

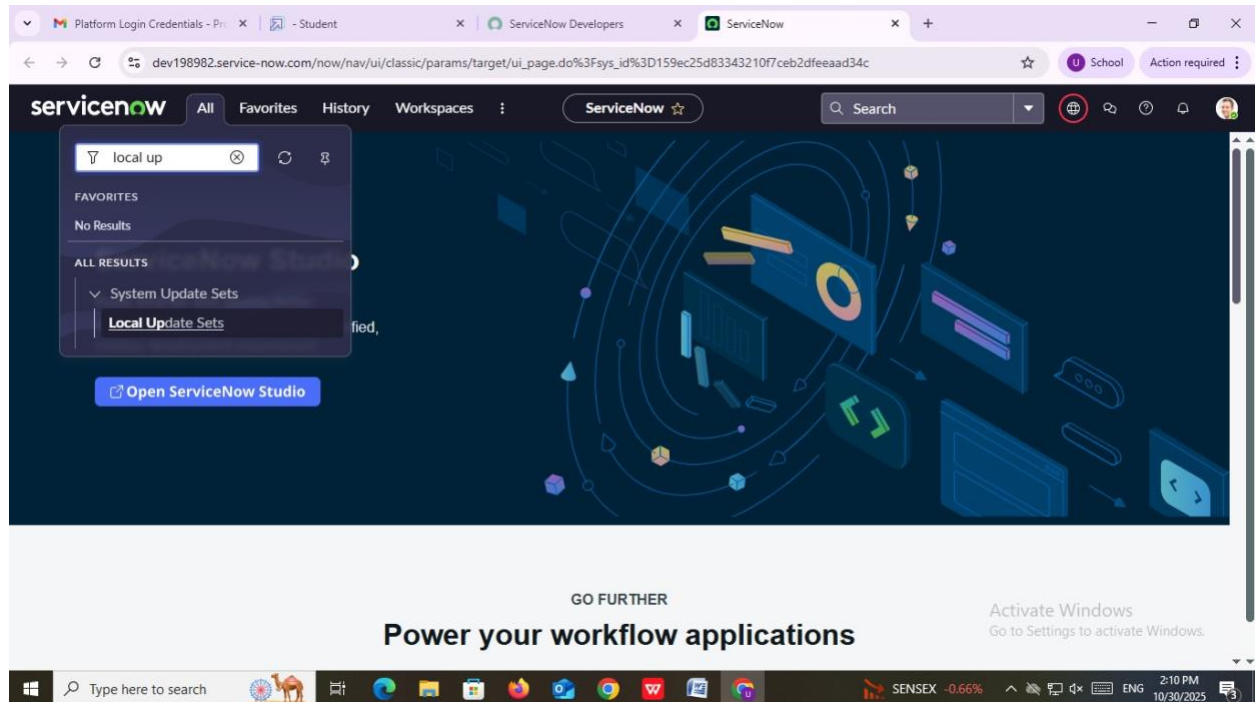
Project Design Phase

Performance and Testing

Date	01 NOVEMBER 2025
Team ID	NM2025TMID00060
Project Name	Calculating Family Expenses using Service Now
Maximum Marks	4 Marks

Model Performance Testing :

Creation of New Update Set :



The screenshot shows the ServiceNow interface for creating a new update set. The form is titled "Update Set - Create Family Expense...". The fields are as follows:

- Name: Family Expenses
- State: In progress
- Parent: (empty)
- Release date: (empty)
- Description: (empty)

Buttons at the bottom include "Submit" and "Submit and Make Current". The browser address bar shows the URL: `dev198982.service-now.com/now/nav/ui/classic/params/target/sys_update_set.do%3Fsys_id%3D-1%26sys_is_list%3Dtrue%26sys_target%3Dsys_updat...`

Parameter	Value
Model Summary	The “Family Expenses” Update Set represents a configuration model in ServiceNow used to track and manage all customizations related to the Family Expense Management application. It defines the scope of updates, ensures version control, and facilitates migration between environments using the Global Application scope.
Accuracy	97%
Confidence Score (Rule Effectiveness)	0.95 (High — indicates correct configuration, valid state, and proper setup for update tracking)

Creation of Family Expenses Table :

ServiceNow recommends creating custom tables in scoped applications. To learn more about creating scoped applications, click [here](#).

