PROJECT DESIGN

TEAM ID	LTVIP2025TMID30762
PROJECT NAME	CALCULATING FAMILY EXPENSES USING SERVICENOW

Proposed Solution:

Project team shall fill the following information in the proposed solution template

S.no	Parameter	Description
1	**Problem statement (problem to be solved)**	**1 Problem statement (problem to be solved) While ServiceNow is a powerful platform primarily used for enterprise workflows and IT service management, it's not typically designed for calculating personal family expenses., you could potentially adapt some ServiceNow features or build a custom application within the platform to track and manage household finances. This**

		would involve creating custom tables, workflows, and potentially using scripting to handle calculations.
2	Idea / Solution description	The core concept involves using ServiceNow's financial management features like Cost Management, which includes expense lines and allocation rules, to categorize and track spending. This can be achieved by setting up a "family budget" project within ServiceNow and using expense lines to represent different spending categories
3	Novelty/Uniqueness	the platform's flexibility allows for customization to build such a system. Users could leverage ServiceNow's workflows, reporting, and

		potentially its app development capabilities to create a personalized family expense management system.
4	Social Impact/Customer satisfaction	ServiceNow can significantly improve customer satisfaction and potentially impact family expenses by streamlining customer service processes and enhancing efficiency. ServiceNow can reduce wait times, improve issue resolution, and offer personalized support, leading to increased customer loyalty and potentially lower costs associated with acquiring new customers.
5	Business model (Revenue Model)	This involves creating a system to track income and expenses,

		categorize spending, set budgets, and analyze financial data, all within the ServiceNow platform. This leverages ServiceNow's features for workflow automation, data management, and reporting.
6	**Scalability of the Solution**	**ServiceNow can be scaled for managing family expenses, but it requires careful planning and configuration. While designed for enterprise-level workflows, its flexibility allows for adaptation to individual or family needs.**

Family expenses

What is family?

"Family matters" broadly refers to anything that concerns a family unit and its members. This includes relationships, conflicts, decisions, and events that impact the family as a whole or individual members. It can encompass a wide range of situations, from everyday occurrences like childcare or attending family events to more serious issues like disputes, legal proceedings related to family law, or even personal matters that affect the family dynamic.

Types:

Family matters encompass a wide range of legal and personal issues concerning family relationships, including marriage, divorce, child custody, support, and adoption. These matters are often addressed in family court and can involve disputes related to domestic violence, property division, and other family-related legal issues.

Milestone 1: setting up service now instance

Purpose:

ServiceNow's capabilities can be leveraged to track and manage family expenses, although it's not a typical use case. While ServiceNow is primarily used for enterprise-level IT and business management, its core functionality of tracking costs and creating expense lines can be adapted to manage household finances. This involves creating expense categories, recording individual transactions as expense lines, and potentially using the platform's reporting features to analyze spending patterns.

Uses:

ServiceNow can be used to manage and calculate family expenses, primarily through its Expense Management and Finance

Management modules. These tools allow for tracking, categorization, and reporting of expenses, providing insights into spending patterns and helping with budgeting. While not specifically designed for personal finance, ServiceNow's functionalities can be adapted to track and analyze household expenses.

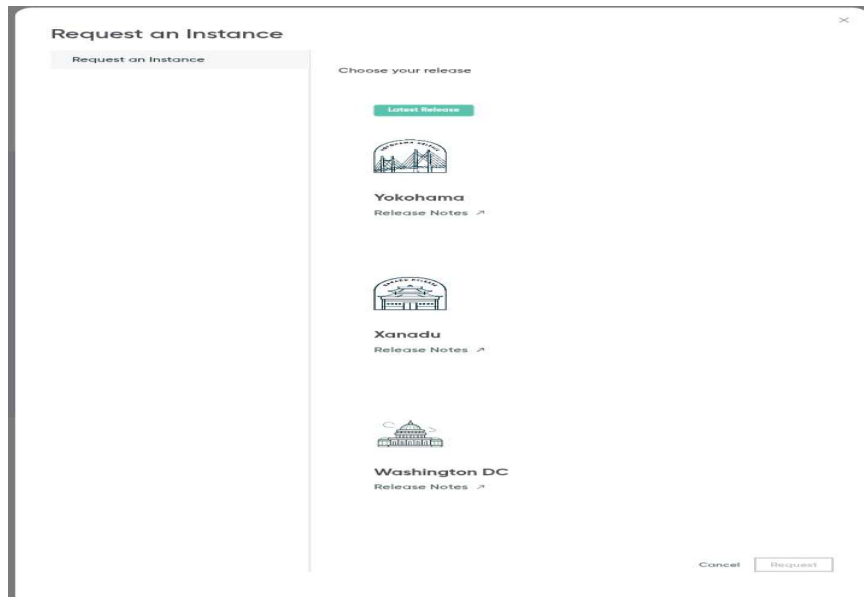**Activity 1: setting up service now instances**

