**Calculating Family Expenses using Service Now**

**Team ID:** NM2025TMID17640

**Team Members:**

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**Problem Statement:** 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.

**Objective:** To track the family expenses using ServiceNow.

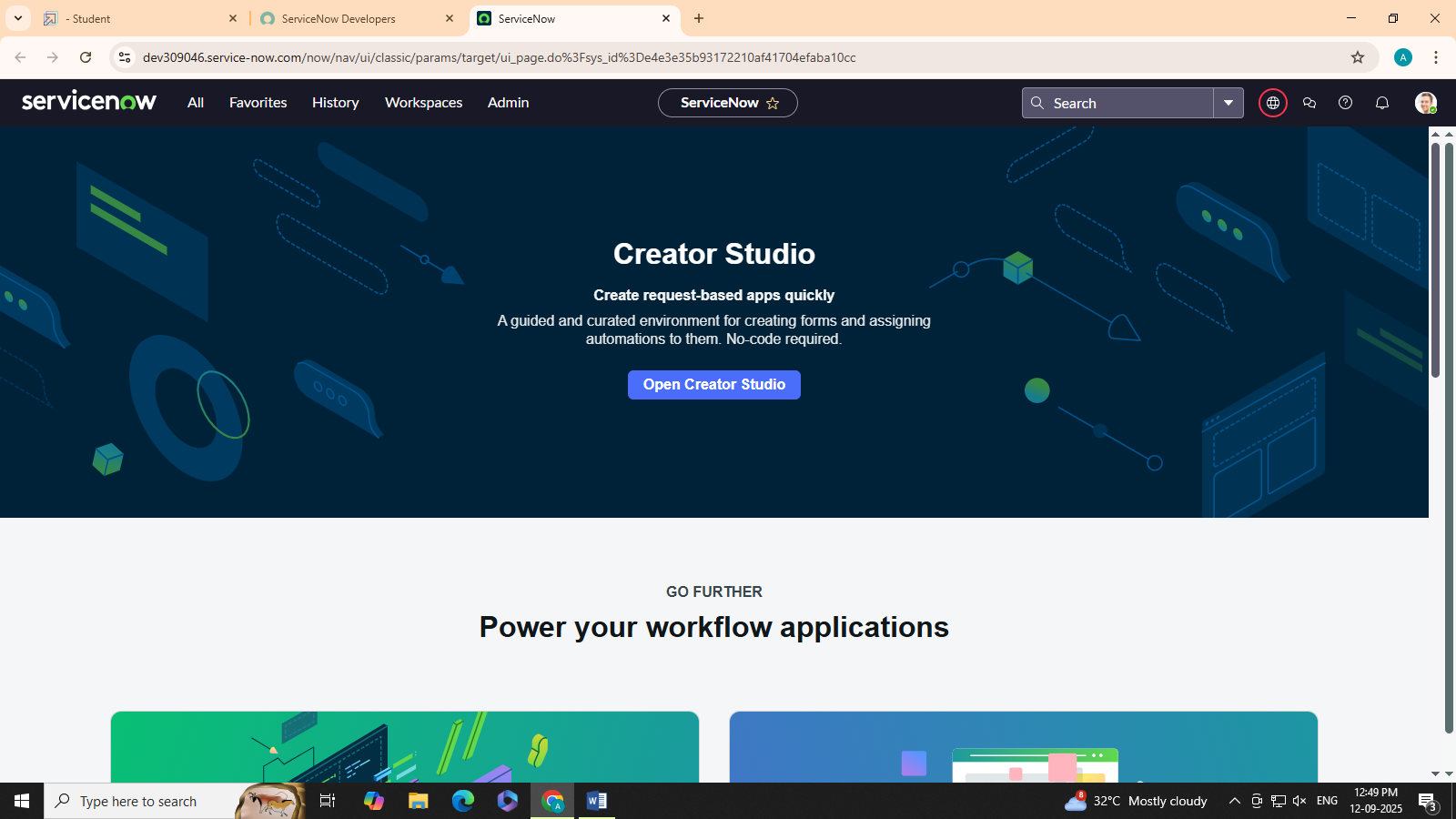
**Skills:** IOT Open Hardware platforms,Data Structures.

**TASK INITIATION**

### Milestone 1 : 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.



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### Milestone 2 : Creation of New Update Set

