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CALCULATE FAMILY EXPENSES USING SERVICENOW

Problem statement

Managing family expenses efficiently is a common challenge in households. Family members often struggle to track income, categorize expenses, and monitor savings goals. Without a structured system, expenses are recorded inconsistently, leading to overspending, lack of accountability, and difficulty in planning budgets.

Currently, families rely on manual methods such as notebooks, spreadsheets, or casual conversations, which lack automation and proper access control. This results in incomplete records, duplicate entries, and no real-time visibility into financial health. Without timely reports or dashboards, families are unable to analyze spending patterns or make informed decisions for future financial planning.

By implementing ServiceNow as a centralized platform, families can automate expense tracking, categorize transactions, and generate reports. This ensures transparency, accountability, and smarter financial management for all members of the household.

Objectives

Define User Roles Clearly

- Head of Family (Finance Coordinator) → Can add income, create and approve expense records, edit, and monitor reports.
- Family Member → Can only add or update their own expense entries.

Implement Access Control Mechanisms

- Use Access Control List (ACL) to restrict family members to their own records while giving full privileges to the head of family.

Workflow Processes using ServiceNow Flow Designer

1. Head of Family sets monthly income and budget.
2. Family members log daily/weekly expenses under categories (e.g., Food, Utilities, Education, Travel, Entertainment).
3. System auto-calculates balance against the monthly budget.
4. Head of Family monitors expenses, approves or flags unusual spending.
5. Reports and dashboards are generated showing expense trends, category-wise breakdown, and savings.

Skills:
Users, Groups, Roles, Tables, Access Control List (ACL), Flow Designer, Notifications, Client Scripts, Reporting & Dashboards.

TASK INITIATION

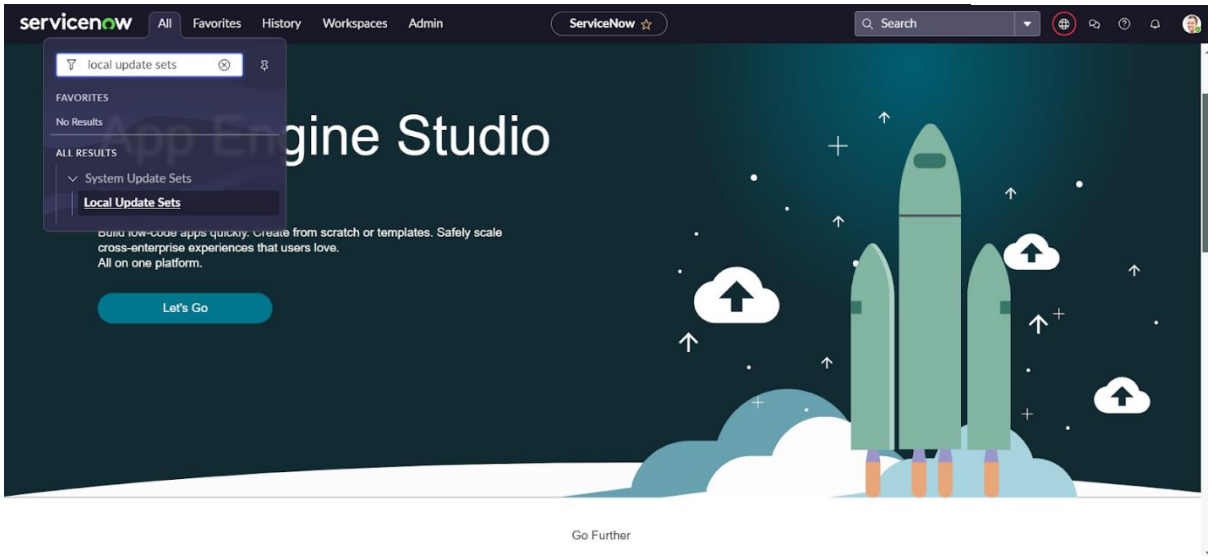
Milestone 1 Users:

