# Calculating Family Expenses using Service Now

# Introduction:

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.

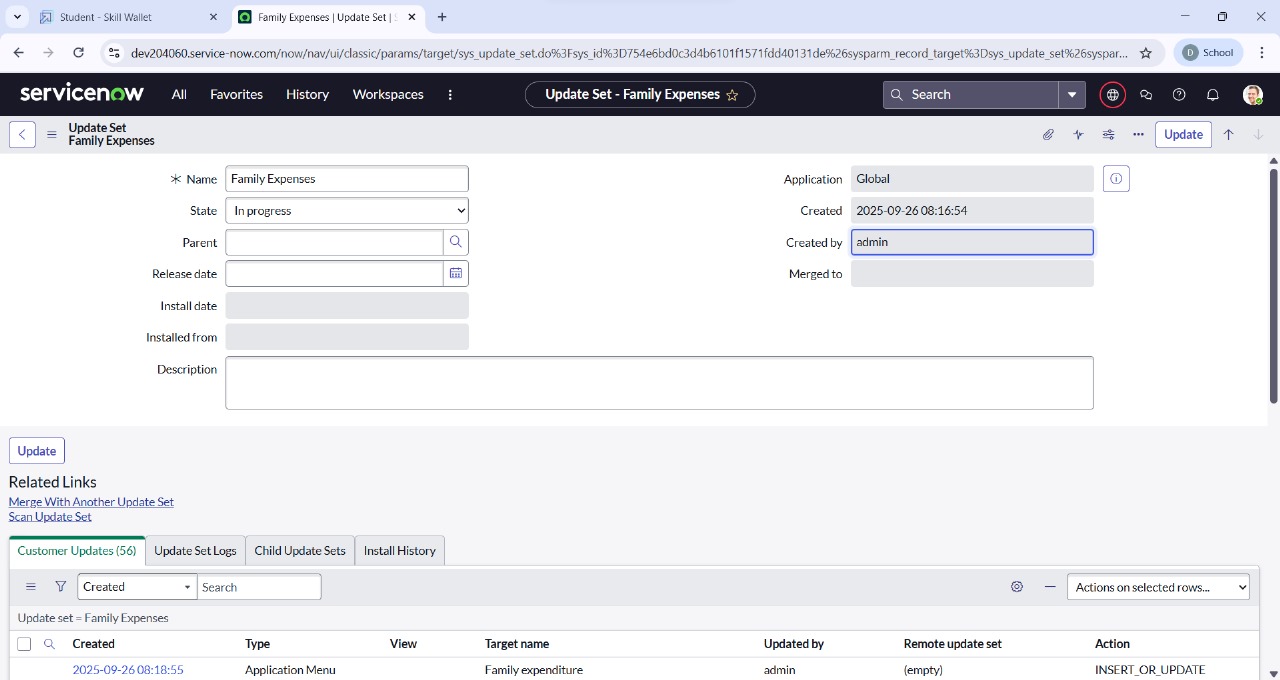
### 1.Setting up ServiceNow Instance

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.

2.**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**

1. Then click on **Submit** and Make current.

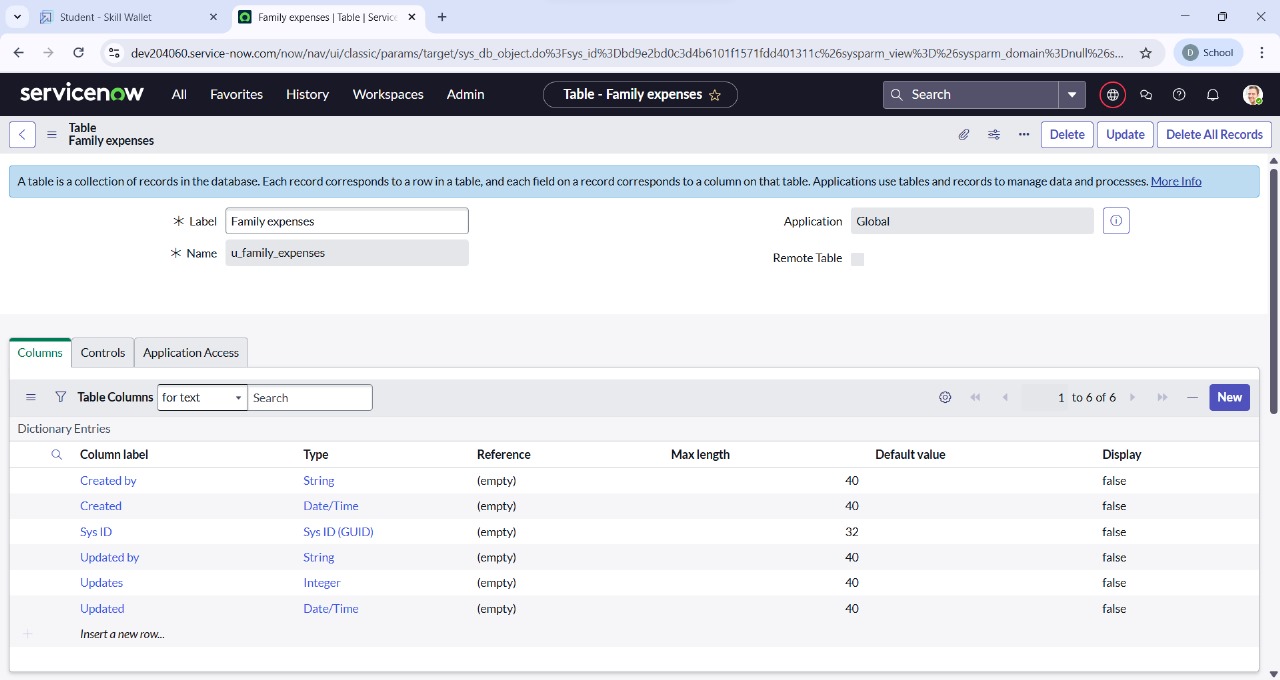
3.Creation of Tables:

### 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**

1. 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**

1. Double click on insert a new row again
2. Give the details as:

Column label : **Date**

Type : **Date**

1. Double click on insert a new row again
2. Give the details as:

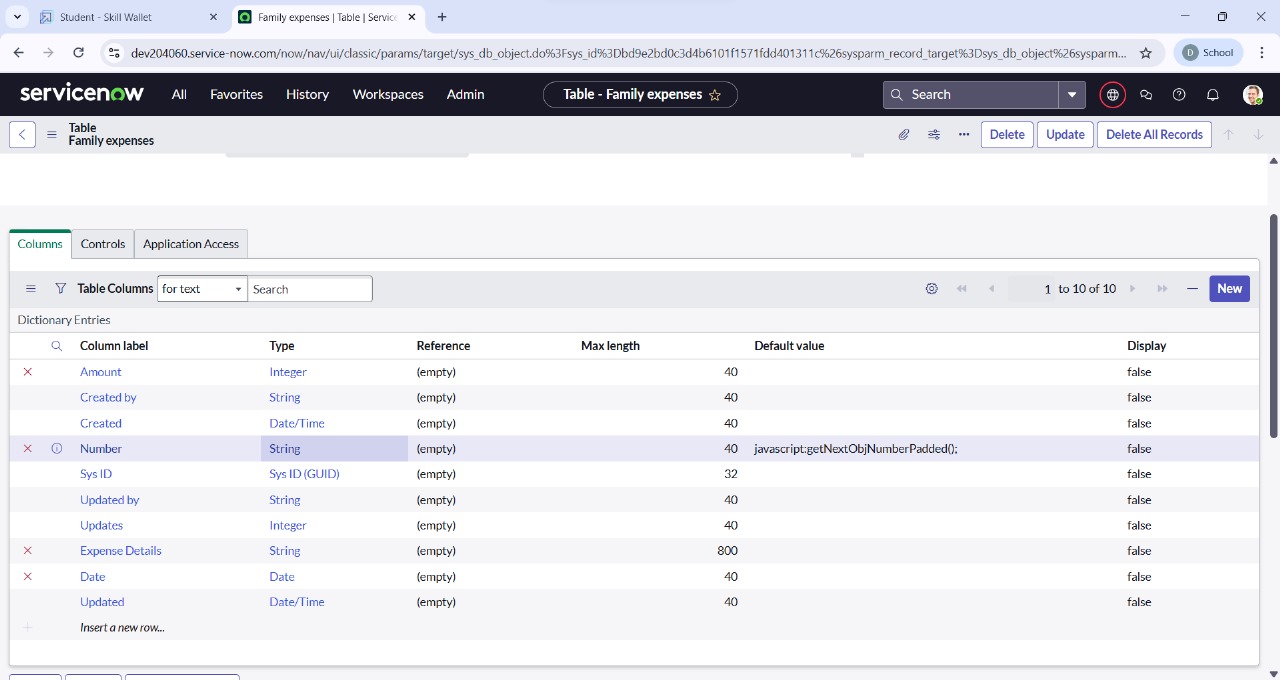
Column label : **Amount**

Type : **Integer**

1. Double click on insert a new row again
2. Give the details as:

Column label : **Expense Details**

Type : **String**

Max length : **800**

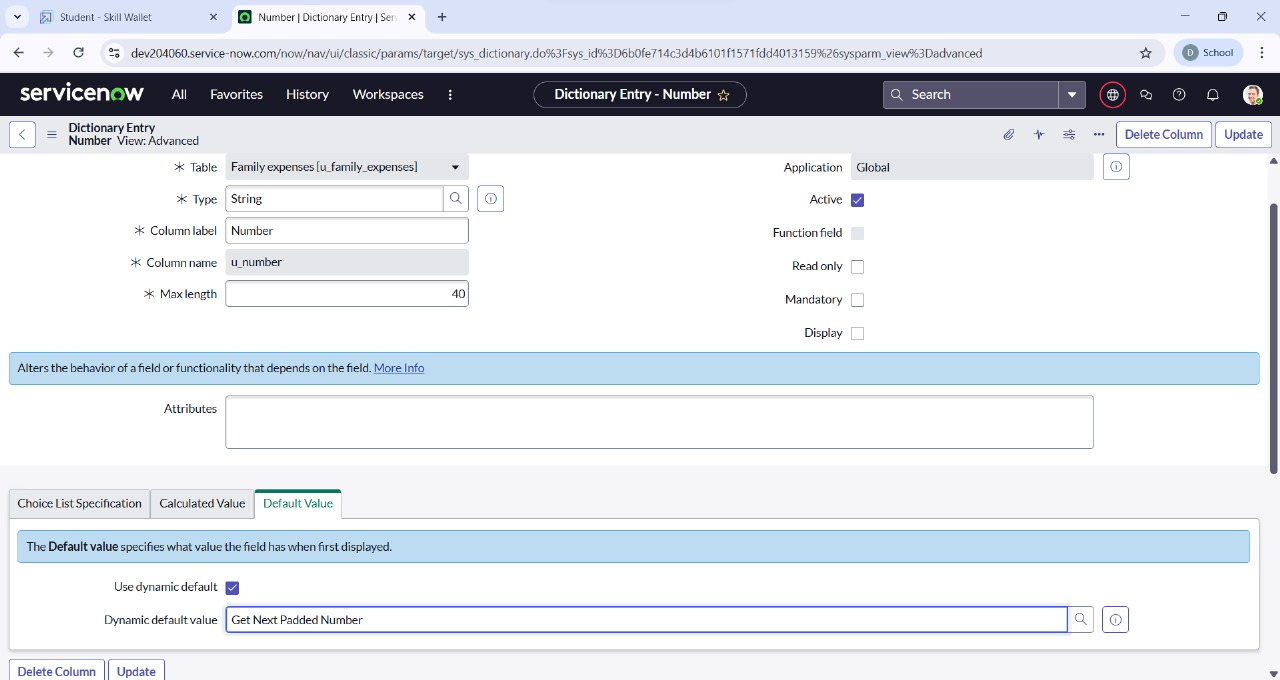
### Making Number Field an Auto-Number:

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**

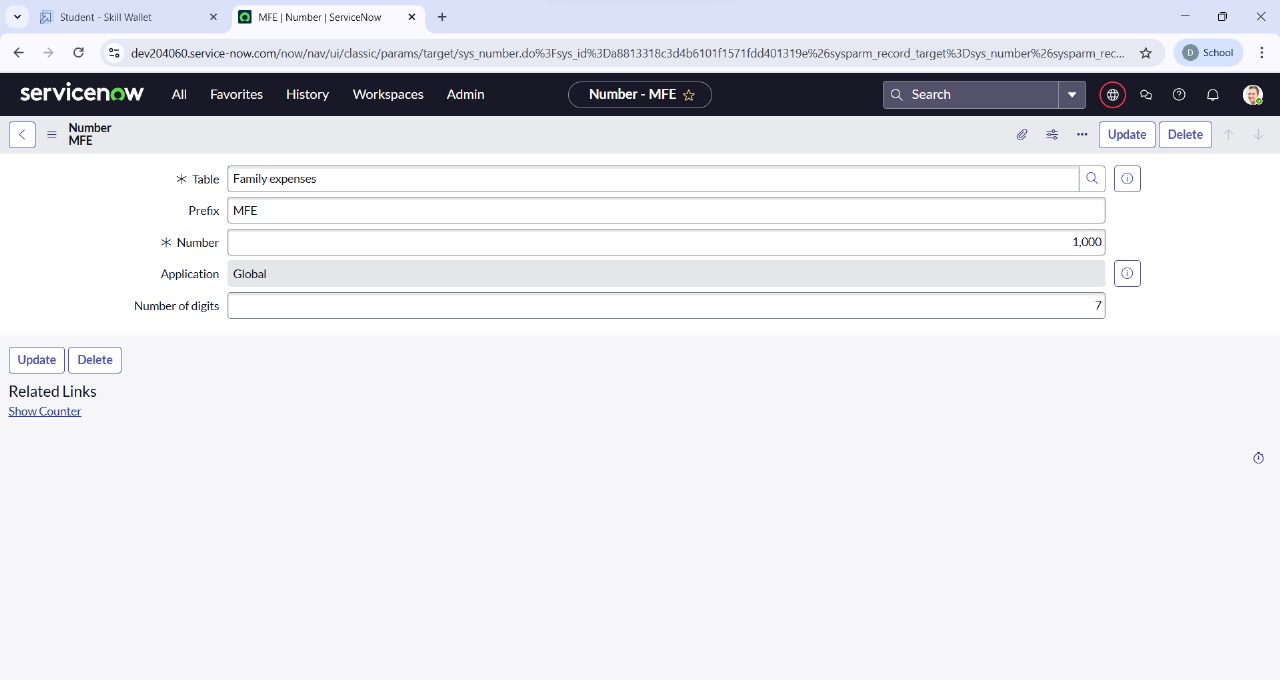
Dynamic default value : **Get Next Padded Number**

1. Click on Update.



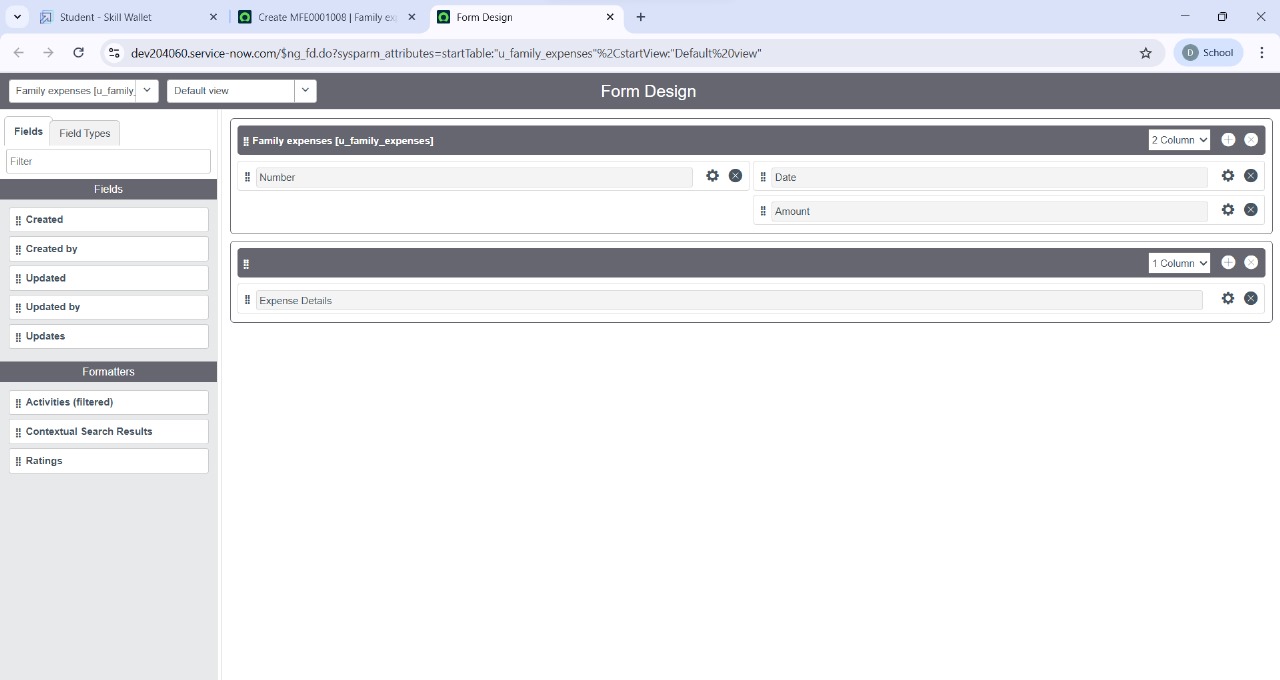
1. Go to All >> In the filter search for Number Maintenance >> select Number Maintenance
2. Click on New.
3. Enter the below Details:

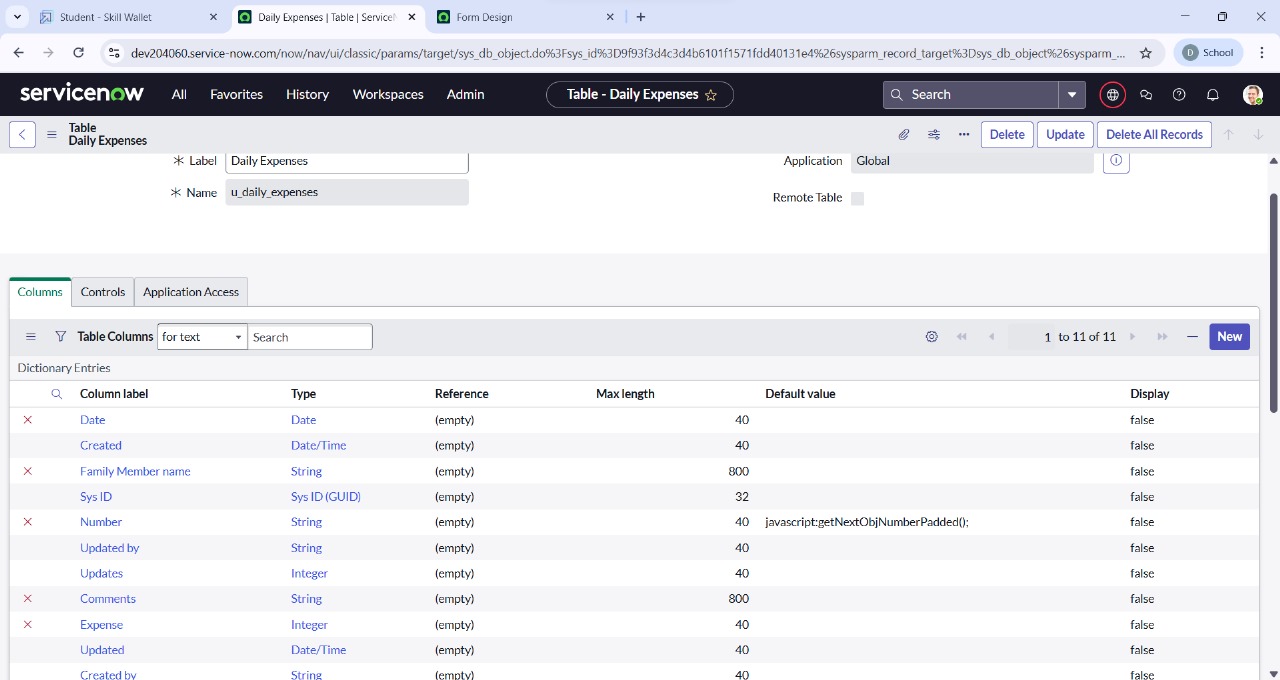
Table : **Family Expenses**

Prefix : **MFE** 

1. Click on **Submit**

### Configuring 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**.

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**

1. 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

1. Double click on insert a new row again
2. Give the details as:

Column label : Date

Type : Date

1. Double click on insert a new row again
2. Give the details as:

Column label : Expense

Type : Integer

1. Double click on insert a new row again
2. Give the details as:

Column label : Family Member Name

Type : Reference

Max length : 800

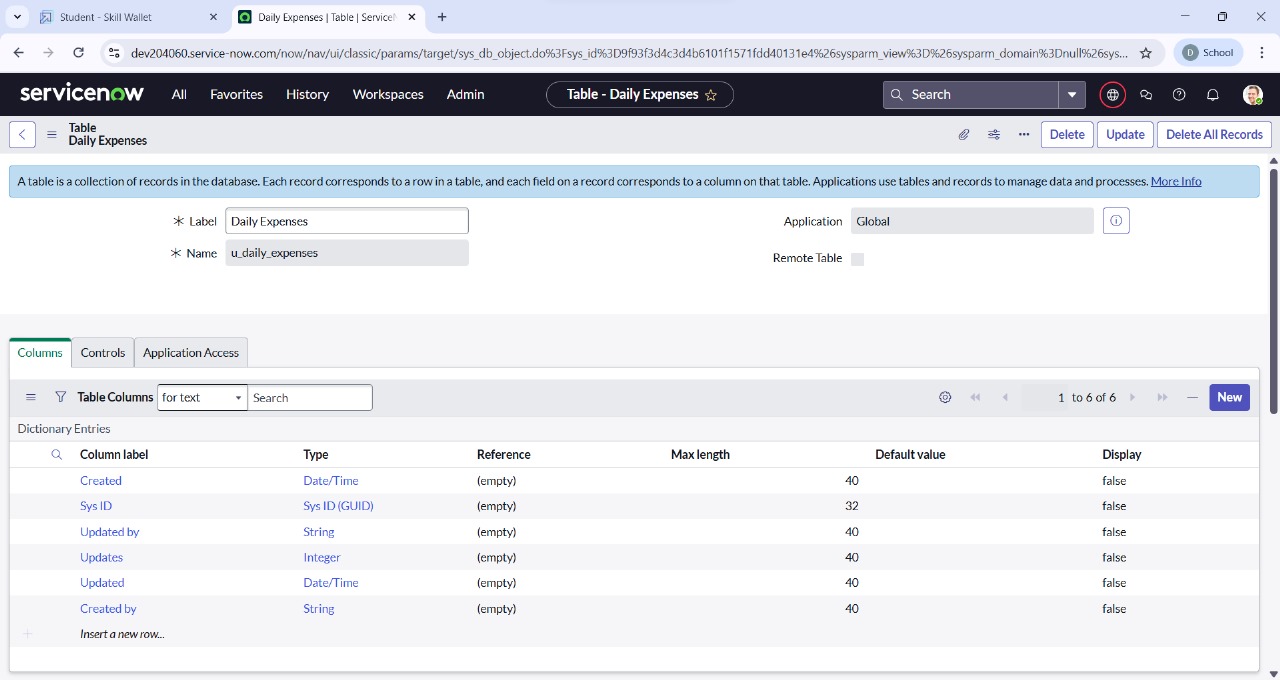
1. Double click on insert a new row again
2. Give the details as:

Column label : Comments

Type : String

Max length : 800

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



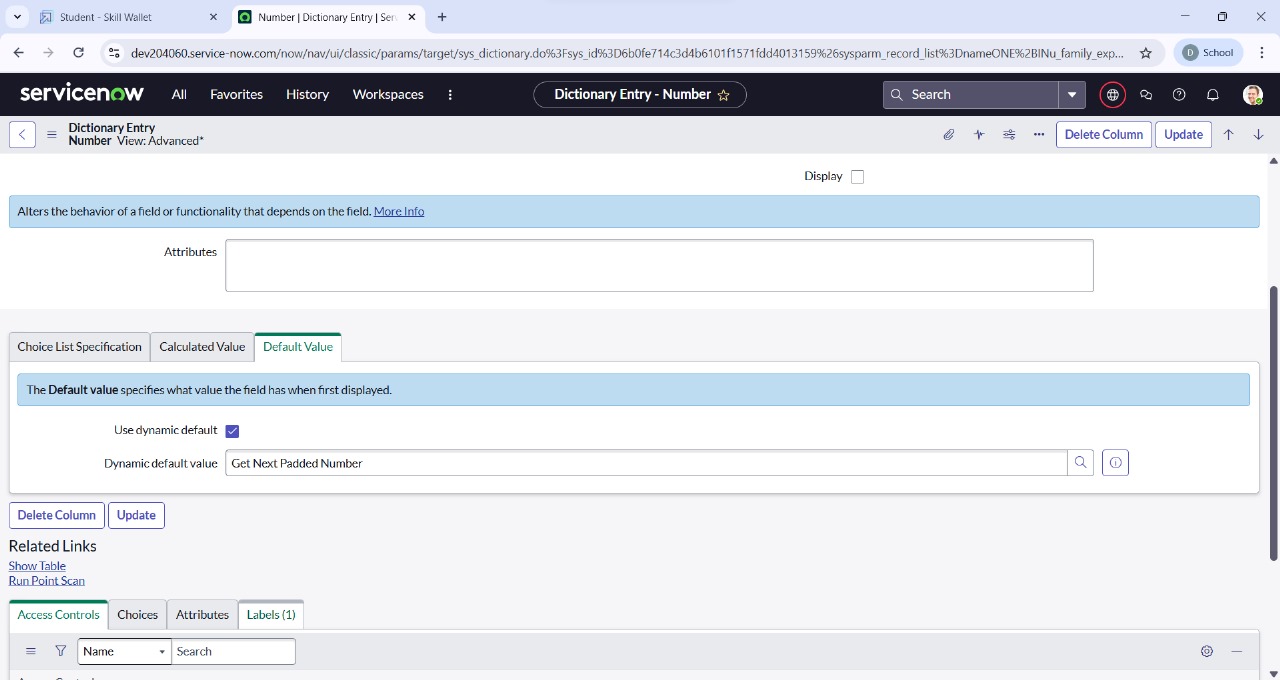
**Making Number Field an Auto-Number:**

* 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

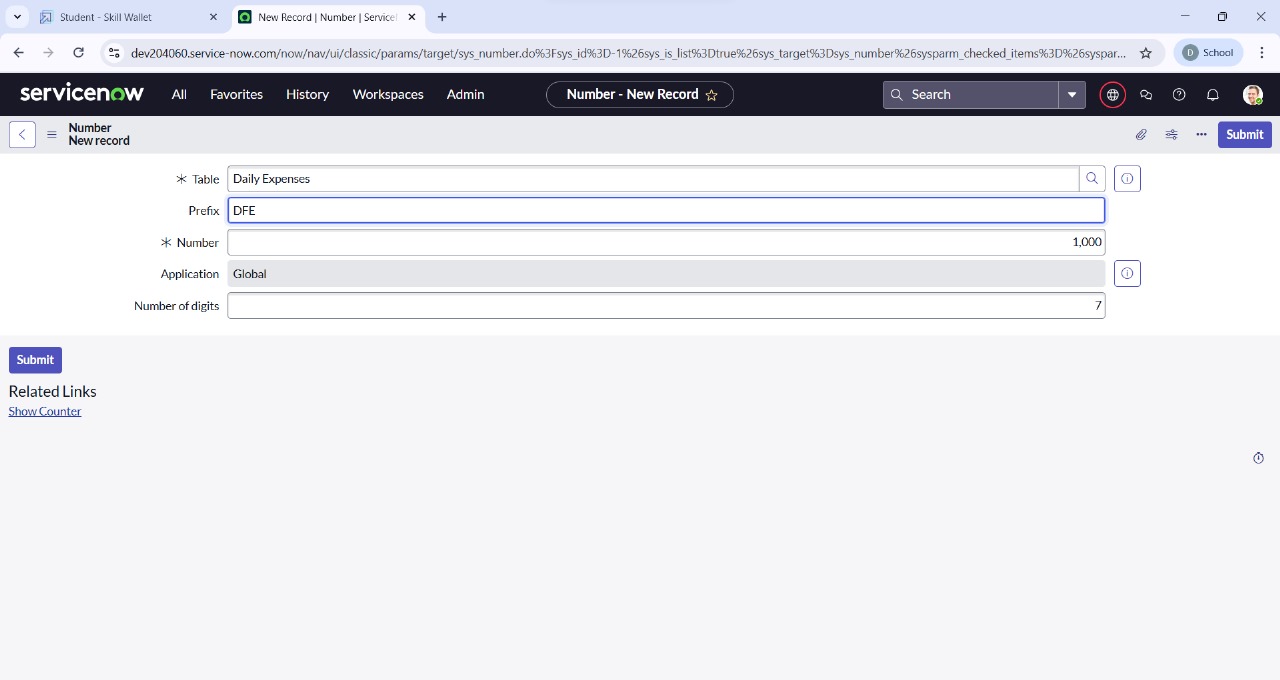
* 1. Click on **Update**.



