



## Calculating Family Expenses using Service Now

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**Team Size :** 3

**Team Leader :** JAGADEESH R

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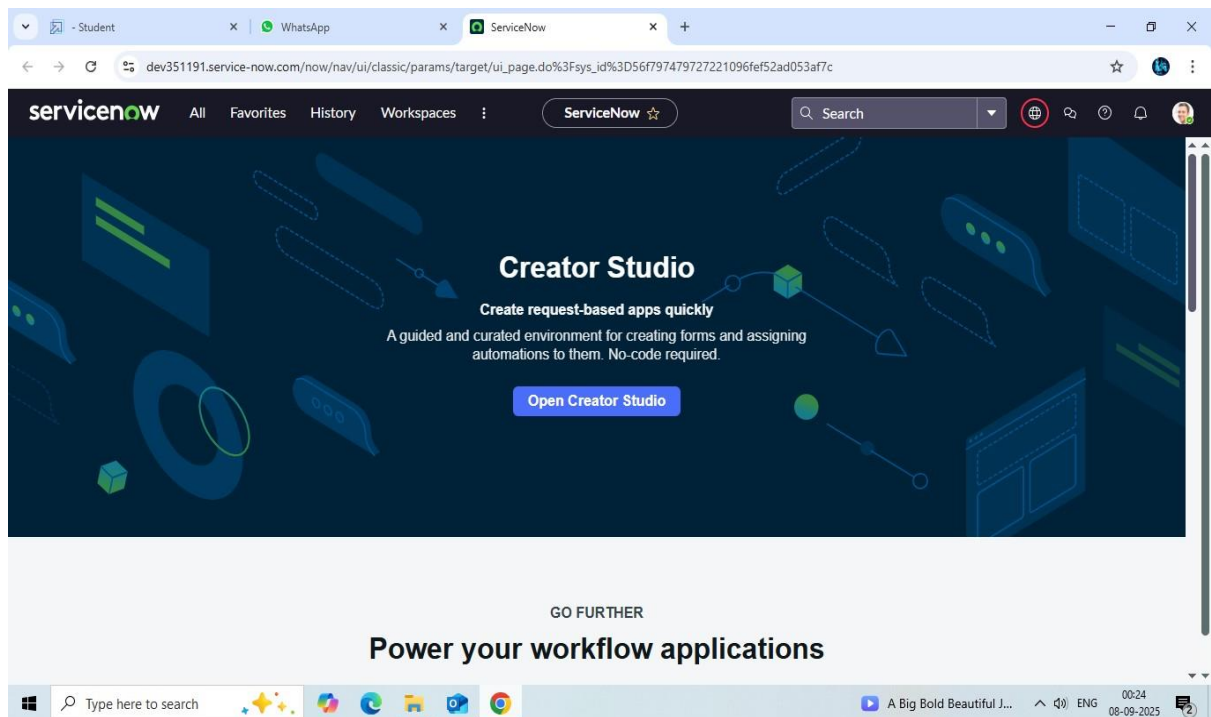
Problem statement: **Calculating Family Expenses using Service Now**

### TASK INITIATION

Milestone 1 : creat Setting up ServiceNow Instance

Activity 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.