Activity 1: setting up service now instance

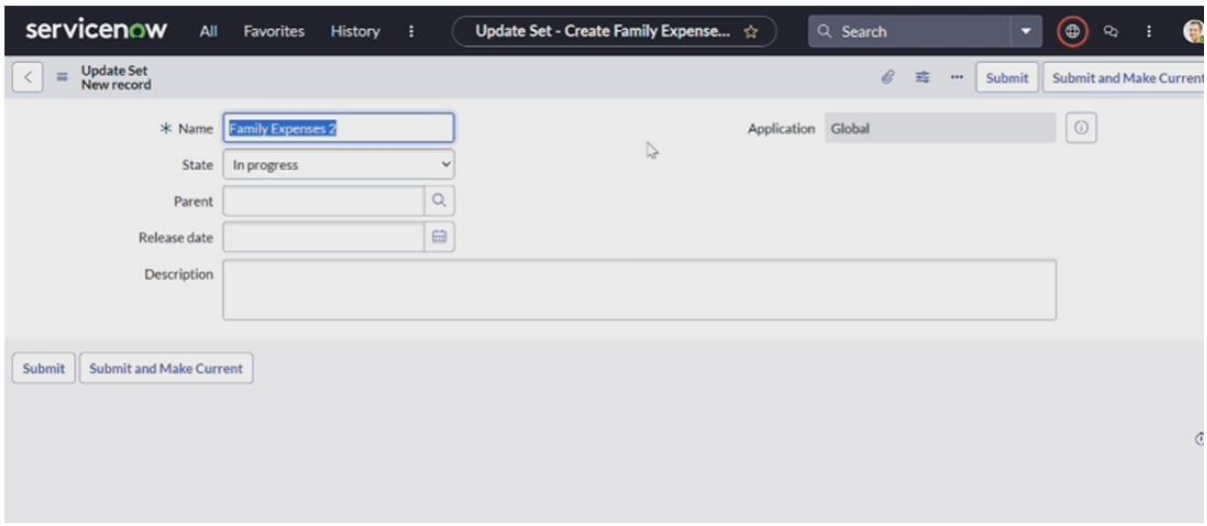
Go to the ServiceNow Developer site: https://developer.servicenow.com

1. Create a developer account (sign up / log in).
2. Open the Personal Developer Instance section.
3. Click Request Instance to get your own ServiceNow instance.
4. Fill in the required details and submit.
5. You will receive an email with your instance link and login details.
6. Use those credentials to log in and start using ServiceNow.

Creating a update set:

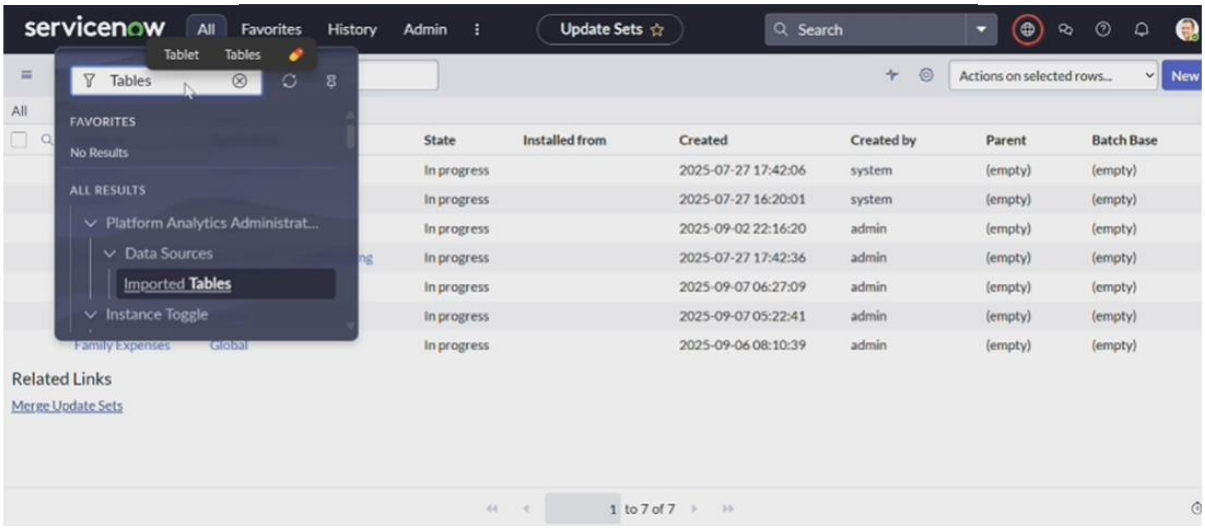


1. click on new table
2. enter a details and name is Educational organization in progress
3. submit button