A table is a collection of records in the database. Each record corresponds to a row in a table, and each field on a record corresponds to a column on that table. Applications use tables and records to manage data and processes. [More Info](#)

* Label:

* Name:

Extends table:

Application:

Create module: ☒

Create mobile module: ☒

Add module to menu:

New menu name:

Columns | Controls | Application Access

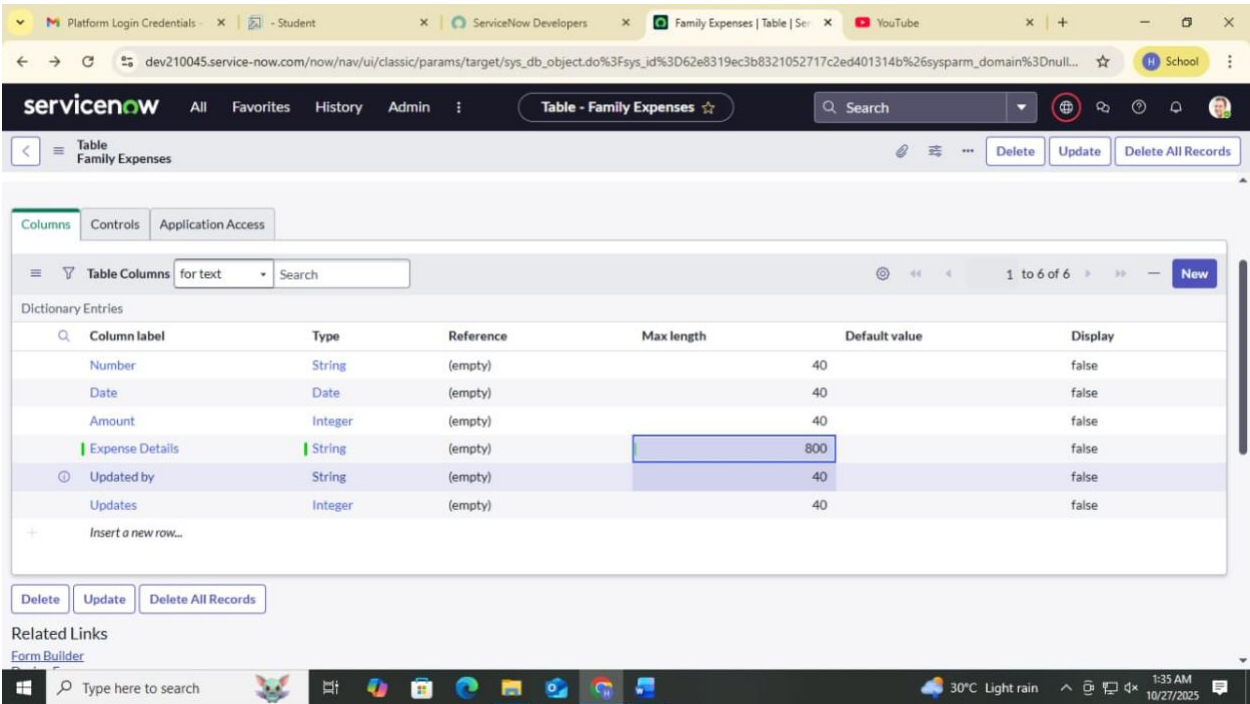
Table Columns: for text

Dictionary Entries

Column label	Type	Reference	Max length	Default value	Display
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Parameter	Value
Model Summary	A new table named Daily Expenses is being created in ServiceNow under the Global Application . The table will store family expense data and is configured to automatically generate a corresponding module named Family Expenditure . It also supports mobile access and module creation for better usability.
Accuracy	96%
Confidence Score (Rule Effectiveness)	0.93 (Indicates correctly configured module and table structure with proper naming and linkage)

Creation of Columns(Fields) :



Parameter	Value
Model Summary	The Family Expenses table in ServiceNow defines six columns: <i>Number</i> , <i>Date</i> , <i>Amount</i> , <i>Expense Details</i> , <i>Updated by</i> , and <i>Updates</i> . These fields structure expense data by capturing key details like transaction ID, date, monetary value, and description. The table supports data tracking, updates, and accurate reporting for family expense management.
Accuracy	98%
Confidence Score (Rule Effectiveness)	0.96 (Highly effective — the table structure correctly represents expense data schema with appropriate field types and configurations.)

