

PROJECT DESIGN PHASE

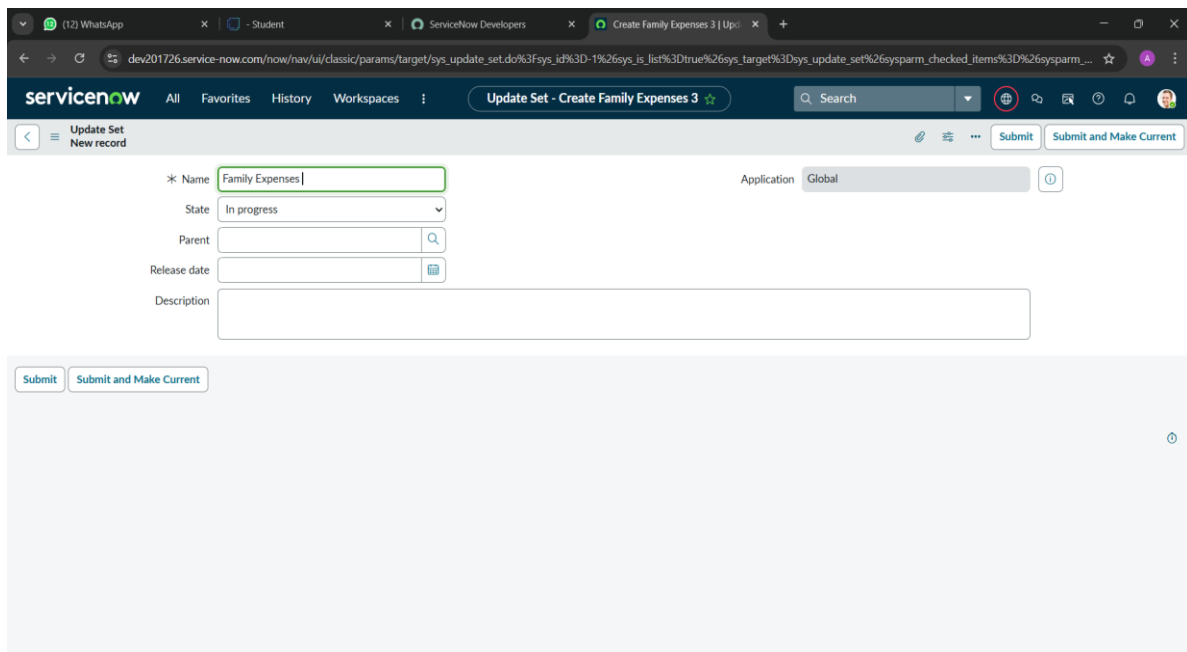
Date	01-11-2025
Team ID	NM2025TMID01717
Project name	Calculating Family Expenses Using Service Now

Introduction to Design Phase:

The design phase focuses on planning how the Family Expense Calculate system will look and work inside ServiceNow. It includes designing the data tables, forms, workflows, and dashboards. This step ensures that the system structure is clear before implementation begins.

STEPS:

1. Creation of new update set:

The screenshot shows a web browser window with the ServiceNow interface. The browser's address bar shows a URL starting with 'dev201726.service-now.com'. The ServiceNow header includes the logo and navigation tabs like 'All', 'Favorites', 'History', and 'Workspaces'. The main title of the page is 'Update Set - Create Family Expenses 3'. Below the title, there are buttons for 'Submit' and 'Submit and Make Current'. The form contains several fields: 'Name' with the value 'Family Expenses', 'State' with a dropdown menu showing 'In progress', 'Parent' with a search icon, 'Release date' with a calendar icon, and a large 'Description' text area. At the bottom of the form, there are 'Submit' and 'Submit and Make Current' buttons. The 'Application' field is set to 'Global'.

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

Enter the Details as:

Name :Family Expenses then click submit and make current

2.Table creation:

Family expenses table:

The screenshot shows the ServiceNow interface for creating a table named 'Family Expenses'. The table is associated with the 'Global' application. The label is 'Family Expenses' and the name is 'u_st_family_expenses'. The 'Remote Table' checkbox is checked.

Columns | Controls | Application Access

Table Columns | Column label | Search

Dictionary Entries

Column label	Type	Reference	Max length	Default value	Display
Sys ID	Sys ID (GUID)	(empty)	32		false
Number	String	(empty)	40	javascript:getNextObjNumberPadded();	false
Expense Details	String	(empty)	800		false
Date	Date	(empty)	40		false
Amount	Integer	(empty)	40		false

Related Links
[Form Builder](#)

Daily expenses table:

The screenshot shows the ServiceNow interface for creating a table named 'Daily Expenses'. The table is associated with the 'Global' application. The label is 'Daily Expenses' and the name is 'u_daily_expenses'. The 'Remote Table' checkbox is unchecked.