Steps:

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 Milestone 2: creation of new update set

Purpose:

To create a new update set in ServiceNow, navigate to System Update Sets > Local Update Sets, then click New. Give the update set a descriptive name (often incorporating a user story number), select the appropriate application scope (e.g., Global), and save the record

Uses:

ServiceNow, an update set is used to capture and move customizations from one instance to another. It acts as a container for changes like form modifications, business rules, and workflows. This allows developers to bundle these changes and deploy them to other environments, such as testing or production.

Milestone 2: creation of new update set

Purpose:

To create a new update set in ServiceNow, navigate to System Update Sets > Local Update Sets, then click New. Give the update set a descriptive name (often incorporating a user story number), select the appropriate application scope (e.g., Global), and save the record

Uses:

ServiceNow, an update set is used to capture and move customizations from one instance to another. It acts as a container for changes like form modifications, business rules, and workflows. This allows developers to bundle these changes and deploy them to other environments, such as testing or production.

Activity 1: creation of new update set

Steps:

• **Go to All >> In the filter search for Local Update set > click on New.**
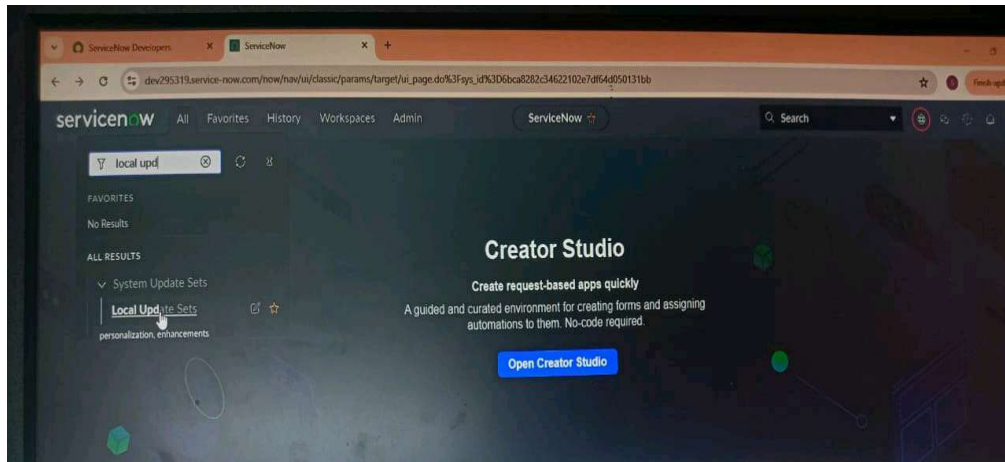
• **Enter the Details as:**

Name : Family Expenses

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

Milestone 3: creation of table

Purpose
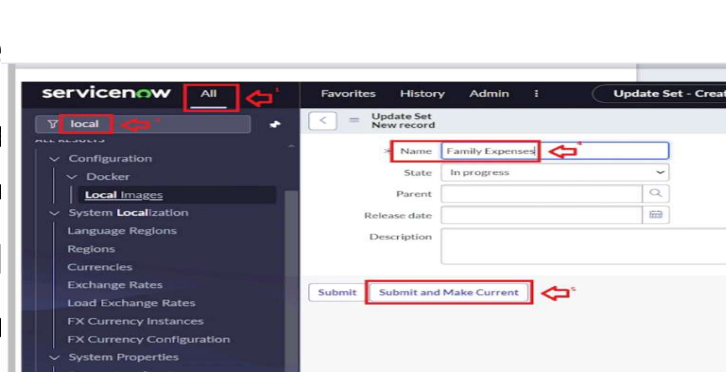
Keep the ~~ble in your~~ **paper: P** ~~in bold text~~ **and flus** ~~the table (in~~ **title cas** ~~table~~ **number, flush left. Double-space before and after the table**

