

M.A.M COLLEGE OF ENGINEERING

*Topic : Calculating Family Expenses
using Servicenow*

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Calculating Family Expenses using Service Now

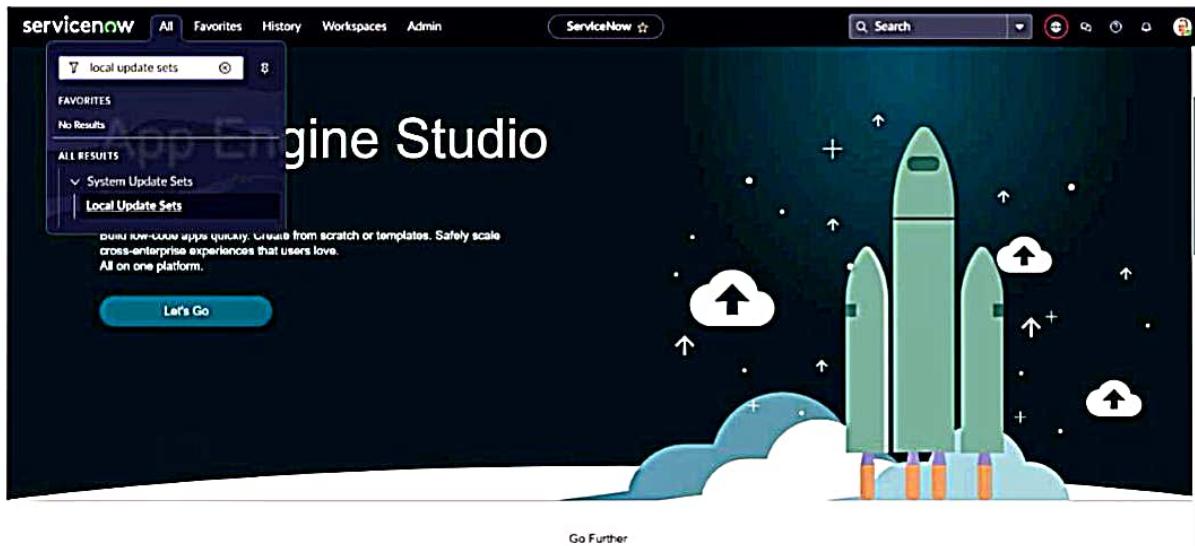
The project aims to develop a comprehensive expense calculation system using ServiceNow. This system will enable users to track and manage family expenses efficiently. It will include features such as expense categorization, budget setting, real-time tracking, and reporting capabilities. Utilizing ServiceNow's 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.

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.

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

A screenshot of the "Update Set - Create New Update Set" form. The left sidebar shows "All" selected, and "Local Update Sets" is highlighted with a red box. The main form fields include "Name" (Family Expenses), "State" (In progress), "Parent" (empty), "Release date" (empty), and "Description" (empty). At the bottom, there are "Submit" and "Submit and Make Current" buttons, both of which are highlighted with red boxes.

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

The screenshot shows a software interface for creating a new menu item. At the top, there are fields for 'Label' (Family Expenses) and 'Name' (u_st_family_expenses). On the right, settings include 'Application' (Global), 'Remote Table' (checked), 'Create module' (checked), 'Create mobile module' (checked), and 'Add module to menu' (set to '...Create new...'). A red box highlights the 'New menu name' field, which contains 'Family Expenditure'. Below this, tabs for 'Columns', 'Controls', and 'Application Access' are visible, along with a table titled 'Dictionary Entries' containing three rows of column definitions.

	Column label	Type	Reference	Max length	Default value	Display
X	Number	String				false
X	Date	Date				false
X	Amount	Integer				false

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

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

Columns	Controls	Application Access			
Table Columns					
	for text	Search			
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
Insert a new row...					

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.

Choice List Specification	Calculated Value	Default Value	
<p>The Default value specifies what value the field has when first displayed.</p> <p><input checked="" type="checkbox"/> Use dynamic default </p> <p><input type="button" value="Dynamic default value Get Next Padded Number"/> </p> <p> </p>			
Delete Column	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

A screenshot of a software interface for configuring a number sequence. The top bar has standard icons like back, forward, search, and update/delete. Below is a form with the following fields:

- Table: Family Expenses
- Prefix: MFE
- * Number: 1.000
- Application: Global
- Number of digits: 7

At the bottom are "Update" and "Delete" buttons.

8.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.

A screenshot of the form configuration interface. It shows two sections:

- Family Expenses [u_family_expenses]**: This section has a "2 Column" layout. It contains fields for Number, Date, and Amount, each with a gear icon and a delete icon.
- Expense Details**: This section has a "1 Column" layout. It contains a single gear icon and a delete icon.

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 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.

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.

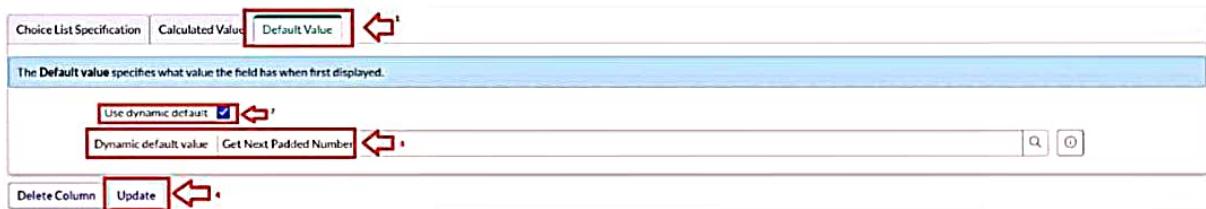
Making Number Field an Auto-Number

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.



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.

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: Go to All >> In the filter search for Business Rules.
 4. Under System Definition Select Business Rules then click on New.
 5. Enter the Details:
Name : Daily Expenses
Applies to table : Select Family Expenses
Daily Expenses : Select Daily Expenses
- 6.Click Save.

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



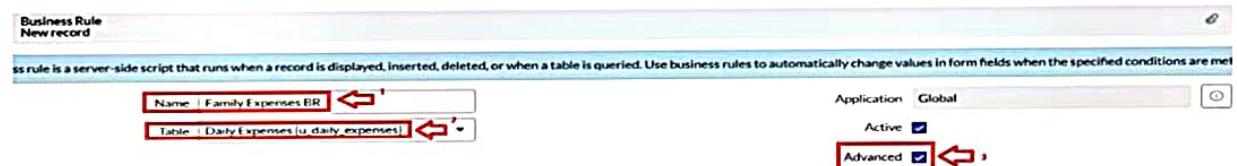
Creation of Business Rules

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



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

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.