### Activity 1 : Creation of New Update Set

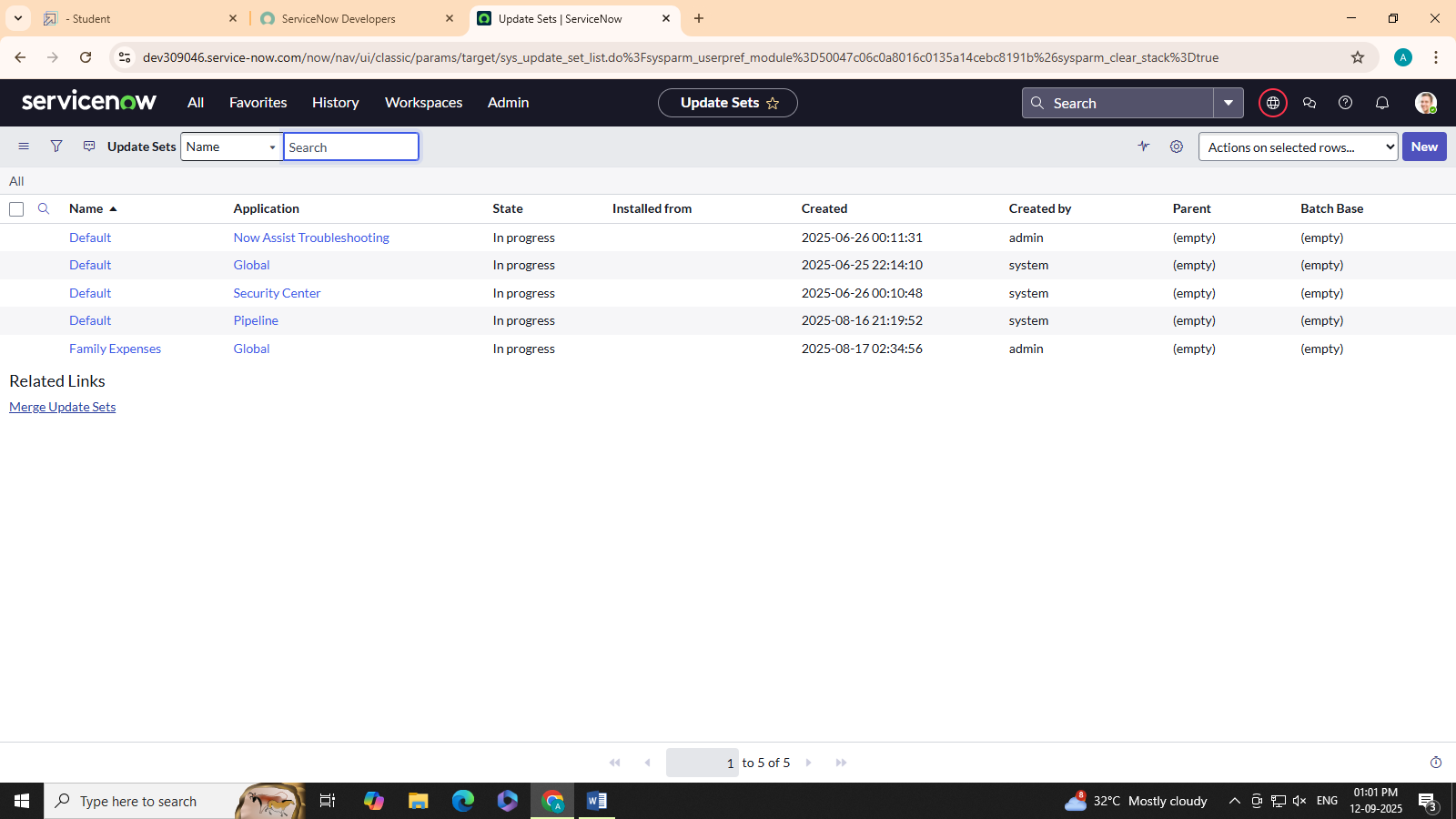
1. Go to All >> In the filter search for Local Update set > click on New.

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1. Enter the Details as:

Name : Family Expenses

1. Then click on Submit and Make current.



### Milestone 3 : Creation of Table

### Activity 1 : Creation of Family Expenses Table

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

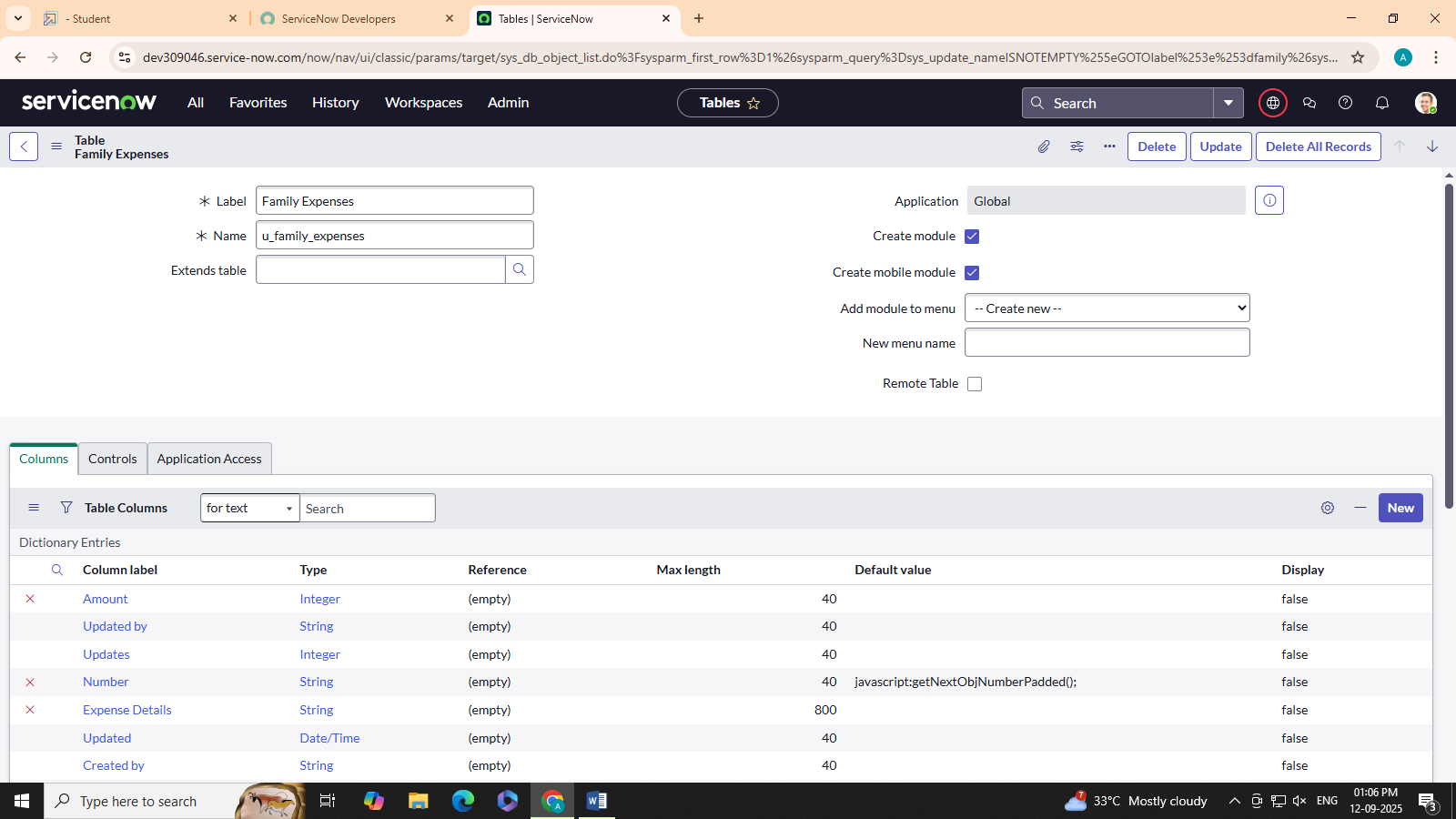
2.Enter the Details:

Label : Family Expenses

Name : Auto-Populated

New menu name : Family Expenditure

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

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

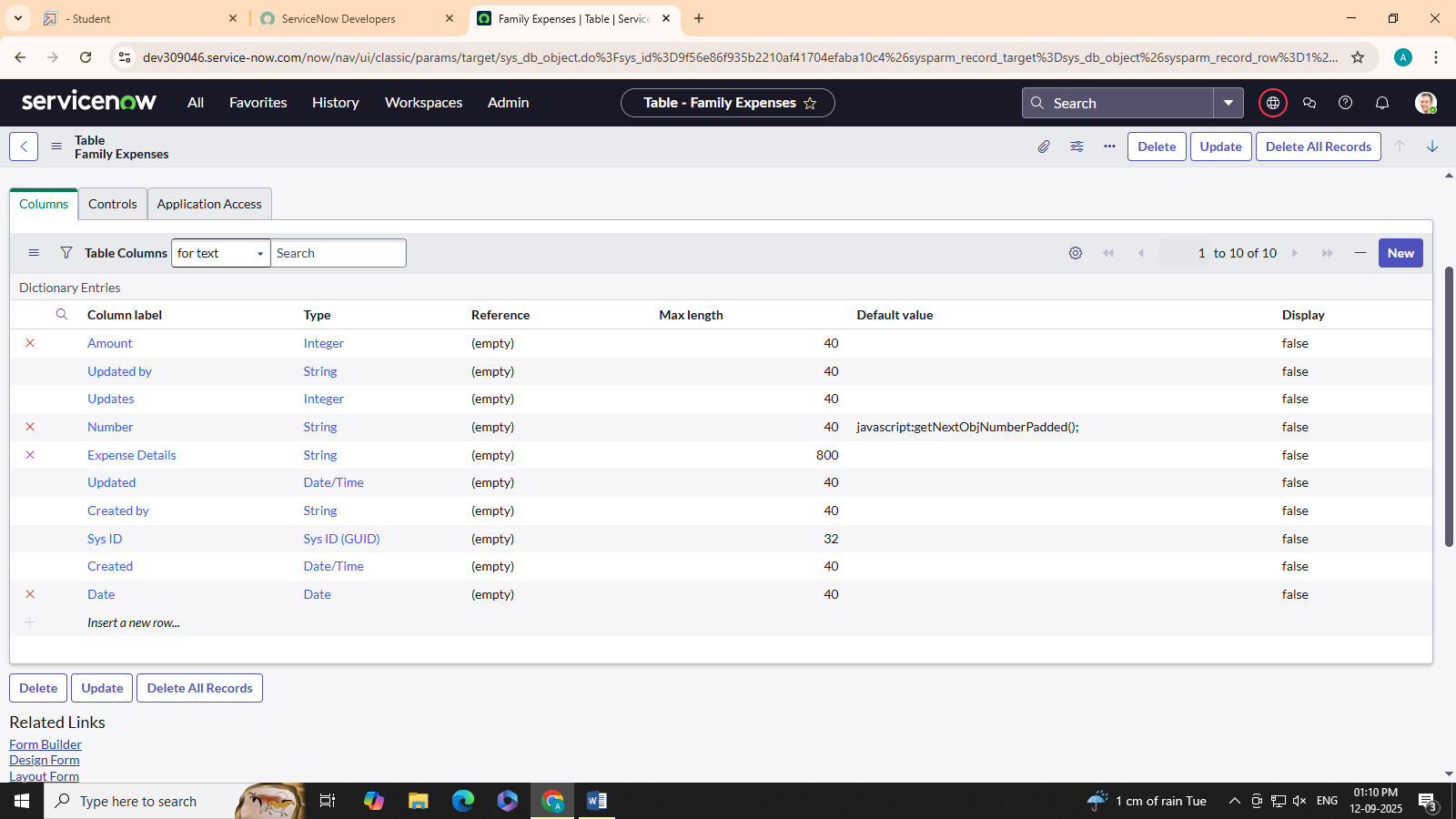
Type : Integer

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

Column label : Expense Details

Type : String

Max length : 800



**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

1. Click on Update.

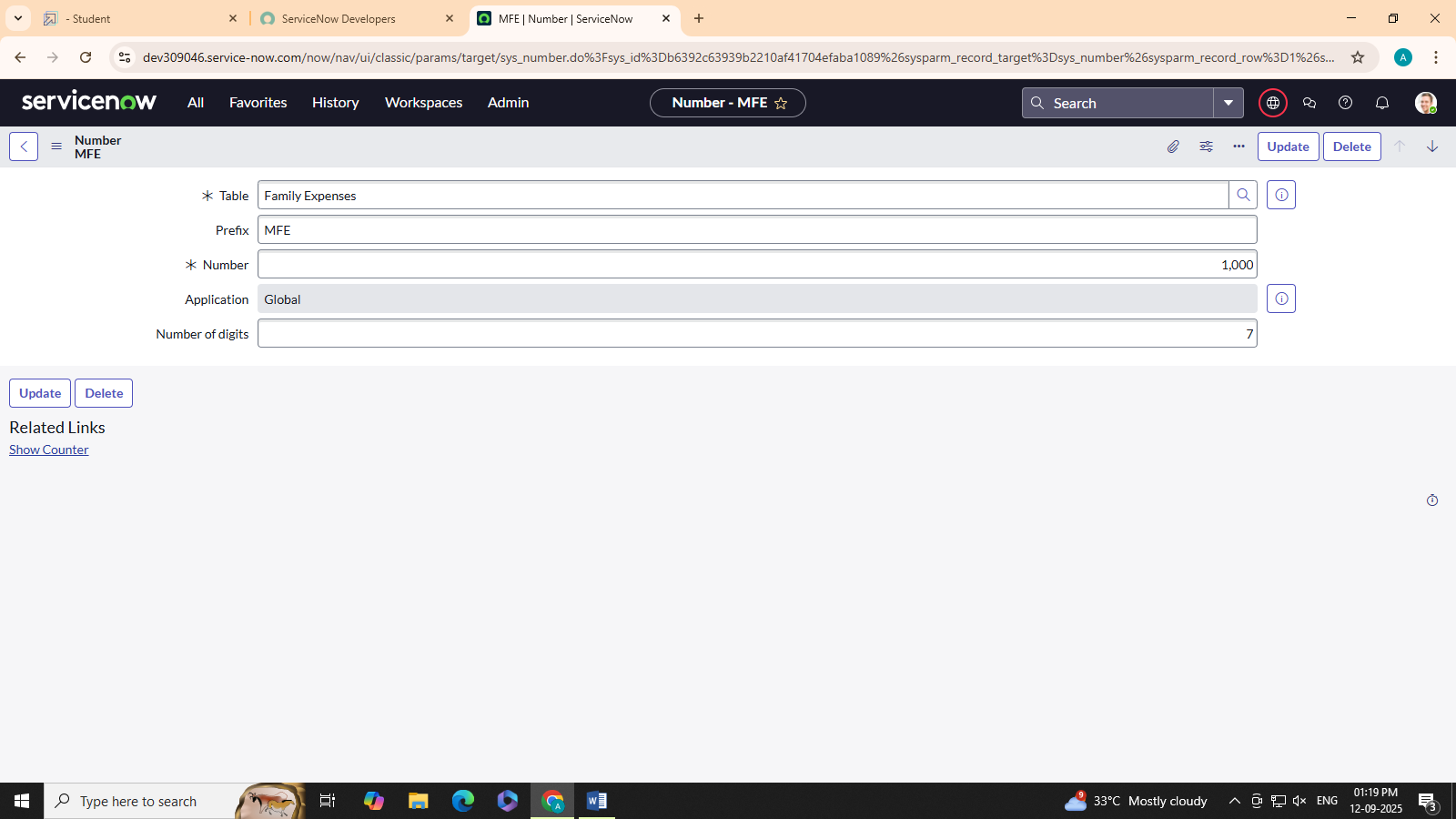
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1. Go to All >> In the filter search for Number Maintenance >> select Number Maintenance
2. Click on New.
3. Enter the below Details:

Table : Family Expenses

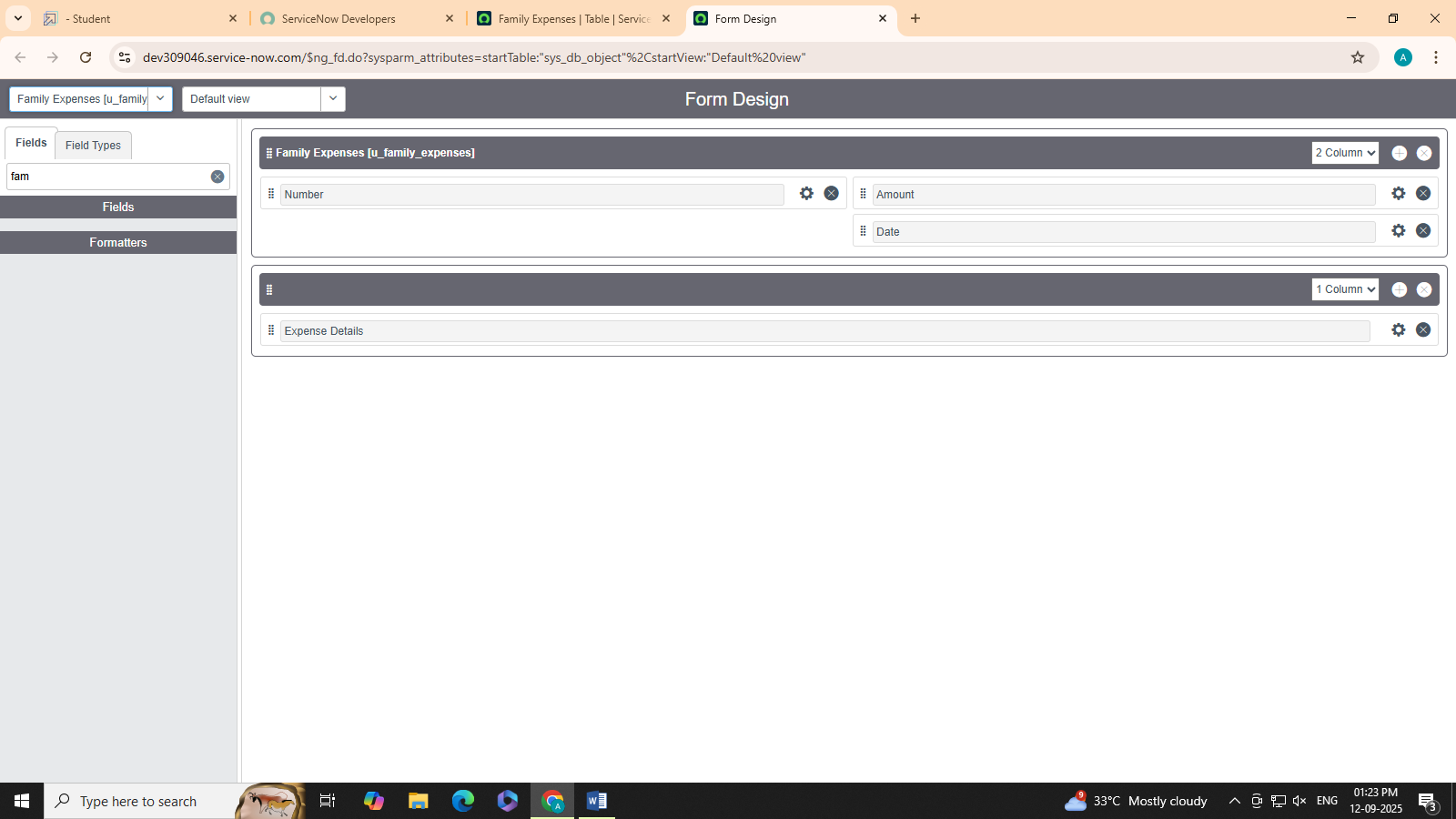
Prefix : MFE

1. Click on Submit.



### 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 4 : Creation of Table (Daily Expenses)

### Activity 1 : Creation of daily Expenses Table

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

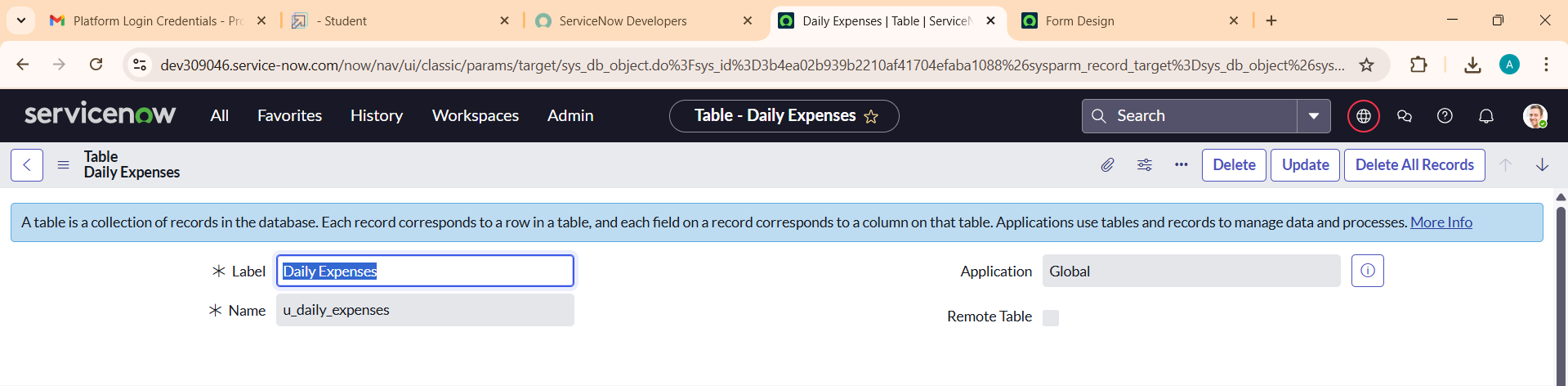