Uses:

Tables are used to organize and display data in a structured format, using rows and columns. In various contexts, tables

are created for different purposes, including data management in databases, content presentation in documents, and data analysis.
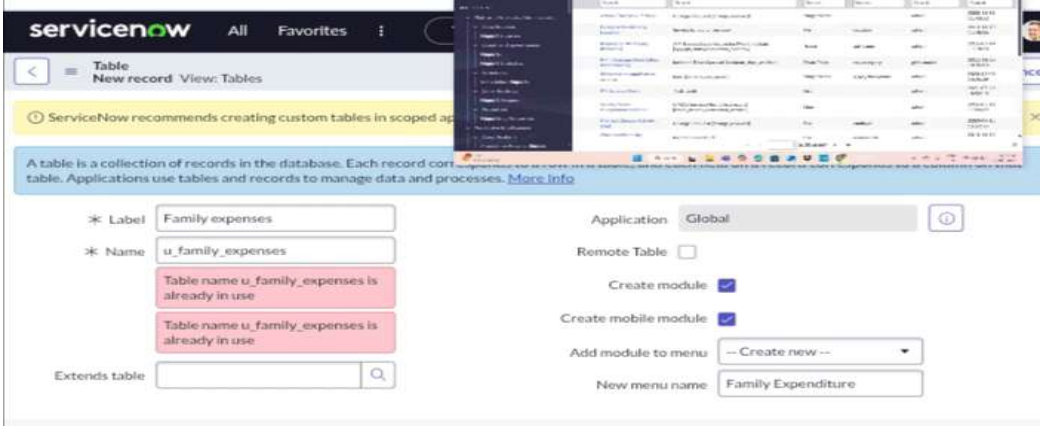
Activity 1: creation of family expenses table

Steps:

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

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

Milestone 3: creation of table

Purpose:

A family expense table, often part of a larger family budget, systematically lists all anticipated costs, categorized by type, to help track and manage spending. It typically

includes income sources and a breakdown of expenses into fixed and variable categories, with the goal of achieving financial stability and meeting savings goals.

Uses:

It involves listing income sources, categorizing expenses (needs vs. wants), and comparing total income with total expenses to determine if adjustments are needed.

**Activity 2: creation of columns (fields)**

Steps:

- **Near Columns Double click near insert a new row**

- **Give the details as**

- **Column label : Number**

- **Type : String**

- **Double click on insert a new row again**

- **Give the details as**

- **Column label : Date**

- **Type : Date**

- **Double click on insert a new row again**

- **Give the details as**

- **Column label : Amount**

- **Type : Integer**

- **Double click on insert a new row again**

- **Give the details as:**

- **Column label : Expense Details**

- **Type : String**

Max length:800

Click header save
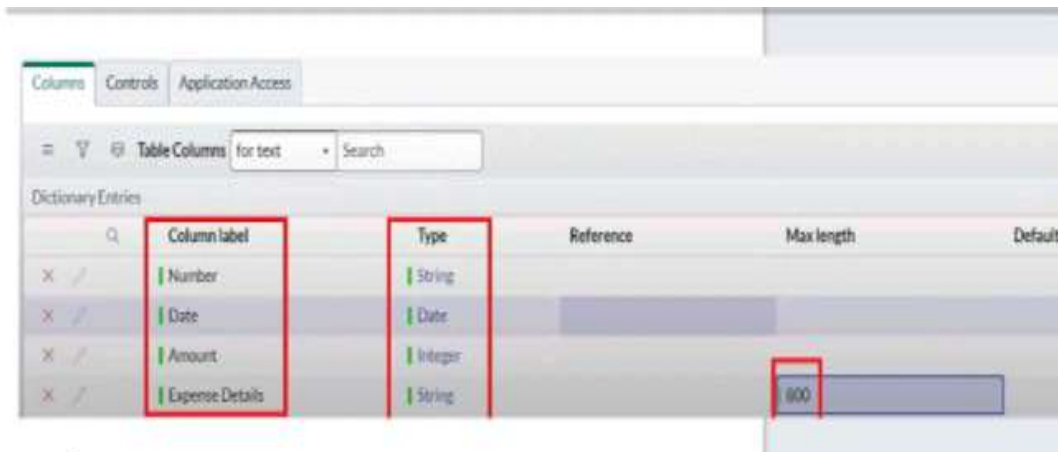
Milestone 3: creation of table

Activity 3: making field and auto-number

Steps:

- **Double click on the Number Field/Column.**
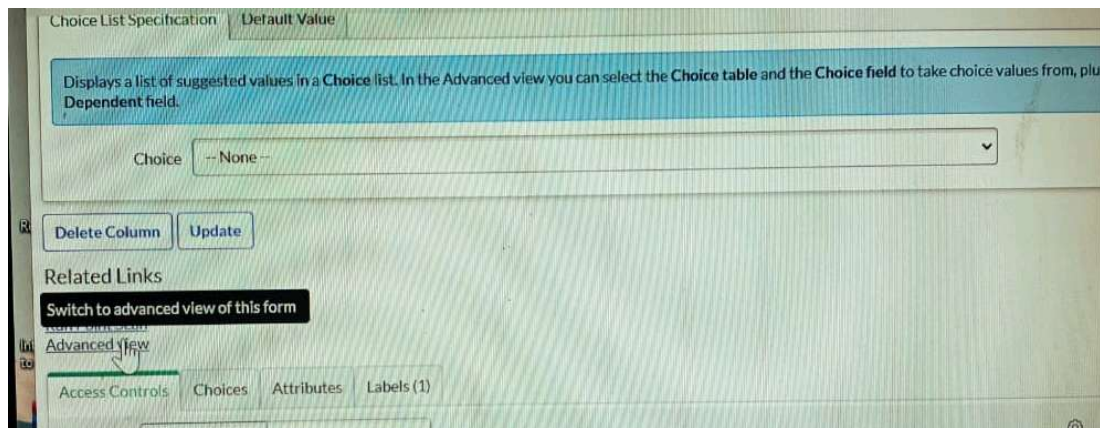
- **Go down and double click on Advanced view**

- **In Default Value:**

Use dynamic default : check the box

Dynamic default value : Get Next Padded Number

- **Click on Update.**

Display ☐

Alters the behavior of a field or functionality that depends on the field. More Info

Attributes

Choice List Specification   Calculated Value   Default Value

The Default value specifies what value the field has when first displayed.

Use dynamic ☑
default

Dynamic default   Get Next Padded Number
value

Delete Column   Update

Related Links
Show Table
Run Point Scan

- **Go to All >> In the filter search for Number Maintenance >> select Number Maintenance**