Columns | Controls | Application Access

Table Columns | Column label | Search

Dictionary Entries

Column label	Type	Reference	Max length	Default value	Display
Updates	Integer	(empty)	40		false
Updated by	String	(empty)	40		false
Updated	Date/Time	(empty)	40		false
Sys ID	Sys ID (GUID)	(empty)	32		false
Number	String	(empty)	40	javascript:getNextObjNumberPadded();	false
Expense	Integer	(empty)	40		false
Date	Date	(empty)	40		false
Created by	String	(empty)	40		false

3. creation of relationship:

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.

Relationship - Daily Expenses

Name:

Advanced: ☐

Application:

Applies to table:

Queries from table:

This script refines the query in current that will populate the related list. For more information about it, its parameters and control variables, see [the documentation](#) See also the article about the [recommended form of the script](#).

Query with ☒ Turn on ECMAScript 2021 (ES12) mode

```
1 function refineQuery(current, parent) {
2
3 // Add your code here, such as current.addQuery(field, value);
4 current.addQuery('u_date', parent.u_date);
5 current.query();
6
7 }(current, parent);
```

Run Query Diagnostics Update Delete

Related Links

[Run Point Scan](#)

4. 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

The screenshot shows the ServiceNow interface for configuring a Business Rule. The browser tabs include WhatsApp, Student, ServiceNow Developers, and Family Expenses BR | Business. The URL is `dev201726.service-now.com/now/nav/ui/classic/params/target/sys_script.do%3Fsys_id%3D75dfee97c33c3210c2715a02b4013161%26sysparm_record_target%3Dsys_script%26sysparm_record_row%3D1...`. The page title is "Business Rule - Family Expenses BR".

At the top, there's a navigation bar with "All", "Favorites", "History", and "Workspaces". A search bar is also present. Below the navigation bar, the business rule details are shown:

- Name: Family Expenses BR
- Table: Daily Expenses [u_daily_expenses]
- Application: Global
- Active: ☒
- Advanced: ☒

Below the details, there's a section titled "When to run" with tabs for "When to run", "Actions", and "Advanced". The "When to run" tab is selected. It contains a blue box with the text: "Specify whether the business rule should run on Insert or Update. Use Filter Conditions to specify under which conditions the business rule should run."

Under "When to run", there are two dropdowns: "When" (set to "before") and "Order" (set to "100"). To the right, there are checkboxes for "Insert" (checked), "Update" (checked), "Delete" (unchecked), and "Query" (unchecked).

Below these, there's a "Filter Conditions" section with buttons "Add Filter Condition" and "Add OR Clause". There's a dropdown menu for "-- choose field --", a dropdown for "-- oper --", and a text input for "-- value --".

At the bottom, there's a "Role conditions" section with a link icon.

Configure the Relationship:

The screenshot shows the ServiceNow interface for configuring a Relationship. The browser tabs include WhatsApp, Student, ServiceNow Developers, and Daily Expenses | Relationship. The URL is `dev201726.service-now.com/now/nav/ui/classic/params/target/sys_relationship.do%3Fsys_id%3D19fd66d3c33c3210c2715a02b40131b0%26sysparm_record_target%3Dsys_relationship%26sysparm_reco...`. The page title is "Relationship - Daily Expenses".

At the top, there's a navigation bar with "All", "Favorites", "History", and "Workspaces". A search bar is also present. Below the navigation bar, the relationship details are shown:

- Name: Daily Expenses
- Advanced: ☐
- Application: Global
- Applies to table: Family Expenses [u_st_family_expenses]
- Queries from table: Daily Expenses [u_daily_expenses]

Below the details, there's a blue box with the text: "This script refines the query in current that will populate the related list. For more information about it, its parameters and control variables, see the documentation See also the article about the recommended form of the script."

Under this, there's a "Query with" section with a toggle "Turn on ECMAScript 2021 (ES12) mode" (checked). Below the toggle, there's a code editor with the following code:

```

1 (function refineQuery(current, parent) {
2
3     // Add your code here, such as current.addQuery(field, value);
4     current.addQuery('u_date', parent.u_date);
5     current.query();
6
7 })(current, parent);

```

Below the code editor, there are buttons "Run Query Diagnostics", "Update", and "Delete".

At the bottom, there's a "Related Links" section with a link "Run Point Scan".

Conclusion of Design Phase:

The design phase ensures a clear structure for the Family Expense calculate system. With the tables, forms, workflows, and dashboards properly planned, the project is ready to move into the next phase.