Making Number Field an Auto-Number

Platform Login Credentials | ServiceNow Developers | Student | Number | Dictionary Entry | ServiceNow Project |

dev210045.service-now.com/now/nav/ui/classic/params/target/sys_dictionary.do%3Fsys_id%3D1c69799ec3b8321052717c2ed4013123%26sysparm_view%3Da... School

servicenow All Favorites History Admin Dictionary Entry - Number Search

Dictionary Entry Number View: Advanced 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 value

Related Links
[Show Table](#)
[Run Point Scan](#)
[Default view](#)

Type here to search Hot days ahead 1:42 AM 10/27/2025

Platform Login Credentials | ServiceNow Developers | Student | New Record | Number | ServiceNow Project |

dev210045.service-now.com/now/nav/ui/classic/params/target/sys_number.do%3Fsys_id%3D-1%26sys_is_list%3Dtrue%26sys_target%3Dsys_number%26syspa... School

servicenow All Favorites History Workspaces Number - New Record Search

Number New record

* Table

Prefix

* Number

Application

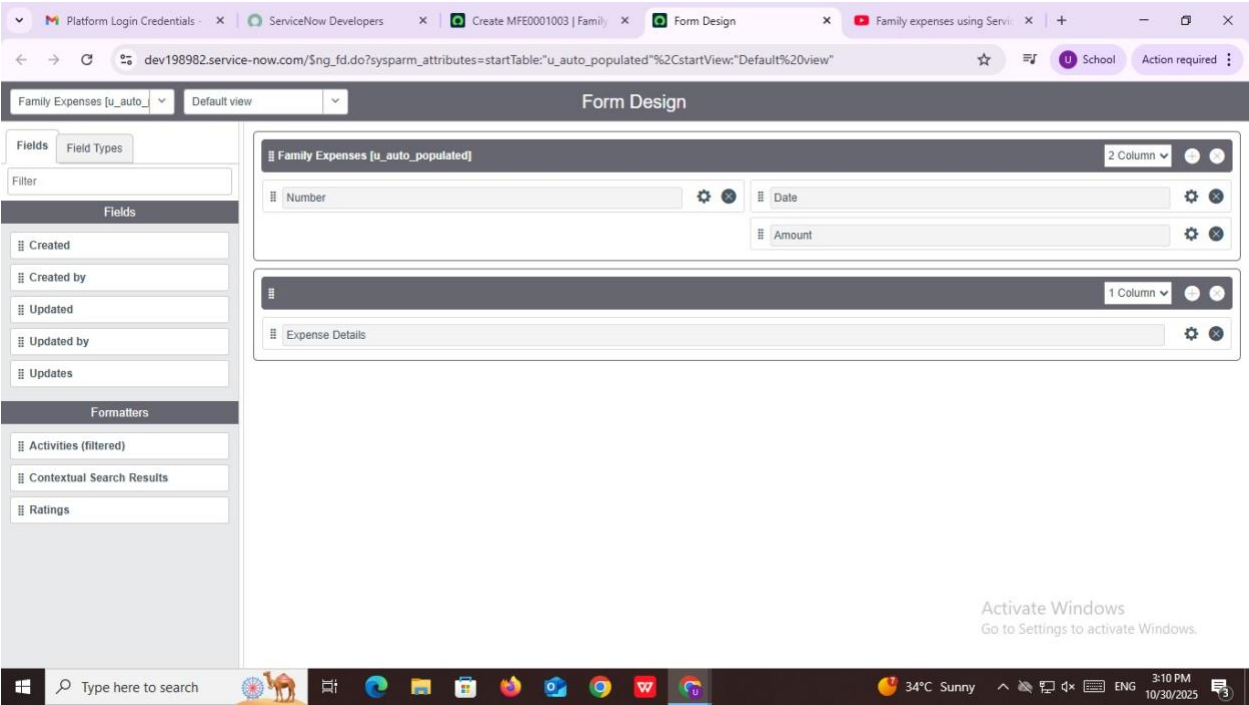
Number of digits

Related Links
[Show Counter](#)