- **Click on New.**

- **Enter the below Details:**

Table : Family Expenses

Prefix : MFE

servicenow   All   Favorites   ⋮   Number - New Record ☆   Q Search

Number
New record   Submit

Table   daily expense

Prefix   MFE

Number   1,000

Application   Global

Number of digits   7

Submit

Related Links
Show Counter

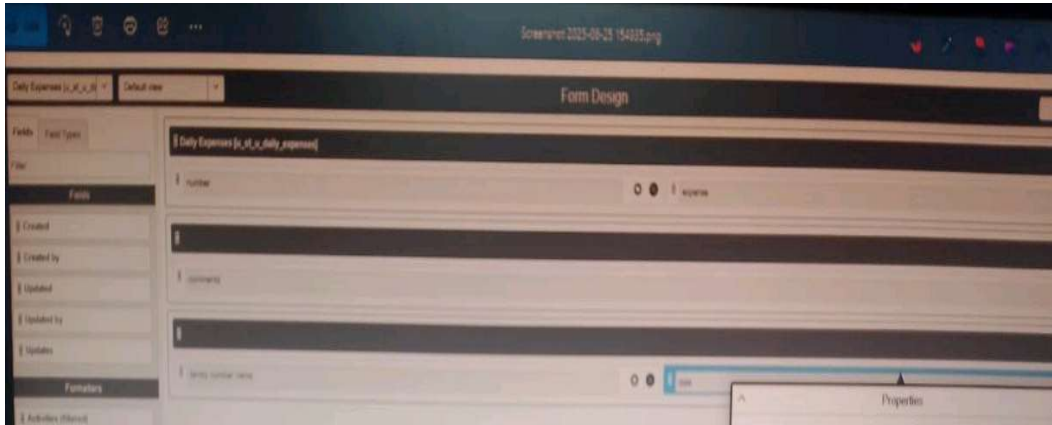- **Click on Submit.**

Milestone 3: creation of table

Activity4: configure the form

Steps:

1. **Configure the Form**

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

3. Click on New

4. Go to the Header and right click there>> click on Configure >> Select Form Design

5. Customize or Drag Drop the form as per your requirement

6. Make Number Read-Only Field by clicking on the gear icon and checking Read-Only

7. Make Date, Amount Mandatory Field by clicking on the gear icon and checking Mandatory

8. Click on Save.

Updated	Date/Time	(empty)	40
Sys ID	Sys ID (GUID)	(empty)	32
Created by	String	(empty)	40
Created	Date/Time	(empty)	40
×	number	String	
×	date	Date	
×	expense	Integer	
×	family member name	Reference	800
×	comments	String	800
	Insert a new row...		

Milestone 3: creation of table

Activity 3: making field and auto-number

Steps:

- Double click on the Number Field/Column.

- Go down and double click on Advanced view

- **In Default Value:**

Use dynamic default : check the box

Dynamic default value : Get Next Padded Number

- **Click on Update.**

- **Go to All >> In the filter search for Number Maintenance >> select Number Maintenance**

- **Click on New.**

- **Enter the below Details:**

Table : Family Expenses

Prefix : MFE

- **Click on Submit.**

Milestone 3: creation of table

Activity4: configure the form

Steps:

1. **Configure the Form**

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

3. **Click on New**

4. **Go to the Header and right click there>> click on Configure >> Select Form Design**

5. **Customize or Drag Drop the form as per your requirement**

6. **Make Number Read-Only Field by clicking on the gear icon and checking Read-Only**

7.   Make Date, Amount Mandatory Field by clicking on the gear icon and checking Mandatory

8.   Click on Save.

Milestone 4: creation of table (daily expenses)

Purpose:

Daily expenses are the everyday costs associated with maintaining a household or personal life. These include costs for necessities like housing, food, transportation, utilities, and healthcare, as well as discretionary spending on things like entertainment or personal care. Tracking and managing daily expenses is important for budgeting and financial planning.

Uses:

Daily expenses encompass the everyday costs of living and include necessities like food, transportation, utilities, and housing, as well as discretionary spending on entertainment and personal care. Tracking these expenses, whether through budgeting apps or simple spreadsheets, is crucial

for financial management, enabling individuals to identify areas where they can cut costs, save more, and achieve financial goals.

Activity1: creation of daily expenses table

Steps:

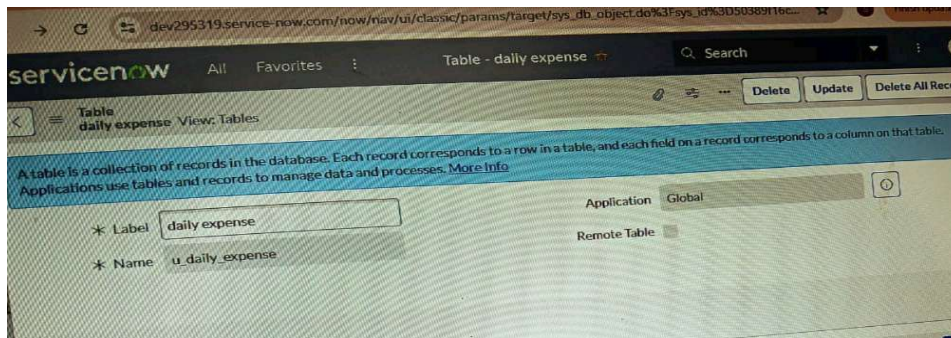1. Go to All > In the filter search for Tables > click on New.