1. Go to All >> In the filter search for Number Maintenance >> select Number Maintenance
2. Click on New.
3. Enter the below Details:

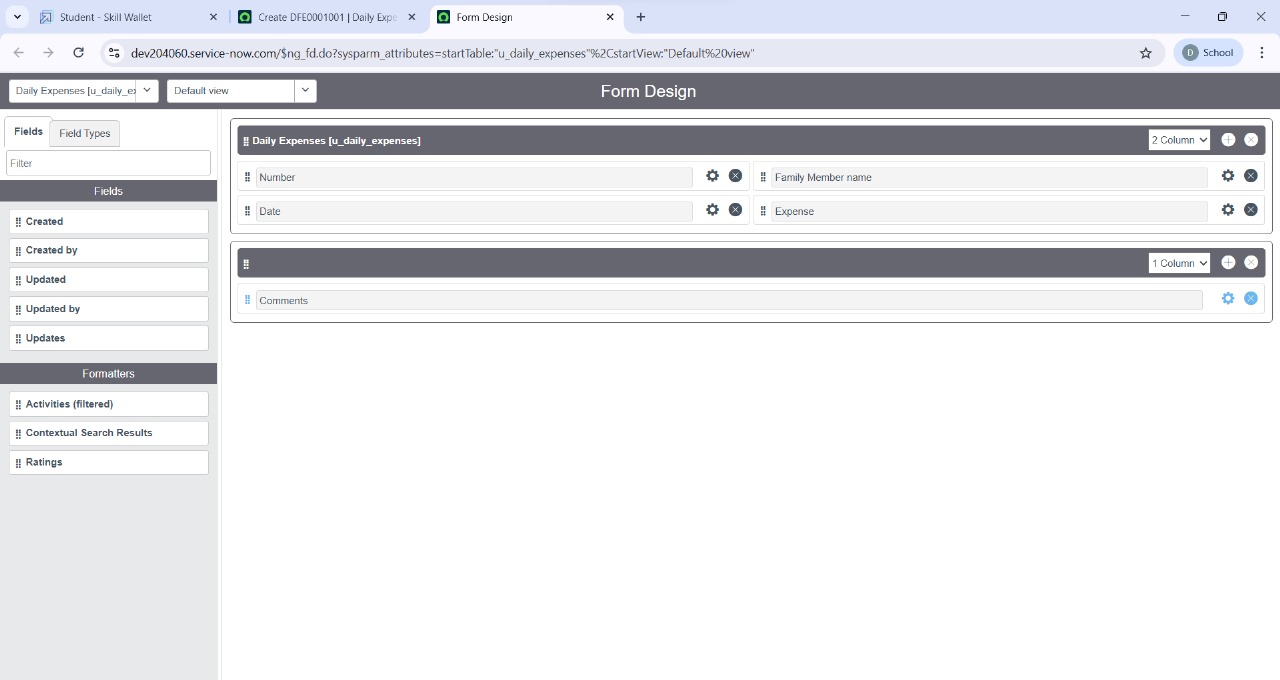
Table : **Family Expenses**

Prefix : **MFE**



1. Click on **Submit**

### Configuring Form:

****

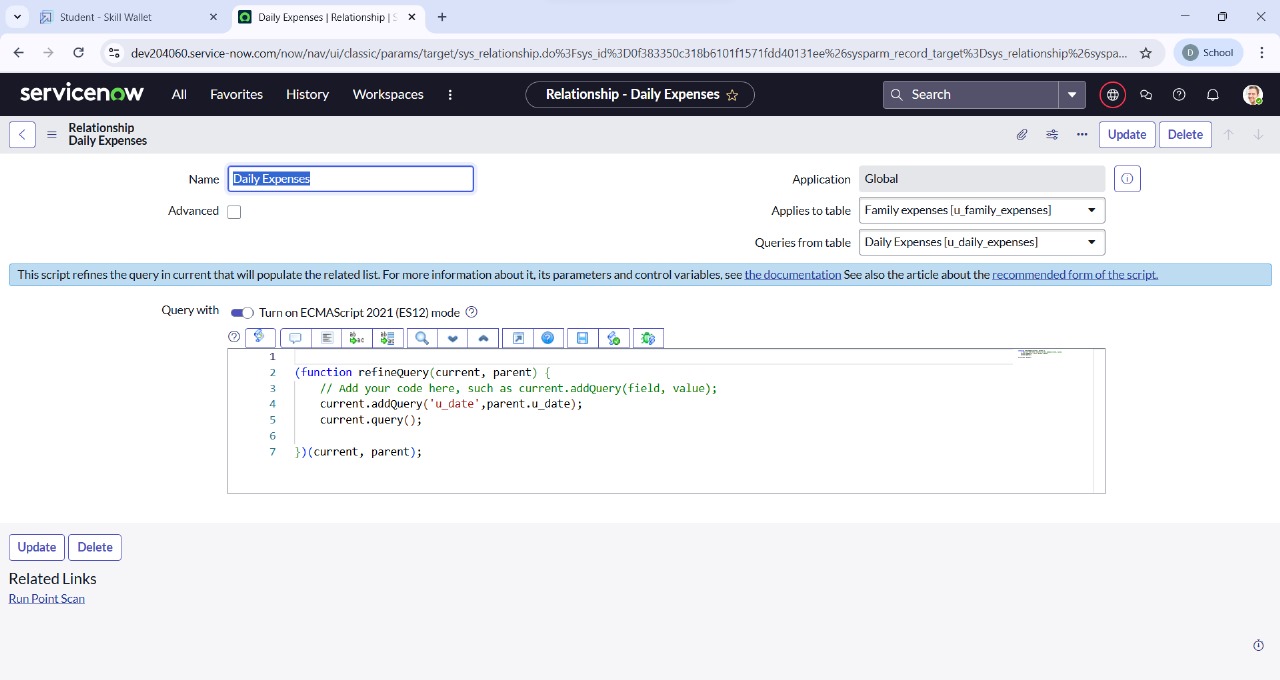
**5.Creation of Relationship between Family Expenses and Daily Expenses tables:**