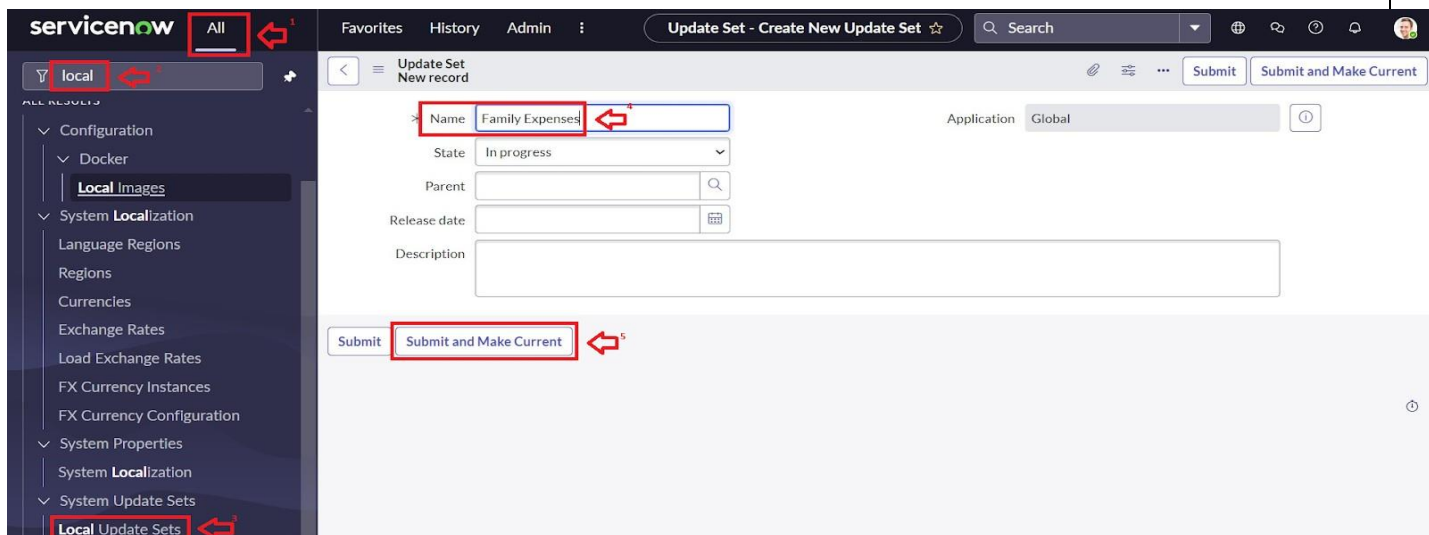


## Milestone 2: Creation of New Update SetActivity 1: : *Creat* Creation of New Update Set

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



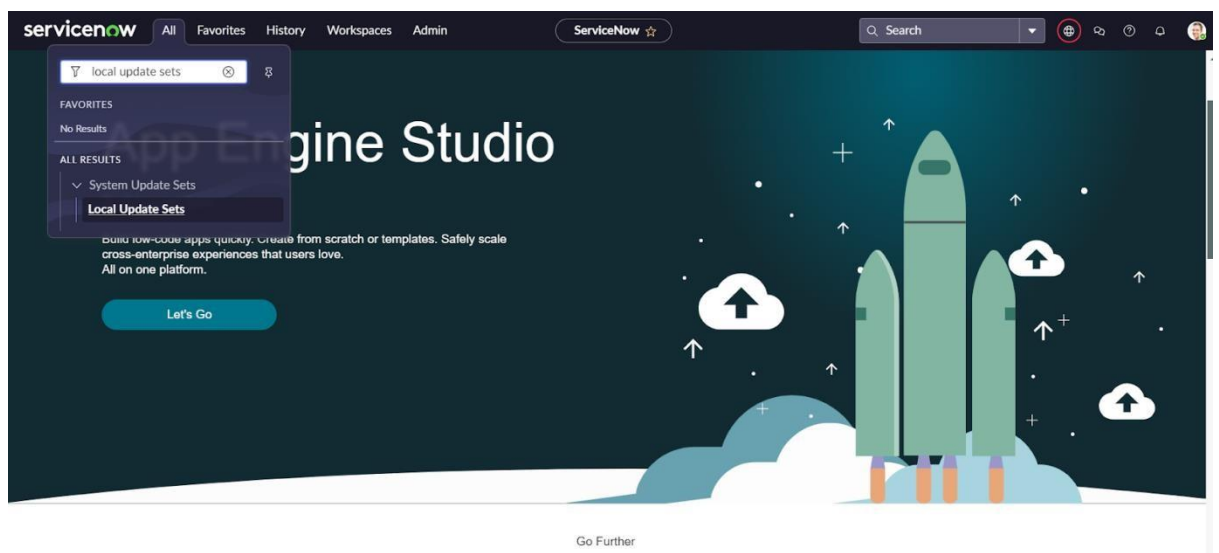
2. Enter the Details as:  
Name : Family Expenses
3. Then click on Submit and Make current.



