CALCULATING FAMILY EXPENSES USING SERVICE NOW

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Problem Statement: Managing household expenses is often a challenge

for families due to the lack of a centralized, automated, and user-friendly system to track income and spending. Traditional methods such as manual record-keeping, spreadsheets, or mobile apps may not provide real-time insights, categorization, or reporting features. This results in difficulties in budgeting, identifying unnecessary expenses, and making informed financial decisions.

Objective: The main objective of this project is to develop a centralized and

automated system on ServiceNow to track and manage family expenses efficiently. The solution aims to simplify the process of recording income and expenditure, categorize expenses, generate real-time reports, and provide insights into spending patterns. This will help families in effective budgeting, controlling unnecessary expenses, and making informed financial decisions.

Skills:

ServiceNow Platform – Creating custom applications, tables, forms, and workflows.

Scripting (JavaScript in ServiceNow) – For client-side and server-side scripting to automate processes.

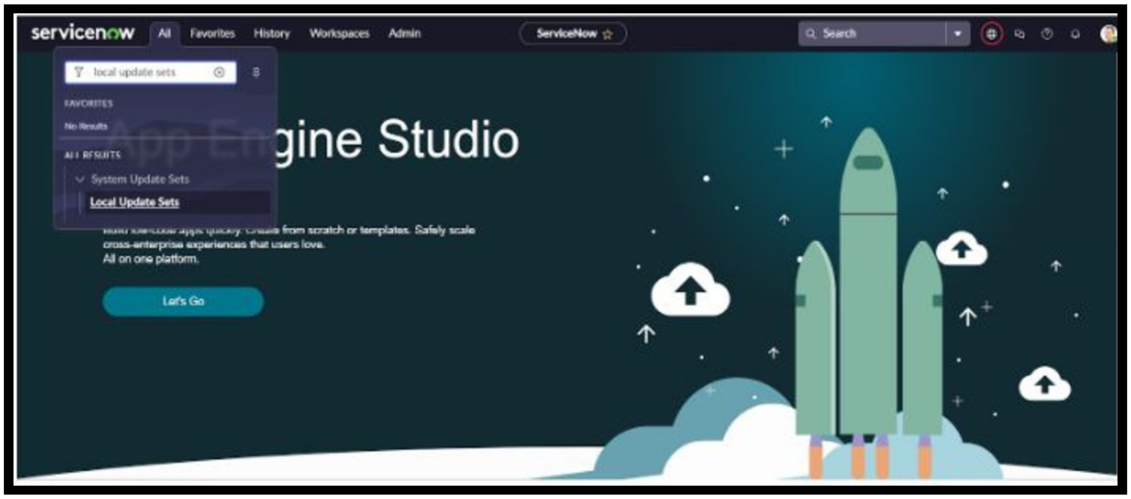
Form Design & Catalog Items – Designing user-friendly forms for entering and categorizing expenses.

Workflow & Automation – Automating expense approval, notifications, and updates.

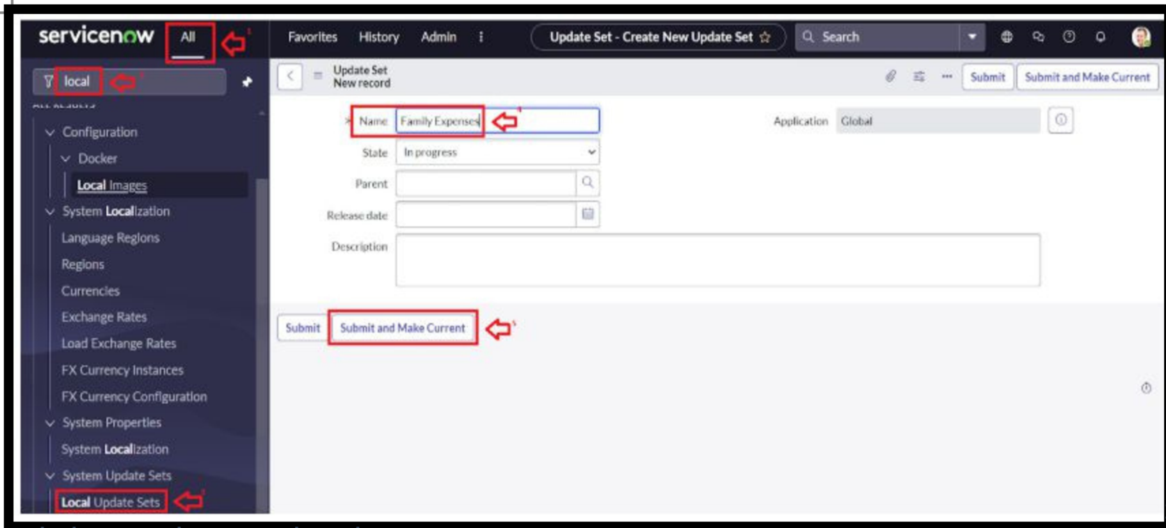
Reporting & Dashboards – Creating real-time reports and visual dashboards for expense analysis.
Database Management – Handling tables, records, and relationships in ServiceNow.
Problem-Solving & Analytical Thinking – Identifying spending patterns and suggesting improvements.
Collaboration Tools – Working as a team using ServiceNow environment.