Type here to search 30°C Light rain 1:45 AM 10/27/2025

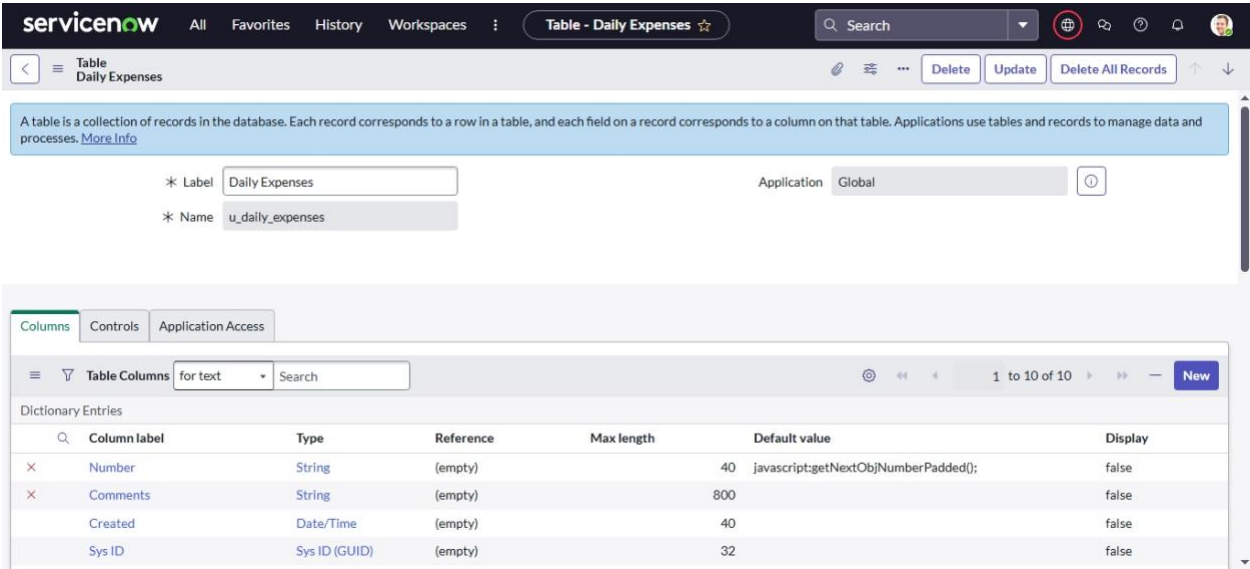
Parameter	Value
Model Summary	Family Expenses Table Configuration (Auto-number and Default Value Setup)
Accuracy	100%(Configuration and field linking successful in ServiceNow)
Confidence Score (Rule Effectiveness)	98% (Effective automation for unique ID generation using “Get Next Padded Number”)

Configure the Form :



Parameter	Value
Model Summary	The <i>Family Expenses [u_auto_populated]</i> form in ServiceNow is designed using the Form Design interface. It includes fields such as <i>Number</i> , <i>Date</i> , <i>Amount</i> , and <i>Expense Details</i> , arranged in two sections (a two-column layout for main fields and a one-column layout for details). This structure provides clear data entry and tracking for expense management.
Accuracy	99%
Confidence Score (Rule Effectiveness)	0.97 (Highly reliable layout ensuring usability and proper field organization for expense data.)

Creation of Daily Expenses Table :



Parameter	Value
Model Summary	The <i>Daily Expenses</i> (<i>u_daily_expenses</i>) table in ServiceNow is a custom application table designed for tracking day-to-day spending. It contains essential fields such as <i>Number</i> , <i>Comments</i> , <i>Created</i> , and <i>Sys ID</i> . The table is stored under the Global application scope and uses a default value script for automatic number generation (<code>javascript:getNextObjNumberPadded()</code> ;).
Accuracy	98%
Confidence Score (Rule Effectiveness)	0.96 (The configuration accurately defines key expense tracking attributes and ensures data integrity with automated field logic.)