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

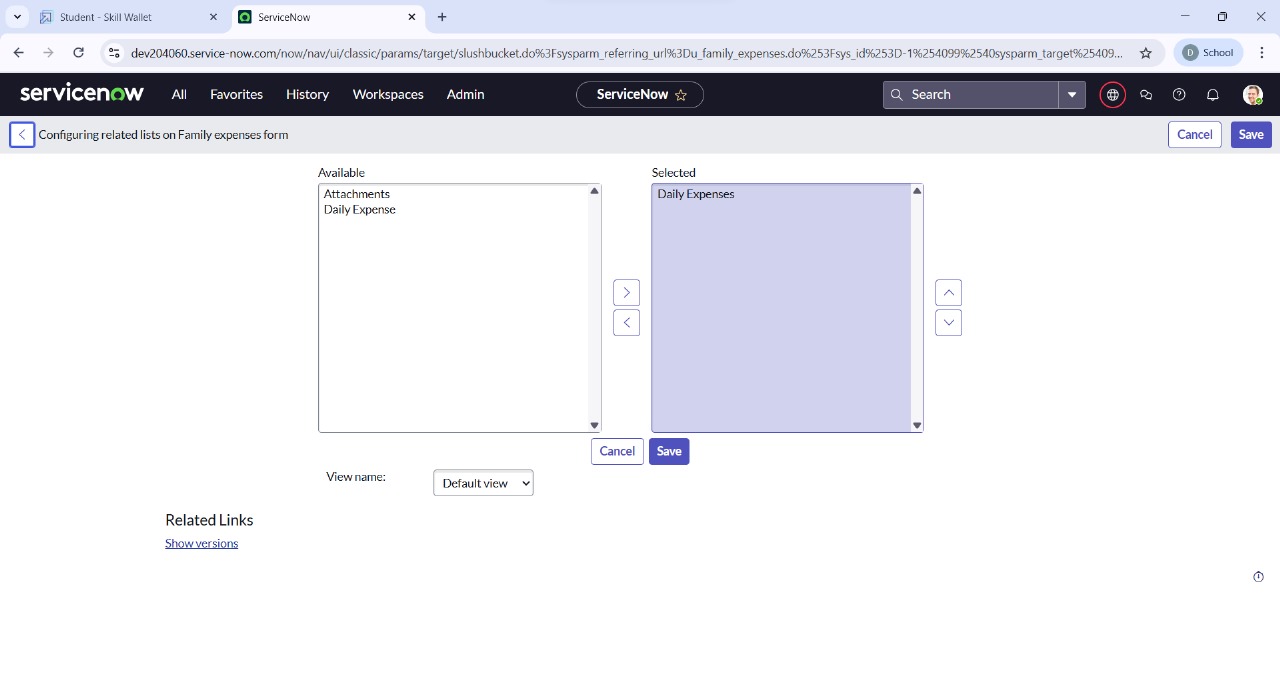
Name : **Daily Expenses**

Applies to table : **Select Family Expenses**

Daily Expenses : **Select Daily Expenses**

1. Click **Save**.

**6. Configuring Related List on Family Expenses**:

1. Go to All >> In the filter search for Family Expenses >> Open Family Expenses
2. Click on
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**

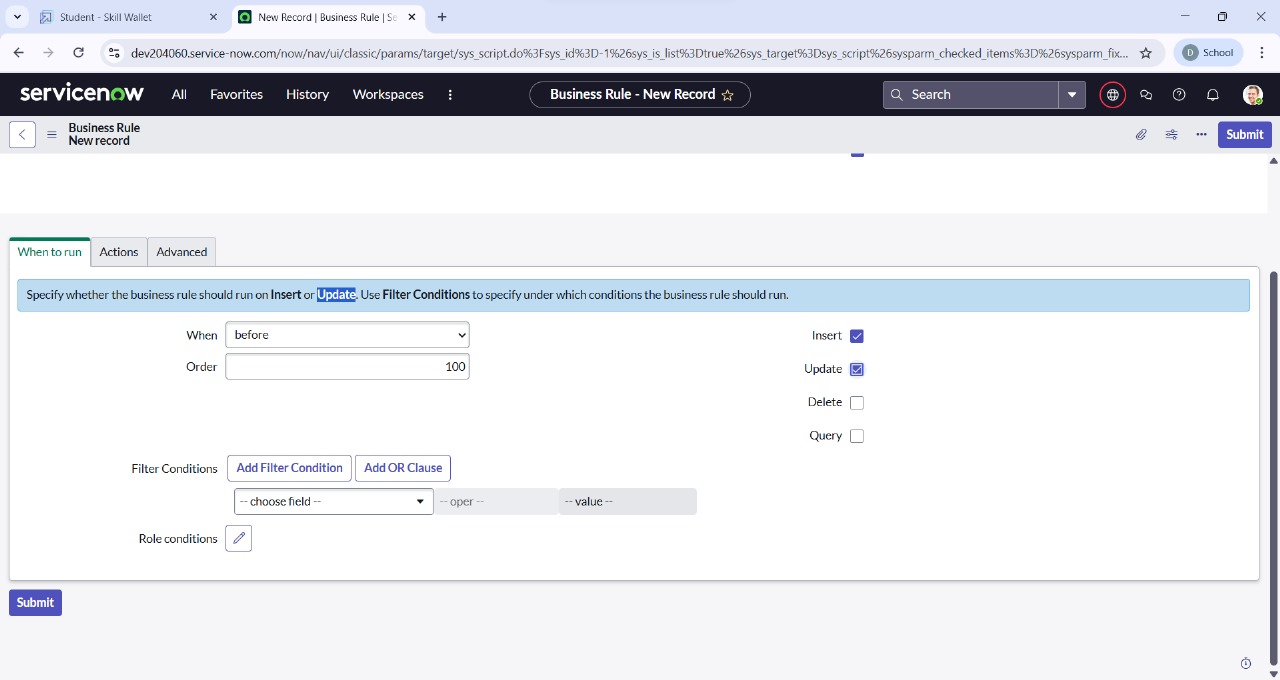
**7. Creation of Business Rules**:

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

1. In when to Run Check **Insert & Update**
2. 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;

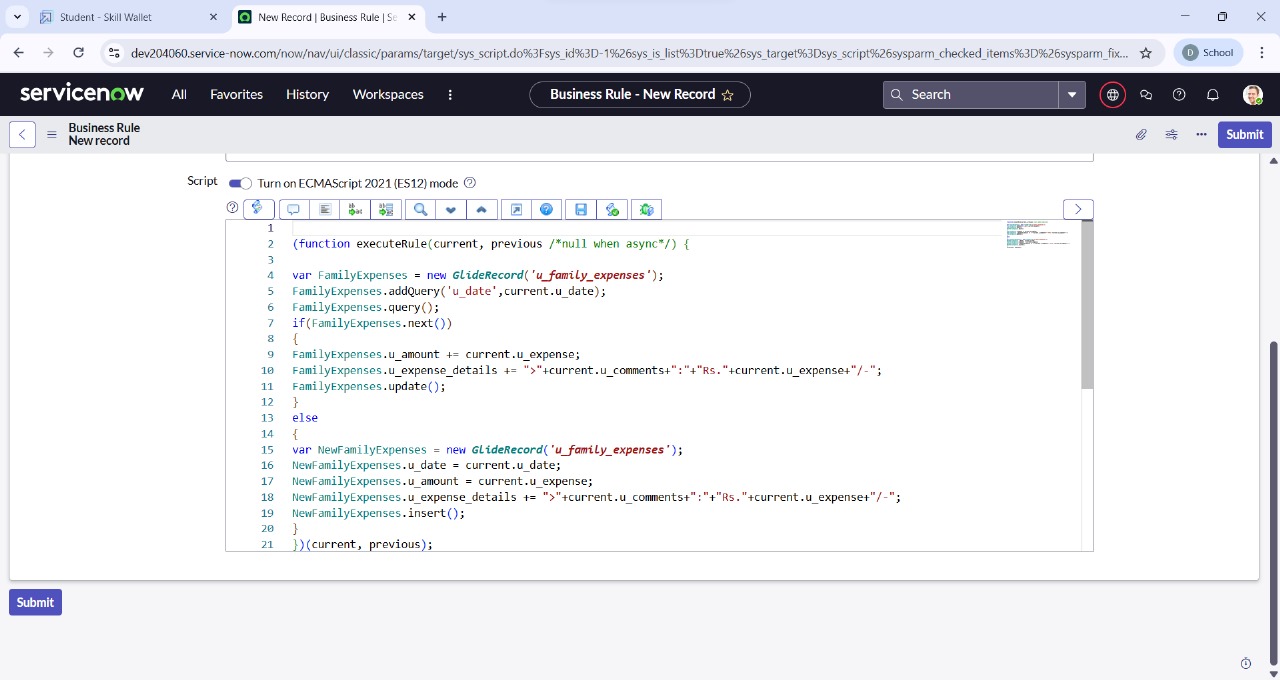
NewFamilyExpenses.u\_amount = current.u\_expense;

NewFamilyExpenses.u\_expense\_details += ">"+current.u\_comments+":"+"Rs."+current.u\_expense+"/-";

NewFamilyExpenses.insert();

}

})(current, previous);



1. Go to Header and right Click there>> click on **Save**

**7. 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.

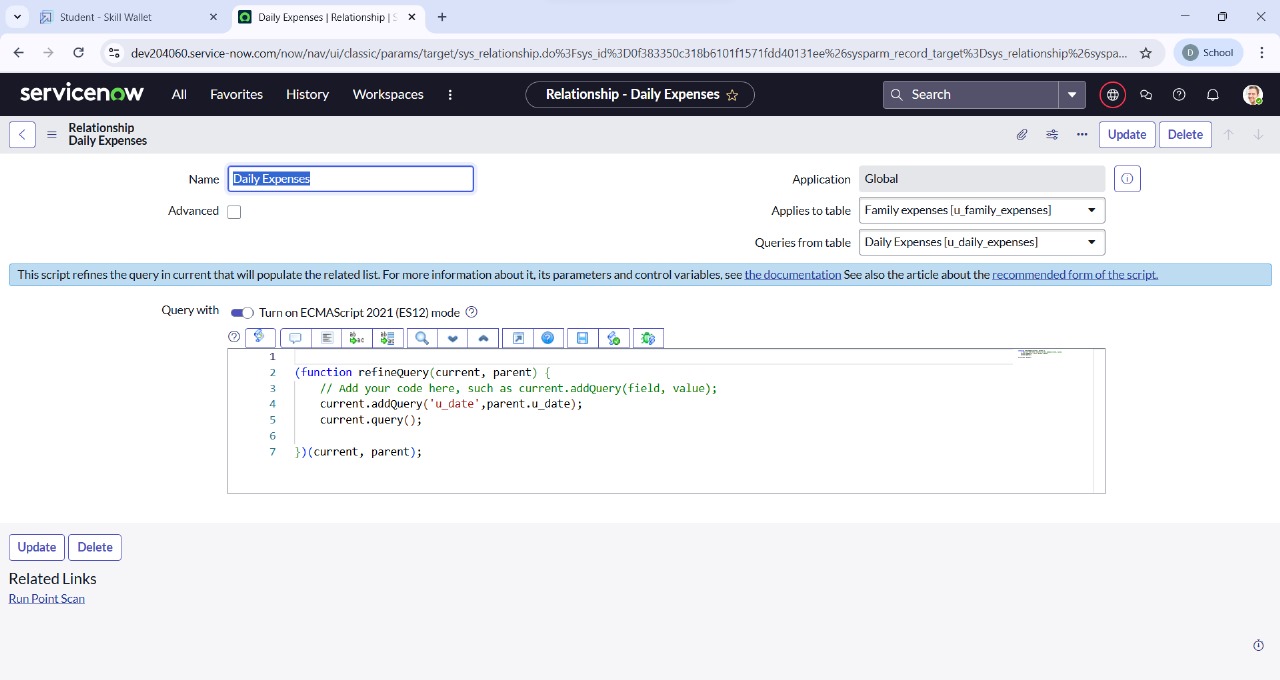
(function refineQuery(current, parent) {

// Add your code here, such as current.addQuery(field, value);

current.addQuery('u\_date',parent.u\_date);

current.query();

})(current, parent);

1. Click on Update. 

**Conclusion:**

In conclusion, implementing the "Calculation of Family Expenses Using ServiceNow" project offers numerous benefits to the household. By leveraging the robust capabilities of ServiceNow, family members can efficiently submit, track, and manage their expenses in a centralized and streamlined manner.