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.T h en click on Submit and Make current.

Creation of Family Expenses Table

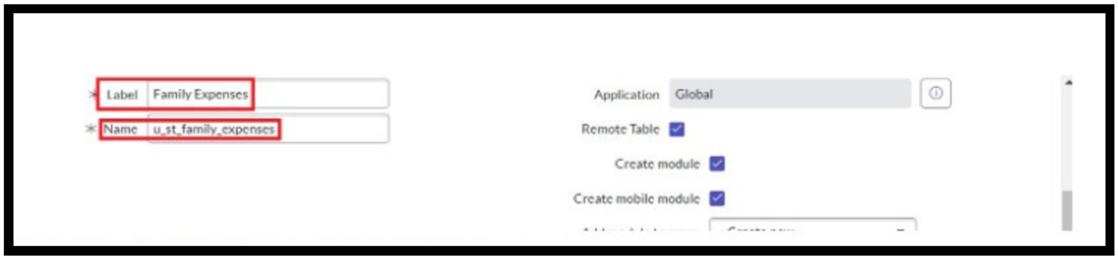
1.Go to All > In the filter search for Tables > click on New

2.Enter the Details:

Label : Family Expenses

Name : Auto-Populated

New menu name : Family Expenditure



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

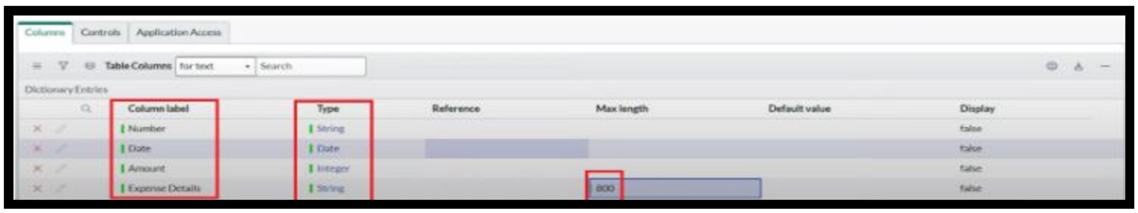
7.Double click on insert a new row again

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.

Making Number Field an Auto-Number

1.Double click on the Number Field/Column.

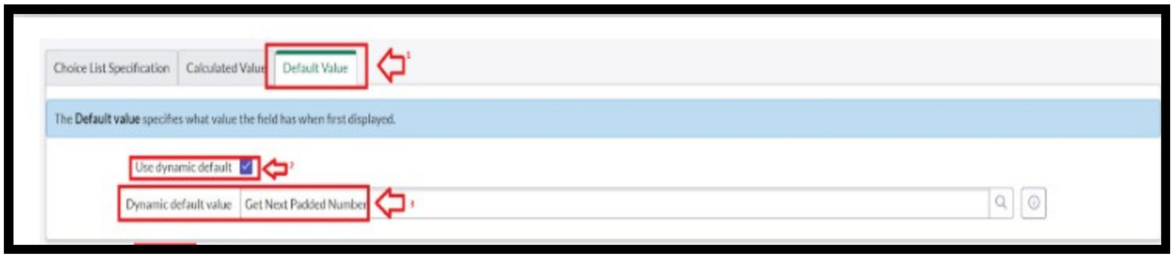
2.Go down and double click on Advanced view

3.In Default Value:

Use dynamic default : check the box

Dynamic default value : Get Next Padded Number

4.Click on Update.



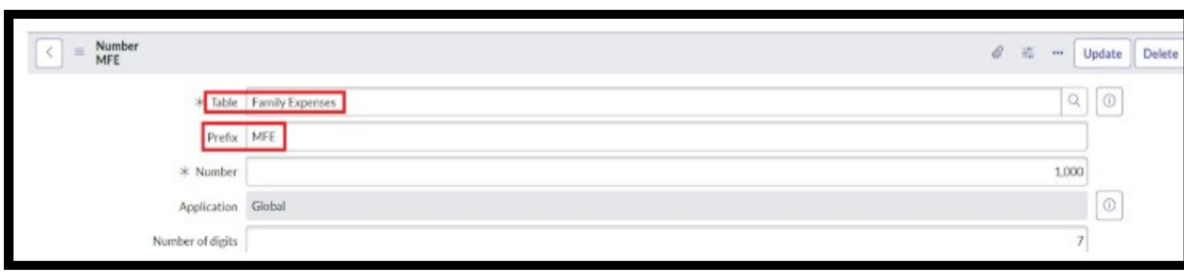
6.Go to All >> In the filter search for Number Maintenance >> select Number Maintenance

7.Click on New.