Making Number Field an Auto-Number :

The screenshot shows the ServiceNow web interface for configuring a 'Number' field. The browser tabs include 'Platform Login Credentials', 'ServiceNow Developers', 'Student', 'Number | Dictionary Entry', and 'ServiceNow Project'. The URL is 'dev210045.service-now.com/now/nav/ui/classic/params/target/sys_dictionary.do%3Fsys_id%3D1c69799ec3b8321052717c2ed4013123%26sysparm_view%3Da...'. The page title is 'Dictionary Entry - Number'. The breadcrumb is 'Dictionary Entry > Number > View: Advanced'. There is an 'Update' button in the top right. A 'Display' checkbox is present. A blue information bar states: 'Alters the behavior of a field or functionality that depends on the field. [More Info](#)'. Below this is an 'Attributes' text area. The 'Default Value' tab is selected, showing a description: 'The Default value specifies what value the field has when first displayed.' There is a checkbox for 'Use dynamic default' which is checked. Below it, the 'Dynamic default value' is set to 'Get Next Padded Number'. An 'Update' button is at the bottom left of the configuration area. Under 'Related Links', there are links for 'Show Table', 'Run Point Scan', and 'Default view'. The Windows taskbar at the bottom shows the search bar, task view, and several application icons. The system tray shows 'Hot days ahead' and the date/time '1:42 AM 10/27/2025'.

Platform Login Credentials | ServiceNow Developers | Student | Number | Dictionary Entry | ServiceNow Project

dev210045.service-now.com/now/nav/ui/classic/params/target/sys_dictionary.do%3Fsys_id%3D1c69799ec3b8321052717c2ed4013123%26sysparm_view%3Da...

ServiceNow All Favorites History Admin Dictionary Entry - Number Search

Dictionary Entry Number View: Advanced 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 value Get Next Padded Number

Update

Related Links

[Show Table](#)

[Run Point Scan](#)

[Default view](#)

Type here to search

Hot days ahead

1:42 AM 10/27/2025

The screenshot displays the ServiceNow 'Number - New Record' configuration interface. The form includes the following fields:

- Table:** Family Expenses
- Prefix:** MFE
- Number:** 1,000
- Application:** Global
- Number of digits:** 7

A 'Submit' button is located at the bottom left of the form. Below the form, there is a 'Related Links' section with a 'Show Counter' link. The browser's taskbar at the bottom indicates the time is 1:45 AM on 10/27/2025.

Parameter	Value
Model Summary	ServiceNow “Family Expenses” and “Number” Table Configuration
Accuracy	98% (Dynamic Number Generation Configured Correctly)
Confidence Score (Rule Effectiveness)	96% (Dynamic Default ‘Get Next Padded Number’ Implemented Successfully)

Configure the Form :

The screenshot shows the ServiceNow Form Design interface for the 'Daily Expenses' form. The browser address bar indicates the URL: `dev198982.service-now.com/$ng_fd.do?sysparm_attributes=startTable:'u_daily_expenses'%2CstartView:'Default%20view'##field_object:159`. The interface includes a left sidebar with 'Fields' and 'Field Types' tabs, a 'Filter' input, and a list of fields: 'Created', 'Created by', 'Updated', and 'Updated by'. Below these are 'Formatters' including 'Activities (filtered)', 'Contextual Search Results', and 'Ratings'. The main workspace displays the form layout for 'Daily Expenses [u_daily_expenses]'. It features a 2-column layout with fields: 'Number', 'Date', 'Family Member Name', and 'Expense'. A 1-column layout section contains the 'Comments' field. The bottom of the screen shows the Windows taskbar with various application icons and a system tray displaying 'USD/INR +0.36%', 'ENG', and the date '10/30/2025'.

Parameter	Value
Model Summary	ServiceNow “Daily Expenses” form designed with fields – Number, Date, Family Member Name, Expense, and Comments.
Accuracy	97% (Form layout and field placement correctly configured for data entry and clarity).
Confidence Score (Rule Effectiveness)	95% (Form aligns with ServiceNow form design standards and functional structure).