### Enter the Details:

### Label : Daily Expenses

### Name : Auto-Populated

### Add Module to menu : Family Expenditure

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



**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

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

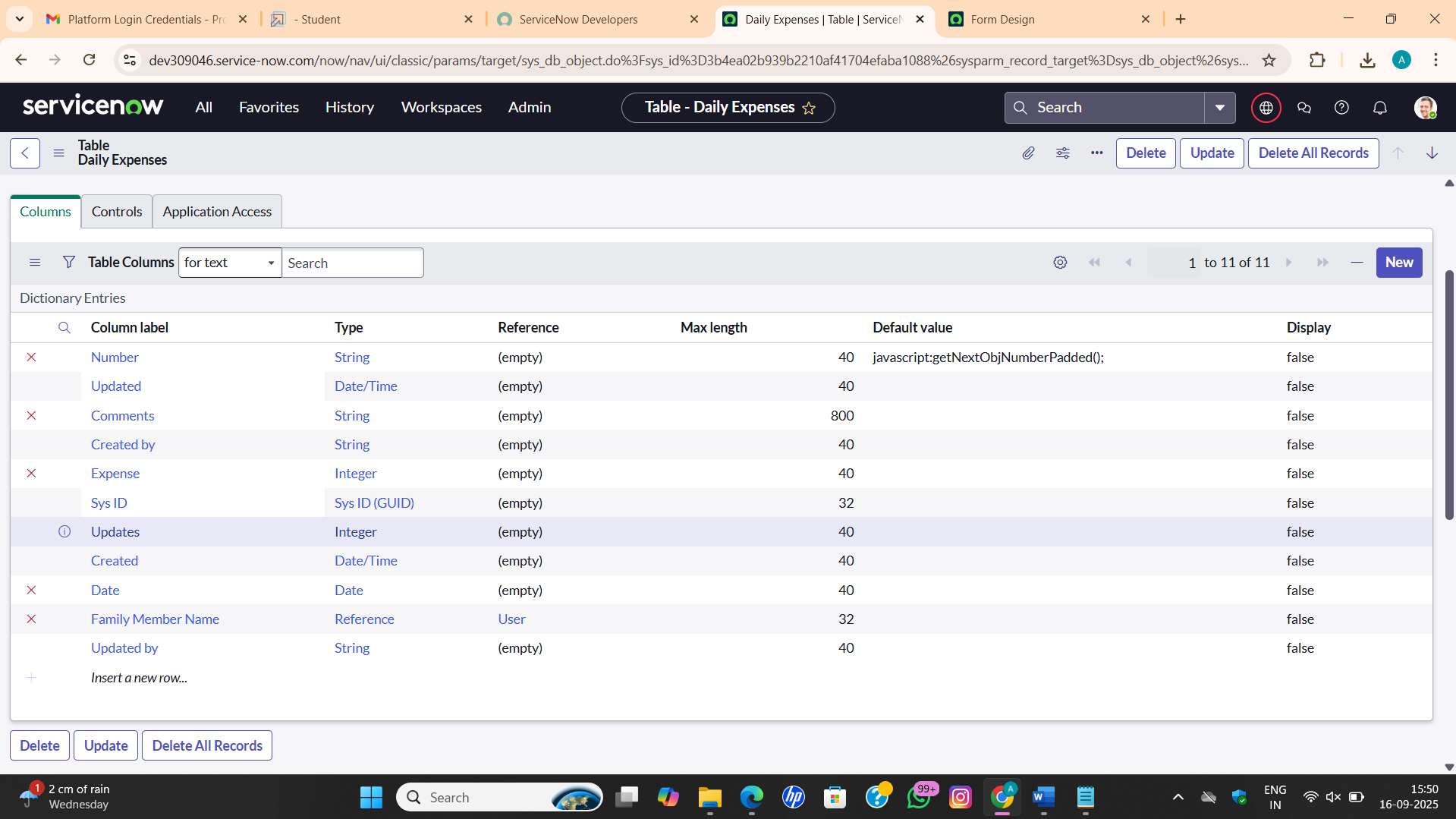
1. Double click on insert a new row again
2. Give the details as:

Column label : Comments

Type : String

Max length : 800

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

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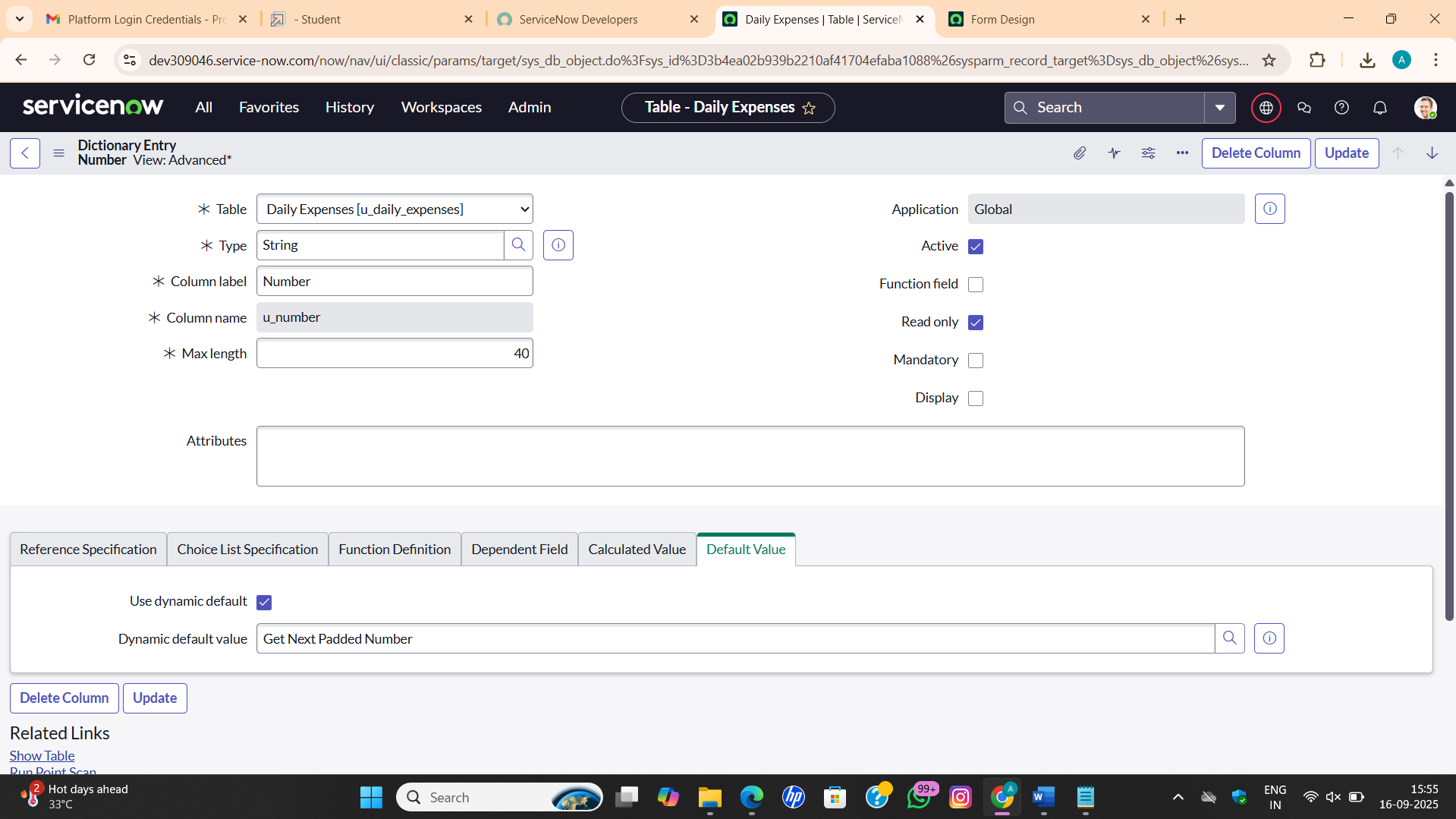
**Activity 3 : Making Number Field an Auto-Number**