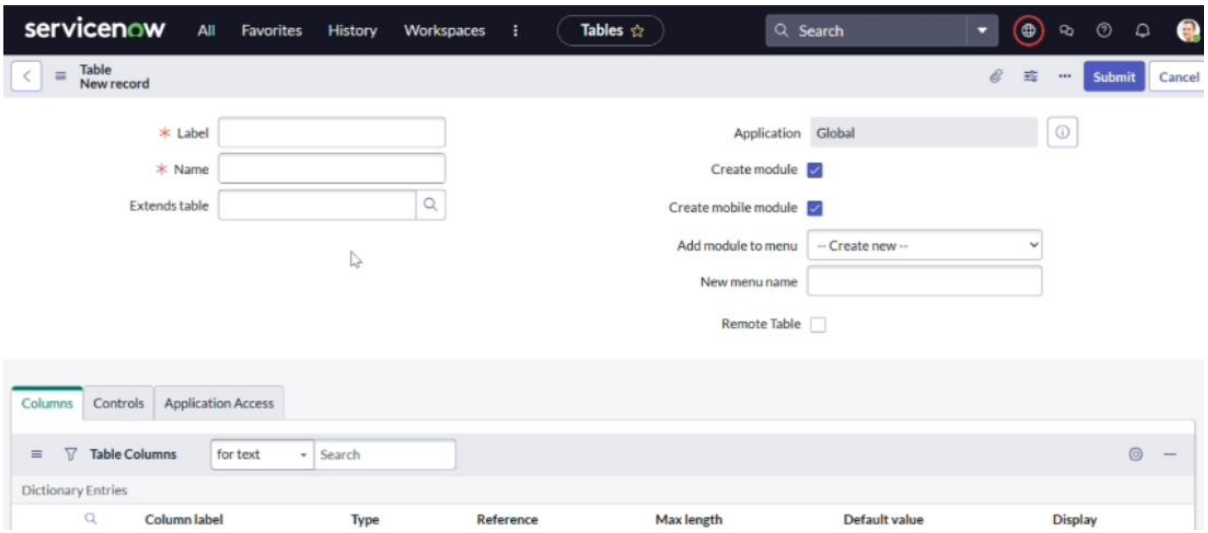


Milestone 2:

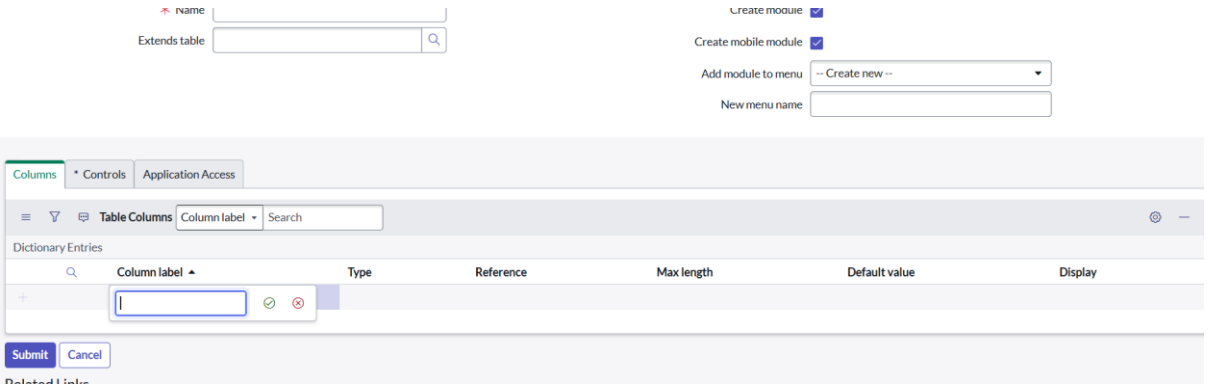
Create a tables :