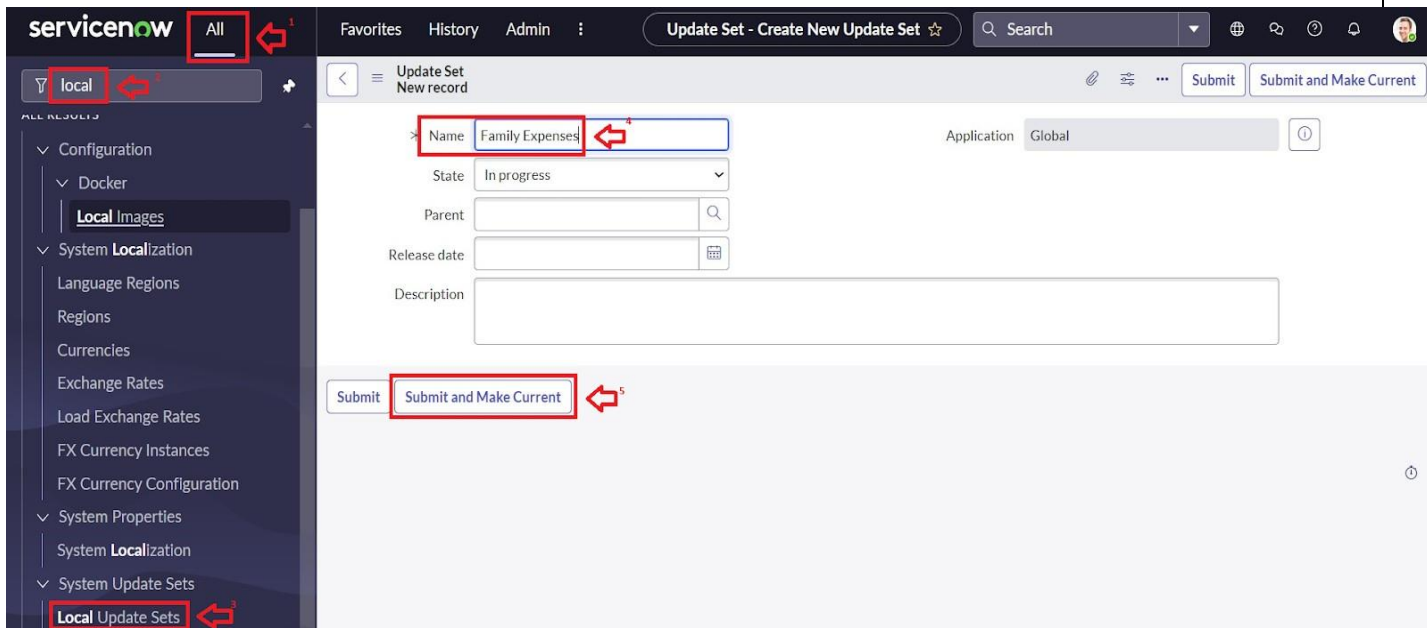
## Milestone 3: Creation of Table

### Activity 1: 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.



## Milestone 4: Creation of Table

### Activity 1: Creat Creation of Family Expenses Table

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

Enter the Details:

Label : Family Expenses

Name : Auto-Populated

New menu name : Family Expenditure

\* Label 
 Application  ⓘ

\* Name 
 Remote Table ☒

Create module ☒

Create mobile module ☒

Add module to menu

New menu name

---

Columns Controls Application Access

Table Columns  Search ⓘ

Dictionary Entries

	Column label	Type	Reference	Max length	Default value	Display
<input checked="" type="checkbox"/> <input type="text"/>	Number	String				false
<input checked="" type="checkbox"/> <input type="text"/>	Date	Date				false
<input checked="" type="checkbox"/> <input type="text"/>	Amount	Integer				false

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: 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

Dictionary Entries	Column label	Type	Reference	Max length	Default value	Display
	Number	String				false
	Date	Date				false
	Amount	Integer				false
	Expense Details	String		800		false

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:  
Use dynamic default : check the box  
Dynamic default value : Get Next Padded Number
4. Click on Update.