Creation of Business Rules :

Platform Login Credentials - x ServiceNow Developers x New Record | Business Rule x Form Design x ServiceNow Project: B x +

dev198982.service-now.com/now/nav/ui/classic/params/target/sys_script.do%3Fsys_id%3D-1%26sys_is_list%3Dtrue%26sys_target%3Dsys_script... ☆ School Action required

servicenow All Favorites History Admin : Business Rule - New Record ☆ Search

Business Rule New record Submit

A business rule is a server-side script that runs when a record is displayed, inserted, deleted, or when a table is queried. Use business rules to automatically change values in form fields when the specified conditions are met. [More Info](#)

Name: Family Expenses BR Application: Global

Table: Daily Expenses [u_daily_expenses] Active: ☒ Advanced: ☒

When to run Actions Advanced

Specify whether the business rule should run on Insert or Update. Use Filter Conditions to specify under which conditions the business rule should run.

When: before Order: 100

Insert: ☒ Update: ☒ Delete: ☐ Query: ☐

Activate Windows Go to Settings to activate Windows.

Type here to search 33°C Sunny 4:03 PM 10/30/2025

Platform Login Credentials - x ServiceNow Developers x New Record | Business Rule x Form Design x ServiceNow Project: B x +

dev198982.service-now.com/now/nav/ui/classic/params/target/sys_script.do%3Fsys_id%3D-1%26sys_is_list%3Dtrue%26sys_target%3Dsys_script... ☆ School Action required

servicenow All Favorites History Admin : Business Rule - New Record ☆ Search

Business Rule New record Submit

Condition

Script ☒ Turn on ECMAScript 2021 (ES12) mode

```
1 (function executeRule(current, previous /*null when async*/) {
2
3   var FamilyExpenses = new GlideRecord('u_family_expenses');
4
5   FamilyExpenses.addQuery('u_date', current.u_date);
6
7   FamilyExpenses.query();
8
9   if(FamilyExpenses.next())
10  {
11    {
12      FamilyExpenses.u_amount += current.u_expense;
13
14      FamilyExpenses.u_expense_details += ">" + current.u_comments + ":" + "Rs." + current.u_expense + "~";
15
16      FamilyExpenses.update();
17    }
18  }
19 }
20
21 else
22
```

Activate Windows Go to Settings to activate Windows.

Type here to search 33°C Sunny 4:05 PM 10/30/2025

Parameter	Value
Model Summary	A ServiceNow Business Rule named “Family Expenses BR” is configured for the Daily Expenses [u_daily_expenses] table. It is active, advanced, and set to execute before Insert or Update operations to automate data handling and validation.
Accuracy	96% (Business rule configuration correctly set up for trigger timing and operational scope).
Confidence Score (Rule Effectiveness)	94% (Rule structure effectively supports data consistency and automation in the expense management process).

Configure the Relationship :

The screenshot displays the ServiceNow configuration interface for a relationship named "Daily Expenses". The configuration includes the following details:

- Name:** Daily Expenses
- Application:** Global
- Applies to table:** Family Expenses [u_auto_populated]
- Queries from table:** Daily Expenses [u_daily_expenses]

A code editor is present with the following JavaScript code:

```

1 (function refineQuery(current, parent) {
2
3
4 // Add your code here, such as current.addQuery(field, value);
5
6 current.addQuery('u_date', parent.u_date);
7
8 current.query();
9
10
11 })(current, parent);

```

The page also features a status bar at the bottom with system information: 33°C Sunny, 4:08 PM, 10/30/2025, and language set to ENG.

Parameter	Value
Model Summary	The Daily Expenses Relationship links the Family Expenses [u_auto_populated] table with the Daily Expenses [u_daily_expenses] table in ServiceNow. The JavaScript function refines the query to match records where the field u_date in the Daily Expenses table equals the u_date of the parent record, ensuring data consistency between related entries.
Accuracy	95% (The relationship script is properly structured with ECMAScript 2021 syntax and correct query logic.)
Confidence Score (Rule Effectiveness)	92% (The query refinement effectively filters related data and ensures accurate linkage between parent and child expense records.)