

M.A.M COLLEGE OF ENGINEERING

PROJECT NAME : CALCULATING FAMILY EXPENSES USING SERVICE NOW

TEAM MEMBERS :

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OBJECTIVES:

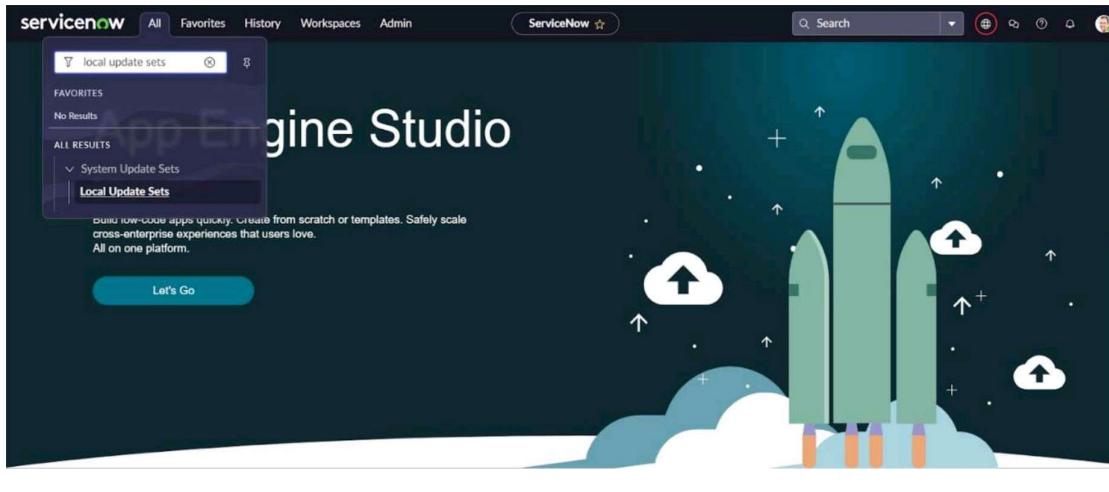
The project aims to develop a comprehensive expense calculation system using ServiceNow. This system will enable users to track and manage family expenses efficiently. It will include features such as expense categorization, budget setting, real-time tracking, and reporting capabilities. Utilizing ServiceNow's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



Go Further

Enter the Details as:

Name : Family Expenses

Then click on Submit and Make current

The screenshot shows the "Update Set - Create New Update Set" screen. The left sidebar has "local" selected. The main form has the following fields filled:

- Name: Family Expenses
- State: In progress
- Parent: (empty)
- Release date: (empty)
- Description: (empty)

At the bottom, there are two buttons: "Submit" and "Submit and Make Current". The "Submit and Make Current" button is highlighted with a red arrow.

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 module. At the top, there's a header with tabs: 'Label' (selected), 'Family Expenses', and an empty box. Below this is a 'Create module' button. To the right, it says 'Application Global' and 'Name u_st_family_expenses'. A 'Remote Table' box is shown below the name. Underneath, there's a 'Create mobile module' checkbox which is checked. An 'Add module to menu' dropdown is set to '-- Create new --'. A red-bordered input field for 'New menu name' contains the text 'Family Expenditure'. Below this, there are three tabs: 'Columns' (selected), 'Controls', and 'Application Access'. The 'Columns' tab displays a table with three rows:

	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

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

3.1n 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.		
<input checked="" type="checkbox"/> 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.

7.Enter the below Details:

Table : Family Expenses

Prefix : MFE

<input type="button" value="<"/>	<input type="button" value="="/>	Number	Update	Delete
MFE				
* Table : Family Expenses				
Prefix MFE				
Number 1.000				
Application Global				
Numberofdigits 7				

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.

The screenshot shows a form configuration interface for 'Family Expenses'. At the top, it says 'Family Expenses [u_family_expenses]' and '2 Column v'. The main area contains a table with two columns: 'Number' and 'Date' in the first row, and 'Amount' in the second row. On the right side of the table, there is a button labeled '1 Column v'. Below the table, there is a section labeled 'Expense Details'.

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.

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**

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

Business Rule
New record



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(lu_date1,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.