8.Enter the below Details:

Table : Family Expenses

Prefix : MFE



9.

10.Click on Submit.

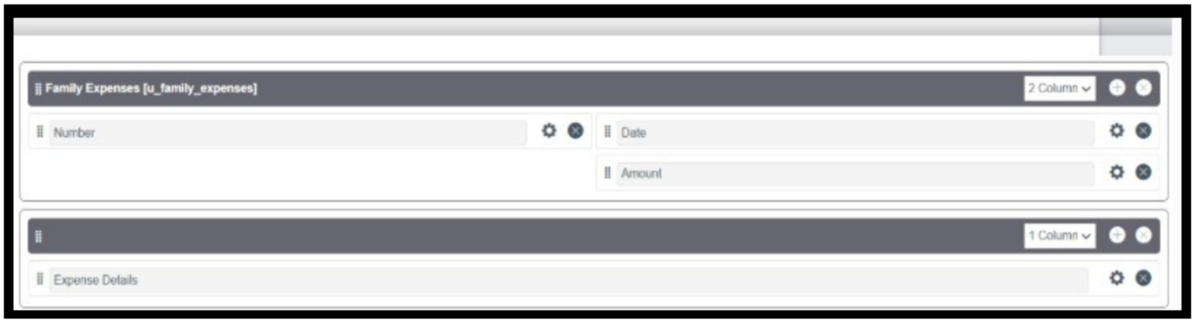
Configure the Form

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.

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.Add Daily Expenses to the Selected Area.

5.Click on Save

Configuring Related List on Family Expen s es

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 List

4.Add Daily Expenses to the Selected Area.

5.Click on Save

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.

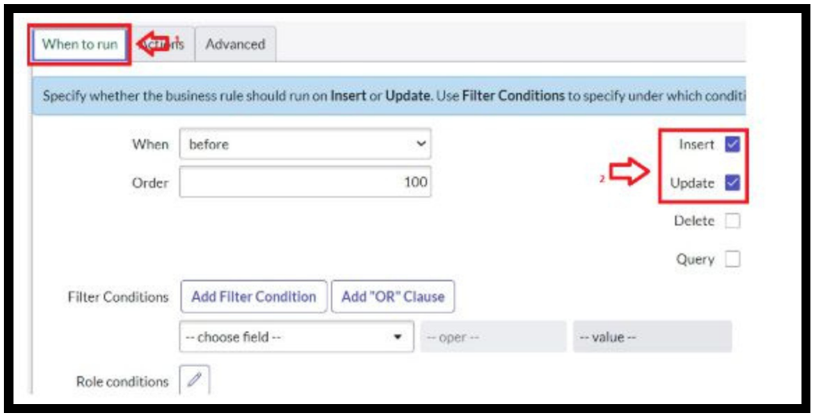
3.Enter the Details:

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);
Fa mi l y Ex p en ses.qu ery () ;
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);
```

```
(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.

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);
cu rren t.qu ery () ;

})(current, parent);
```

5.Click on Update.

Configure The Relationship

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

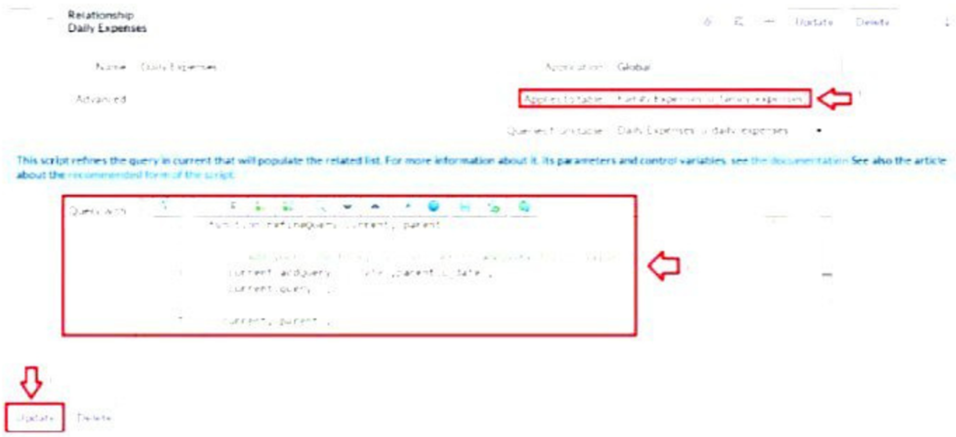
2. In that, open Daily Expenses Relationship.

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