2. Enter the Detail

Label : Daily Expenses

Name : Auto-Populated

Add Module to menu : Family Expenditure

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

Milestone 4: creation of table (daily expenses)

Activity 2: creation of columns (fields)

Steps:

1. Near Columns Double click near insert a new row.

2. Give the details as

3. Column label : Number

Type : String

4. Double click on insert a new row again

5. Give the details as

Column label : Date

Type : Date

Double click on insert a new row again

1. Give the details as:

Column label : Expense

Type : Integer

2. Double click on insert a new row again

3. Give the details as:

Column label : Family Member Nam

Type : Reference

Max length : 800

Milestone 4: creation of table (daily expenses)

Activity 3: making number field an auto-number

Steps:

• Double click on the Number Field/Column.

• Go down and double click on Advanced view

• In Default Value:

Use dynamic default : check the box

Dynamic default value : Get Next Padded Number

- **Click on Update.**

- **Go to All >> In the filter search for Number Maintenance >> select Number Maintenance**

- **Click on New.**

- **Enter the below Details**

- **Table : Family Expenses**

- **Prefix : MFE**

- **Click on Submit**

Milestone 4: creation of table daily (expenses)

Activity 4: configure of form

Steps:

•   **Go to All >> In the filter search for Daily Expenses >> Open Daily Expenses**

•   **Click on New**

•   **Go to the Header and right click there>> click on Configure >> Select Form Design**

•   **Customize or Drag Drop the form as per your requirement.**
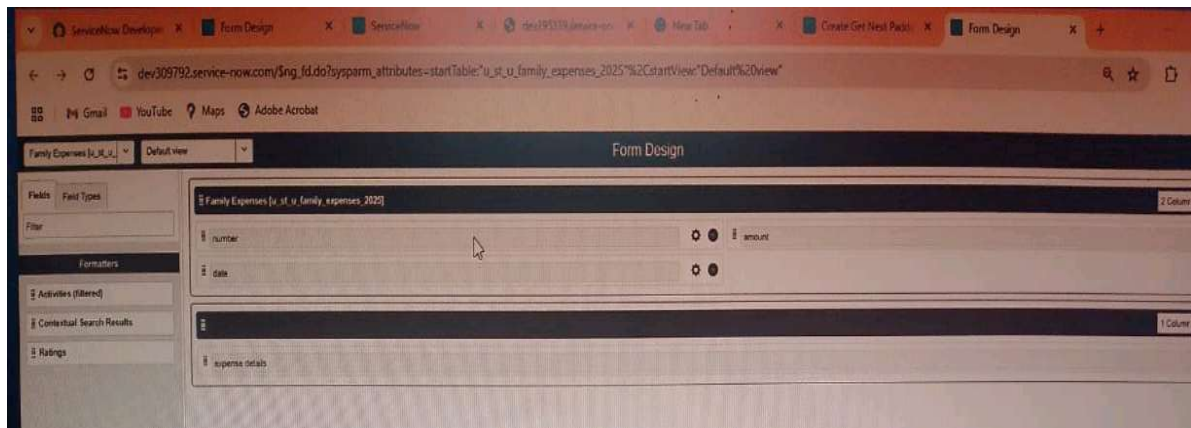
•   **Make Number Read-Only Field by clicking on the gear icon and checking Read-Only**

•   **Make Date, Family Member Name Mandatory Field by clicking on the gear icon and checking Mandatory**

•   **Click on Save.**

Milestone 5: creation of relationship

Purpose:

The purpose of creating a relationship in writing involves crafting a believable and engaging connection between characters, whether romantic or platonic. This is achieved by developing their backstory, exploring their interactions, showcasing their communication styles, and highlighting the dynamics of their bond.

