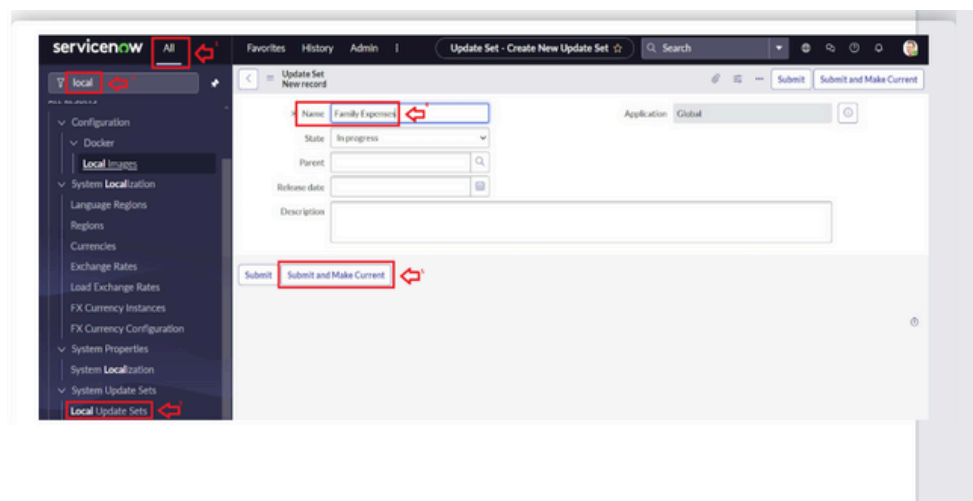3. Then click on Submit and Make current.

Task 3:Creation of table

Activity 1:Creation of family expenses table
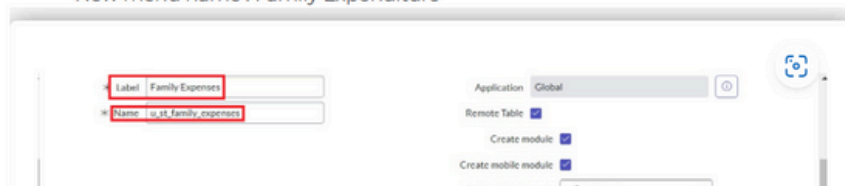

1. Go to All > In the filter search for Tables > click on New.
2. Enter the Details:
   Label : Family Expenses
   Name : Auto-Populated
   New menu name : Family Expenditure

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

Activity 2: Creation of column filed

Creation 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
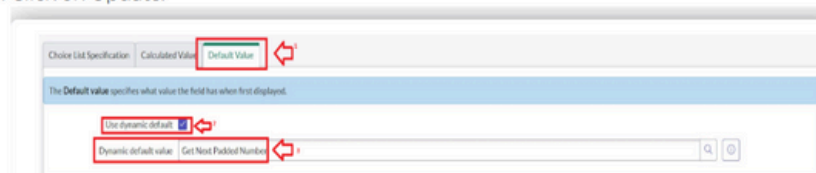   Type : String
   Max length : 800
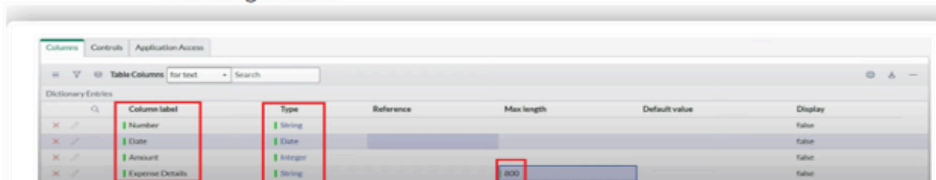
9. Go to the Header and right click there>> click on Save.

Activity 3 : Making number field an auto-number

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

9. Click on Submit.

Activity 4 : Configure the form

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.

Task 4 : Creation of table (Daily Expenses)

Activity 1 : Creation of daily expenses table

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.

Activity 2: Creation of columns (Field)

Creation 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
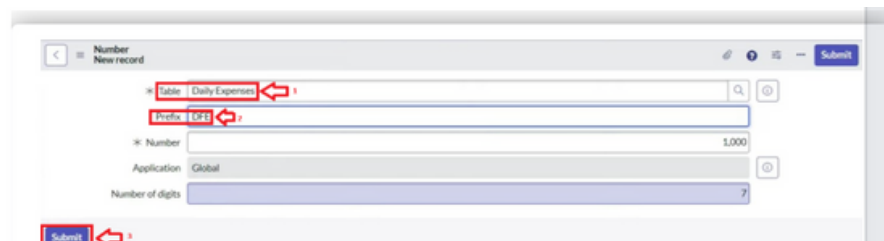   Type : String
    Max length : 800

Activity 3 : Making number field auto-number

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

9. Click on Submit.

Activity 4 : Configure the form

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.

Task 5: Creation of relationship

Activity : Creation of relation ship between family expenses and daily expenses tables

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.

Task 6 :Configuring related list on family expenses

Activity 1 : Configuring related list on family expenses

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

Task 7 : Creation of business rules

Activity : Creation of business rules

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

Business Rule
New record

This 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	Application	Global
Table	Daily Expenses [u_daily_expenses]	Active	✓
		Advanced	✓

4. In when to run Check Insert and Update

| When to run | | Advanced |

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

When	before	Insert	✓
Order	100	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())
{
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    💬 📧 👤 👥 🔍 ⌄ ⌃ 📄 🔵 💾 📋 📑
  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.

Task 8 : Configure the relationship

Activity : Configure the relationship

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 :

Implementing family expense calculation in ServiceNow provides a structured and automated way to manage and analyze household financial data. By leveraging ServiceNow's capabilities such as forms, workflows, reporting, and dashboards, families can track income and expenses in real time, categorize spending, and generate insights for better financial planning. This not only reduces manual effort but also enhances accuracy, transparency, and decision-making in managing family budgets.