Choice List Specification   Calculated Value   **Default Value**

The **Default value** specifies what value the field has when first displayed.

☒ Use dynamic default

Dynamic default value   Get Next Padded Number

Delete Column   **Update**

5. Go to All >> In the filter search for Number Maintenance >> select Number Maintenance 6. Click on New.

Enter the below Details: Table  
: Family Expenses  
Prefix : MFE

9. 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 Daily Expenses 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:  
Label : Daily Expenses  
Name : Auto-Populated  
Add Module to menu : Family Expenditure



✱ Label | Daily Expenses ↔ 1  
✱ Name | u\_daily\_expenses ↔ 2  
Extends table [ ] 🔍



Application Global ⓘ  
Create module ☒  
Create mobile module ☒  
Add module to menu Family Expenditure ↔ 3

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: 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.

### 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

: Family Expenses

Prefix : MFE

Number  
New record

\* Table Daily Expenses 1

Prefix DFE 2

\* Number 1,000

Application Global

Number of digits 7

Submit 3

9. 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.

## Daily Expenses [u\_daily\_expenses] 2 Column

## Number ## Date ## Family Member Name ## Expense

## 1 Column

## Comments

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:  
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

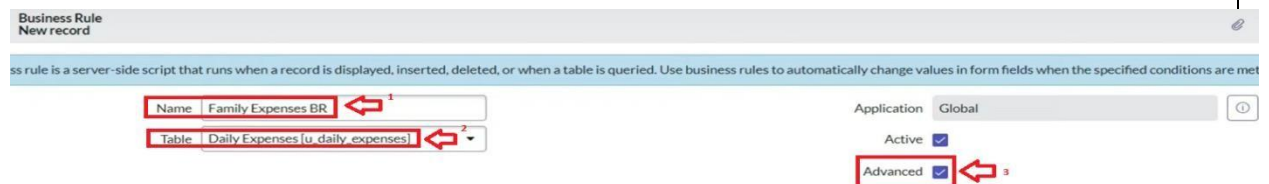
### Activity 1: Configuring Related List on Family Expenses

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 Rules

### 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:  
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();
}
```

When to run  ~~Script~~ Advanced

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

When:

Order:

Filter Conditions:

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

Role conditions:

Insert ☒

Update ☒

Delete ☐

Query ☐

```

}
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.

## **Milestone 9: Configure the Relationship**

### **Activity 1: Create 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.

Relationship  
Daily Expenses

Name:

Application:

Advanced ☐

Applies to table:  1

Queries from table:

This script refines the query in current that will populate the related list. For more information about it, its parameters and control variables, see [the documentation](#). See also the article about the recommended form of the script.

Query with

```

1 (function refineQuery(current, parent) {
2
3     // Add your code here, such as current.addQuery(field, value);
4     current.addQuery('u_date', parent.u_date);
5     current.query();
6
7 })(current, parent);

```

2

3

**Conclusion:** Calculating family expenses using ServiceNow provides a structured and efficient way to manage household finances. By leveraging its automated workflows, customizable dashboards, and reporting features, families can easily record income, track expenses, categorize spending, and generate insights into financial patterns. This approach not only minimizes manual effort and errors but also promotes transparency, better budgeting, and informed decision-making for future financial planning. Ultimately, ServiceNow acts as a smart tool to transform traditional expense tracking into a digital, reliable, and user-friendly system.