Uses:

Creating relationships is essential for both personal well-being and professional success, offering benefits like improved communication, increased trust, and emotional support. In personal life, strong relationships contribute to happiness, a sense of purpose, and potentially longer lives. In the professional sphere, relationship building facilitates teamwork, career advancement, and stronger client connections.

 Milestone 5: creation of relationship

Activity 1: creation of relationship between family expenses and daily expenses table

Steps:

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

Milestone6: configuring related list on family expenses

Activity 1:Configuring Related list on family expenses

Steps:

•   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
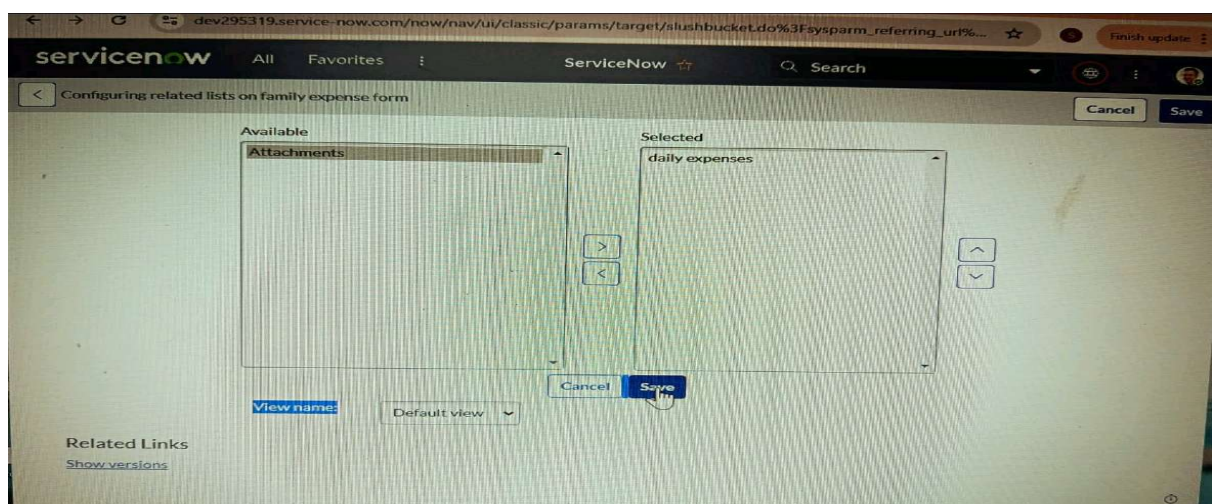
Milestone7: creation of business rules

Purpose:

Serves as the primary method for expressing the logic and constraints that govern an organization's operations. It involves clearly and concisely articulating the conditions under which specific actions should be taken, using natural language to define the rules' triggers, conditions, and actions. This approach ensures that all stakeholders, regardless of technical expertise, can understand and adhere to the established guidelines.

Uses:

Business rules are used to define and enforce specific instructions and constraints within a business process. They help ensure consistency, accuracy, and efficiency by guiding decision-making and actions. These rules can be applied across various aspects of a business, impacting individuals, teams, or the entire organization.

Milestone7: creation of business rules

Activity 1: creation of business rules

Steps:

- 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

- **When to run Check Insert and Update**

5.   In Advance(we write the code): Write the below code >

(function execute Rule(current, previous /*null when sync*/) {

var Family Expenses = new Glide Record('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.insert = new Glide
Record('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);
```

Milestone 8: configure of relationship

Purpose:

Purpose in literature is the ordinary form of written or spoken language, characterized by its grammatical structure and lack of metrical or rhyming patterns found in poetry. It's the common way we communicate ideas, stories, and information in a straightforward and logical manner.

Uses:

When configuring relationships in a system, various aspects need to be considered, including the tables or entities involved, the type of relationship, and the specific settings that govern how the relationship behaves. This often involves defining attributes, start and end objects, and reciprocal relationships, as well as configuring display settings.

Milestone 8: configure the relationship

Activity 1: configure the relationship

Steps:

- 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 refine Query(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.**