Click on new table



Creatingcolumn



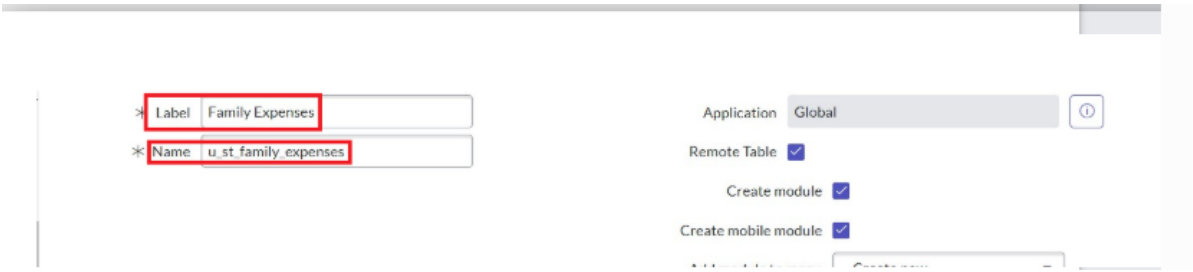
Creation of Family Expenses Table

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

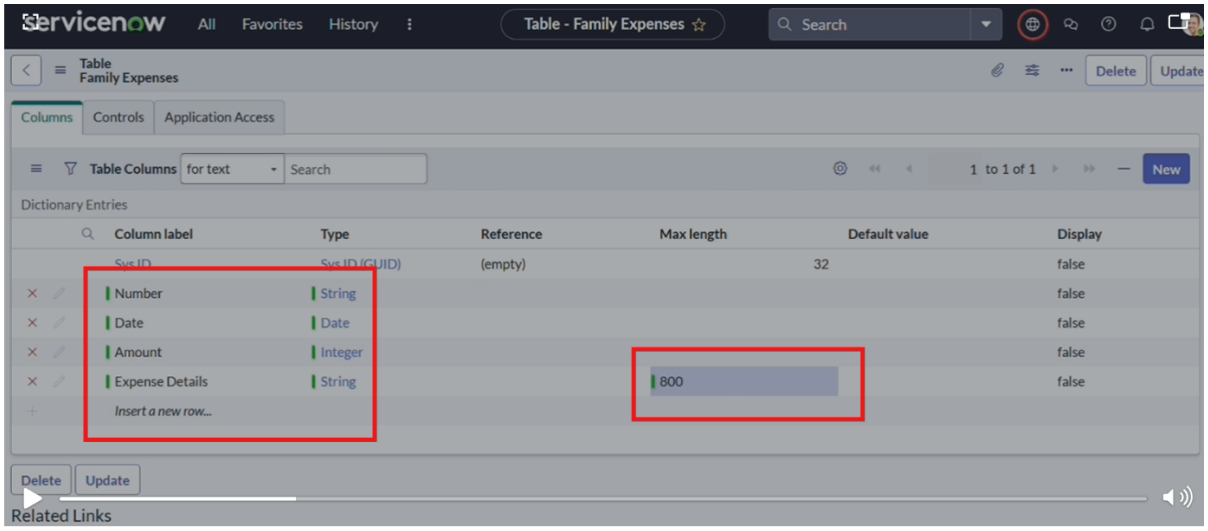
7. Double click on insert a new row again