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

1. Click on Update.

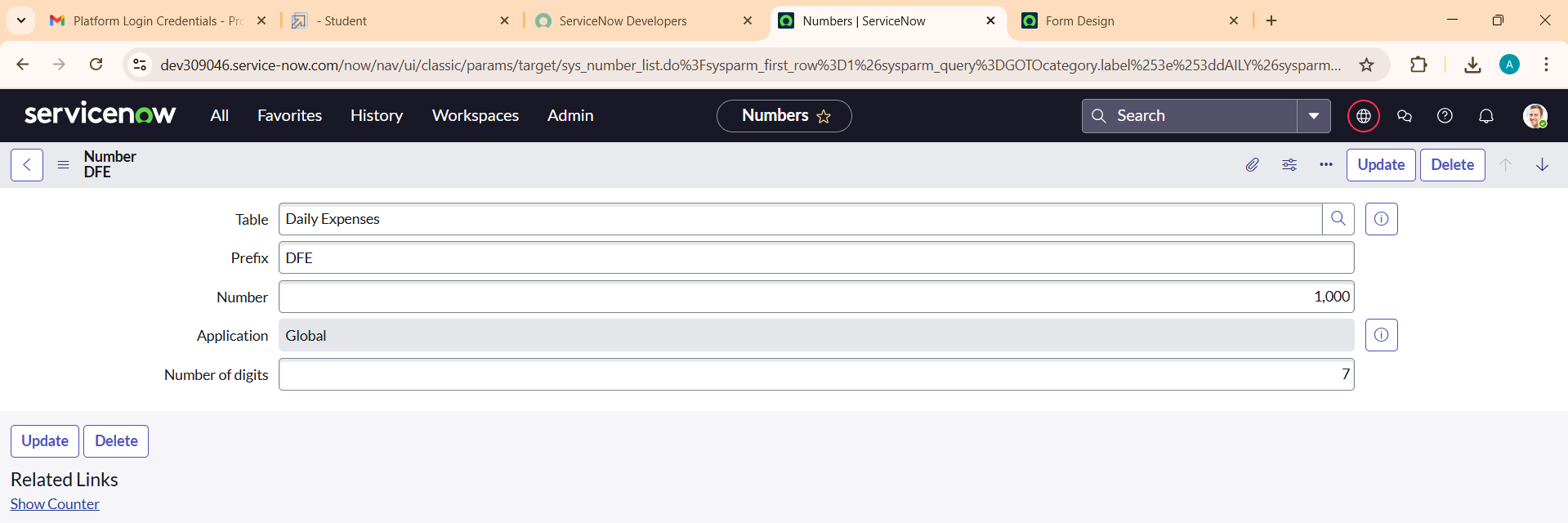


1. Go to All >> In the filter search for Number Maintenance >> select Number Maintenance
2. Click on New.
3. Enter the below Details:

Table : Daily Expenses

Prefix : DFE

1. 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.
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 5 : Creation of Relationship

### Activity 1 : Creation of Relationship between Family Expenses and Daily Expenses tables

### Go to All >> In the filter search for Relationships >> Open Relationships

### Click on New.

### Enter the details:

### Name : Daily Expenses

### Applies to table : Select Family Expenses

### Daily Expenses : Select Daily Expenses

### Click Save.

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### Milestone 6 : Configuring Related List on Family Expenses

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

### Go to All >> In the filter search for Family Expenses >> Open Family Expenses

### Click on New

### Go to the Header and right click there>> click on Configure >> Select Related Lists

### Add Daily Expenses to the Selected Area.

### Click on Save.

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### Milestone 7 : Creation of Business Rules

### Activity 1 : Creation of Business Rules

### Go to All >> In the filter search for Business Rules.

### Under System Definition Select Business Rules then click on New.

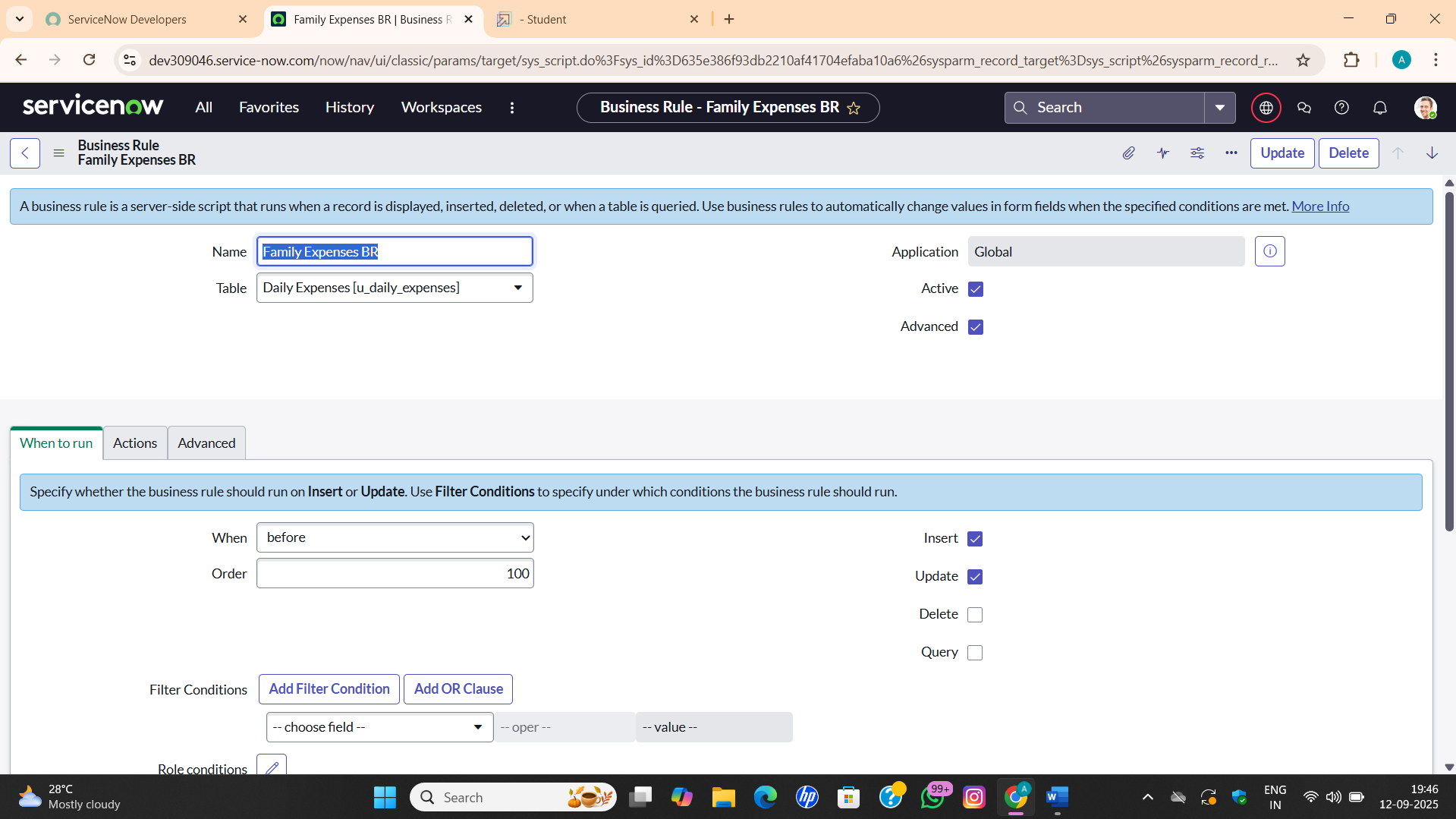
### Enter the Details:

### Name : Family Expenses BR

### Table : Select Daily Expenses

### Check Advanced

1. In when to run Check Insert and Update.



1. 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;

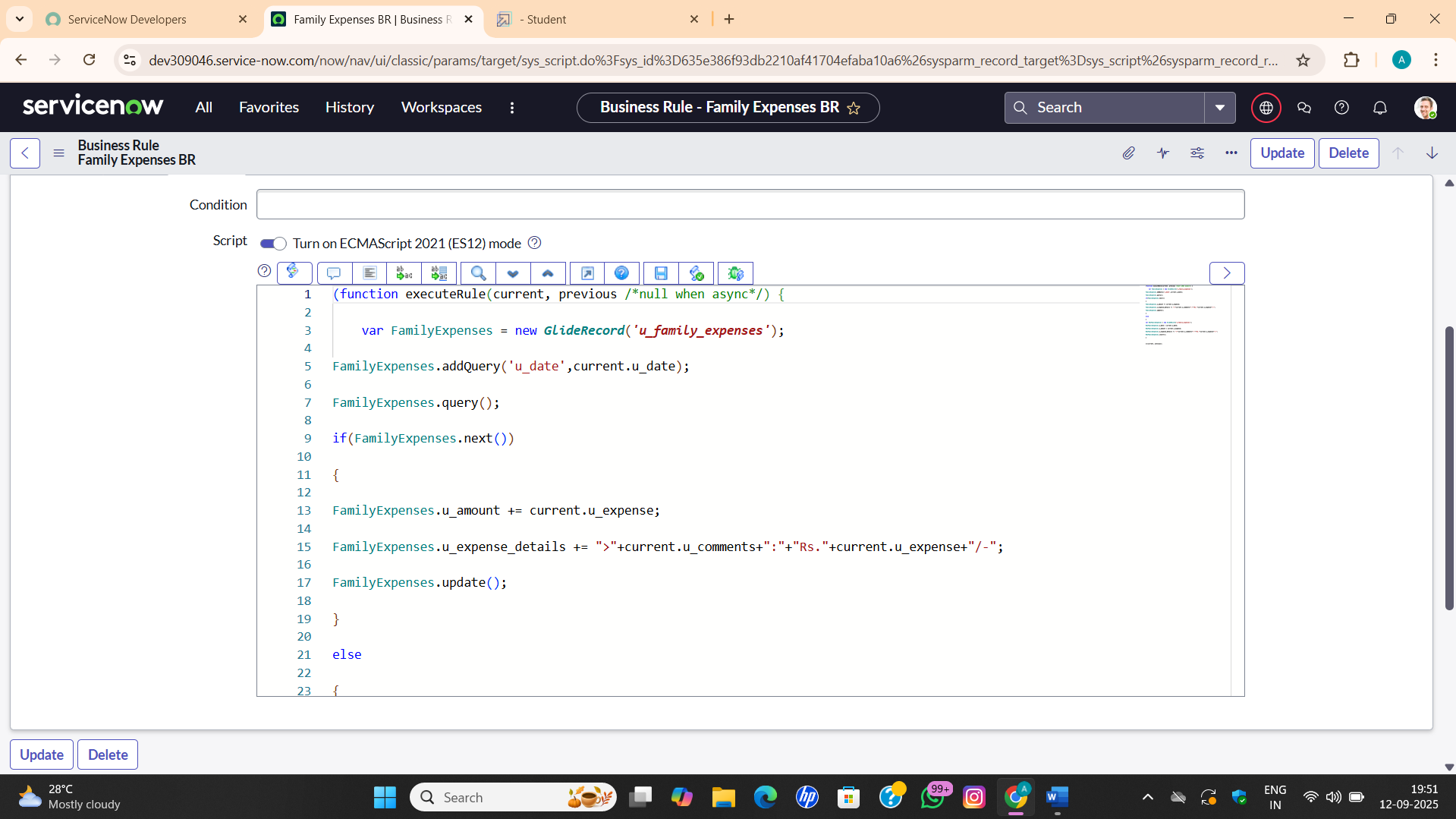
NewFamilyExpenses.u\_expense\_details += ">"+current.u\_comments+":"+"Rs."+current.u\_expense+"/-";

NewFamilyExpenses.insert();

}

})(current, previous);

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



### Milestone 8 : Configure the Relationship

### Activity 1 : Configure the Relationship

### Go to All >> In the filter search for Relationships >> Open Relationships.

### In that, open Daily Expenses Relationship.

### For Applies to table : Select Family Expenses.

### 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);

### Click on Update.

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### Conclusion:

The Family Expense Tracker built on ServiceNow provides an efficient and centralized platform for managing household financial data. By leveraging ServiceNow’s database, forms, and reporting capabilities, the tracker helps record income, categorize expenses, and generate insights through dashboards and reports.

This solution reduces manual effort, ensures data accuracy, and improves financial visibility for families. With features like expense categorization, budget monitoring, and real-time reporting, it allows users to make informed financial decisions. Moreover, since ServiceNow is scalable and secure, the tracker can be extended to support multi-user access, notifications for overspending, and integration with external financial tools.

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### Result:

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