8. Give the details as:

Column label : Expense Details

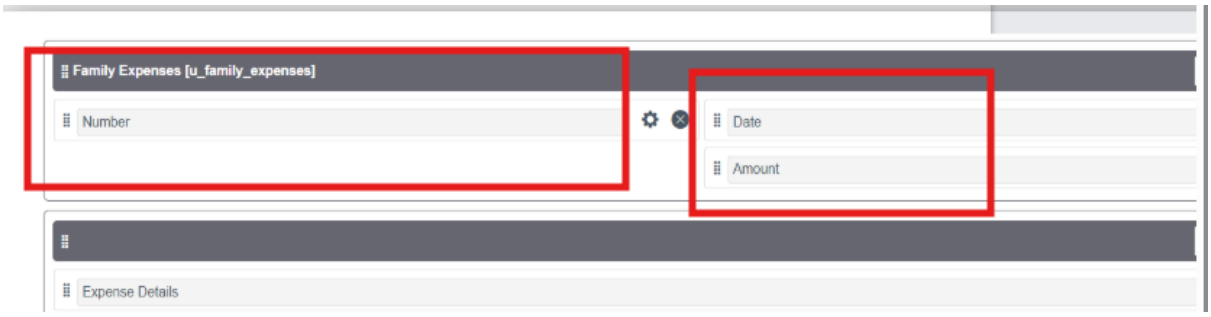
Type : String

Max length : 800



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 4

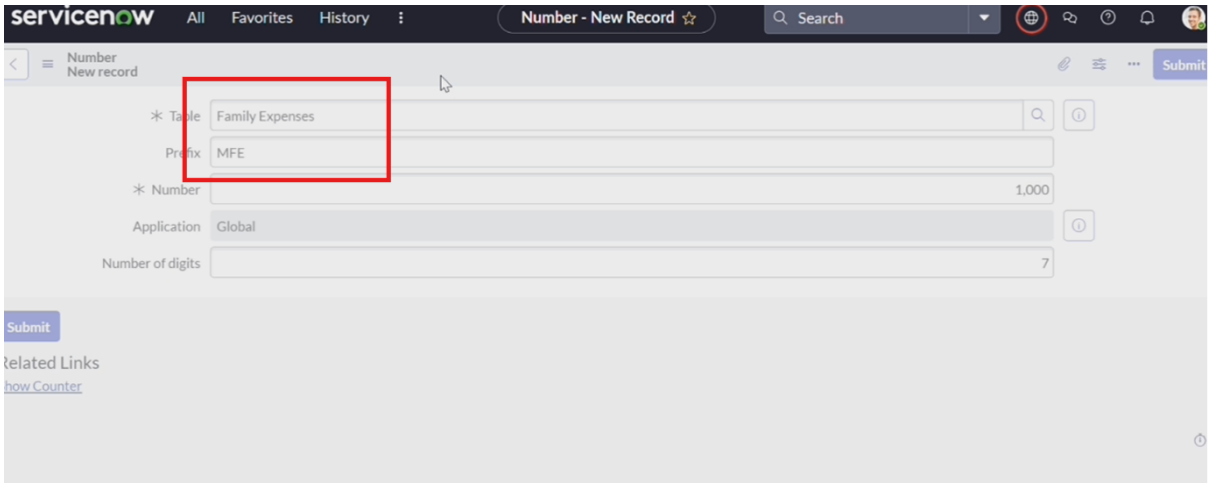
Creation of Table (Daily Expenses)

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



Creation of Relationship between Family Expenses and Daily Expenses tables

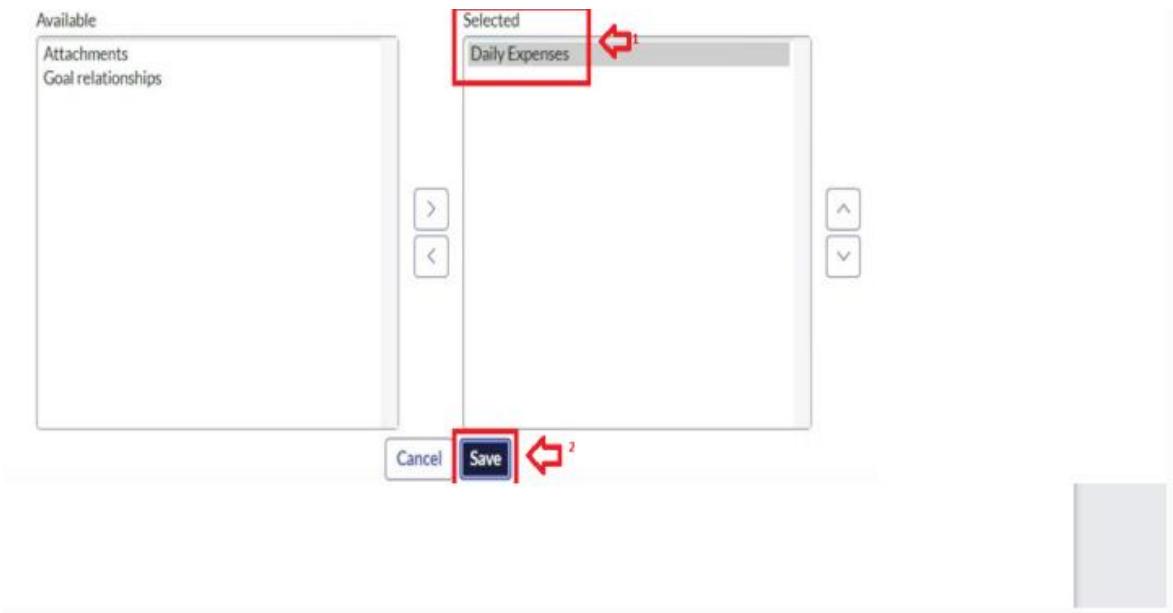
1. Go to All >> In the filter search for Relationships >> Open Relationships
2. Click on New.
3. Enter the details:

Name : Daily Expenses

Applies to table : Select Family Expenses

Daily Expenses : Select Daily Expenses

4. Click Save.



Milestone 5

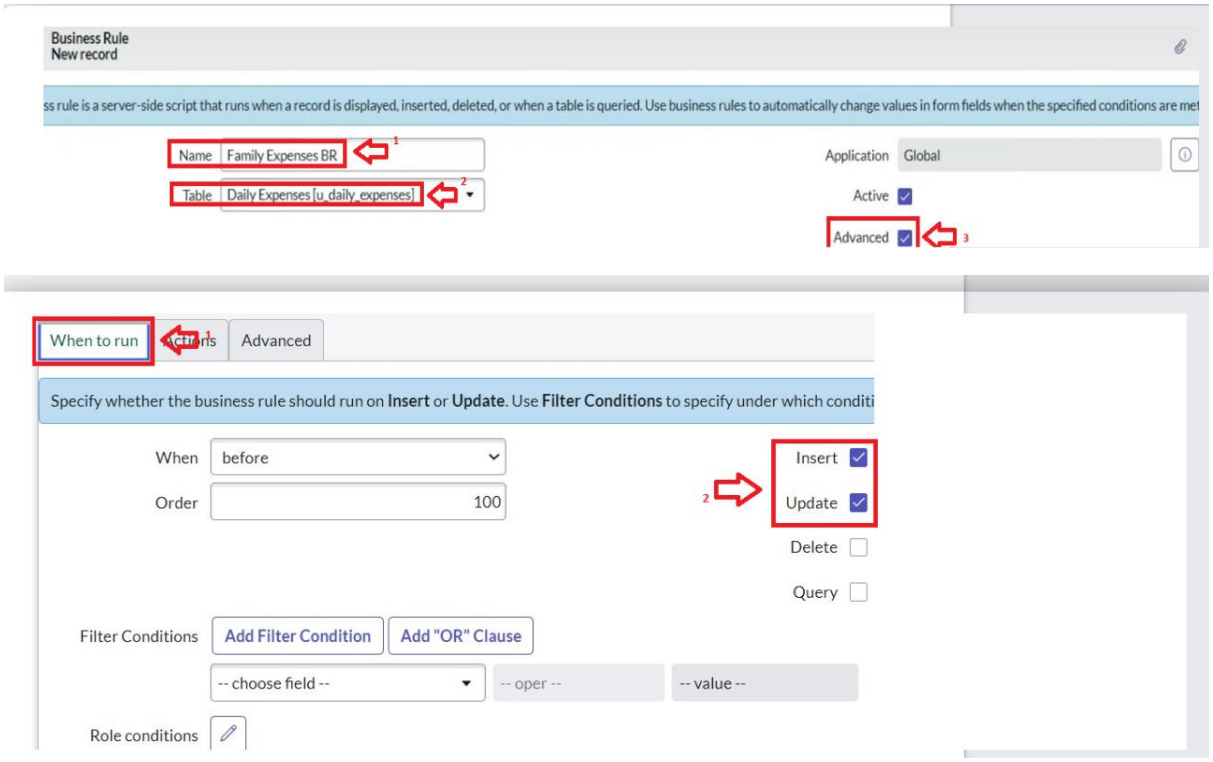
Creation of Business Rules

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




```
(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);
```

Milestone5

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 refine Query(current, parent) {

// Add your code here, such as current. Add Query(field, value);
current. add  Query('udate',parent. udate);
current. query();
})(current, parent);
```

Click on Update.

Conclusion

Following these steps will let you centralize family finances in ServiceNow, automate approvals and monthly reconciliation, and provide transparent, actionable reporting so the family can budget and save more effectively. This step-by-step plan mirrors the milestone and activity style in your reference document for easy translation into a Word document or presentation.