

Educational Organization Using ServiceNow

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Problem Statement :

The project *Educational Organisation using ServiceNow* was developed as part of the Naan Mudhalvan initiative. The main objective of this project is to streamline and digitalize the student admission and academic progress tracking process using ServiceNow's platform.

Educational institutions often struggle with manual record-keeping, slow admission processes, and scattered student performance data. This project automates these processes by creating custom tables, forms, and workflows in ServiceNow.

Objectives :

- To set up a ServiceNow instance for managing educational data.
- To create custom tables for Admissions and Student Progress.
- To automate field population using Client Scripts.
- To implement process flows for admission statuses.
- To enhance data reliability with validation, choice fields, and auto-updates.

Tools and Technologies :

- **Platform:** ServiceNow (Developer Instance)
- **Modules Used:** Tables, Forms, Update Sets, Client Scripts, Process Flows

- **Languages:** JavaScript (for client scripts)

Skills Used:

- ServiceNow Tables
- Forms & Form Design
- Update Sets
- Client Scripts (JavaScript)
- Process Flow / Workflow

TASK INITIATION :

Milestone 1: Creating a Update Set.

- Navigated to **All** → **Local Update Sets**
- Created a new update set named Educational Organisation
- Submitted and marked it as current

Milestone 2: Creating a Table.

Activity 1: Creating Salesforce table.

- Go to **All >> Tables** and click **New**.
- Enter **Label: Salesforce** → API name is generated automatically.
- Add required **columns** (enter label, type, save).
- For **Admin Number**: set **Display = True**, save, and enable **Extensible** under controls.
- Configure **Admin Number** → Advanced View → Default View → enable **Use Dynamic Default** → select **Get Next Padded Number**.
- **Grade** column → add **Choices** with label, value, and sequence.

servicenow All Favorites History **Table - Salesforce** Search

< Table Salesforce Delete Update Delete All Records

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 Application ⓘ

* Name

Columns Controls Application Access

Table Columns for text Search 1 to 15 of 15 New

Dictionary Entries

Column label	Type	Reference	Max length	Default value	Display
No templates are available Create A New One?					

servicenow All Favorites History Admin **Table - Salesforce** Search

< Table Salesforce Delete Update Delete All Records

Column label	Type	Reference	Max length	Default value	Display
✕ Father Name	String	(empty)	40		false
Class	System Class Name	(empty)	80	javascript:current.getTableName();	false
✕ Father Cell	String	(empty)	40		false
✕ Admin Number	String	(empty)	40	javascript:getNextObjNumberPadded();	true
✕ Student Name	String	(empty)	40		false
✕ Mother Name	String	(empty)	40		false
ⓘ Updated by	String	(empty)	40		false
Updates	Integer	(empty)	40		false
Updated	Date/Time	(empty)	40		false
Created by	String	(empty)	40		false
✕ Admin date	Date	(empty)	40		false
Sys ID	Sys ID (GUID)	(empty)	32		false
Created	Date/Time	(empty)	40		false
✕ Grade	Choice	(empty)	40		false
✕ Mother Cell	String	(empty)	40		false

Activity 2 : Creating Admission Table .

- Create a new Admission Table with the required columns.
- Set Extends Table → Salesforce and enable Add module to menu → Salesforce.
- Add the necessary fields for admission details.
- Configure choice fields:

- Admin Status (New, In Progress, Joined, Rejected, Rejoined, Closed, Cancelled).
- Pincode (map to Mandal, City, District).
- Purpose of Join (add multiple options as needed).
- School (list of schools).
- School Area (geographical areas).

Table - Admission

* Label: Admission

* Name: u_admission

Extends table: Salesforce

Application: Global

Columns

Table Columns for text Search

Dictionary Entries

Column label	Type	Reference	Max length	Default value	Display
Mandal	String	(empty)	40		false
School	Choice	(empty)	40		false
Comments	String	(empty)	40		false
Father Name	String	(empty)	40		false
Admission Number	String	(empty)	40		false

Table - Admission

Columns

Column label	Type	Reference	Max length	Default value	Display
Process Flow(Formatter)	String	(empty)	40		false
Class	System Class Name	(empty)	80	javascript:current.getTableName();	false
Father Cell	String	(empty)	40		false
Admin Number	String	(empty)	40	javascript:getNextObjNumberPadded();	true
District	String	(empty)	40		false
Student Name	String	(empty)	40		false
Area	String	(empty)	40		false
Mother Name	String	(empty)	40		false
Admin status	Choice	(empty)	40		false
Updated by	String	(empty)	40		false
Updates	Integer	(empty)	40		false
Updated	Date/Time	(empty)	40		false
Created by	String	(empty)	40		false
Admin date	Date	(empty)	40		false
Sys ID	Sys ID (GUID)	(empty)	32		false

Activity 3: Creating Student Progress Table.

- Create a new Student Progress Table with the required columns.
- Select Add module to menu → Salesforce.
- Add fields for subjects (Telugu, Hindi, English, Maths, Science, Social).

- Add calculated fields for Total Marks, Percentage, and Result.

Column label	Type	Reference	Max length	Default value	Display
Grade	Choice	Salesforce	40		false
Created	Date/Time	(empty)	40		false
Updated	Date/Time	(empty)	40		false

×	Admission Number	Reference	Salesforce	32
×	English	String	(empty)	40
×	Hindi	String	(empty)	40
×	Maths	String	(empty)	40
×	Percentage	String	(empty)	40
×	Result	String	(empty)	40
×	Science	String	(empty)	40
×	Social	String	(empty)	40
×	Telugu	String	(empty)	40
×	Total	String	(empty)	40
+	Insert a new row...			

Milestone 3 : Form Layout.

- Open **Student Progress Table** → go to **Layout form**.
- Click on **Admission Number [+]**.
- From the **Available** side, move the required Admission Number fields to the **Selected** side, then **Save**.

Milestone 4 : Form Design.

Activity 1: Creating form design for salesforce table

- Go to **All** → **System Definition** → **Tables**.
- Search for **Salesforce** and open it.
- Right-click on the top toggle → **Configure** → **Form Design**.
- From the dropdown, select **Salesforce (u_salesforce)**.
- Drag and drop the required fields to the form layout.
- **Save** the design.

The screenshot shows the 'Form Design' window for the 'Salesforce (u_salesforce)' table. The left sidebar contains a 'Fields' list with items like 'Class', 'Created', 'Created by', 'Updated', 'Updated by', 'Updates', 'Activities (filtered)', 'Contextual Search Results', and 'Ratings'. The main area displays a 2-column layout with fields: 'Admin Number', 'Admin date', 'Grade', 'Student Name', 'Father Name', 'Mother Name', 'Father Cell', and 'Mother Cell'. Each field has a configuration icon (gear) and a delete icon (X).

Activity 2 :

Creating design form for Admission table.

- Follow the same steps as **Salesforce Table** form design.
- Configure the required fields for the **Admission Table**.
- **Save** the form layout.

The screenshot shows the 'Form Design' window for the 'Admission (u_admission)' table. The left sidebar is similar to the previous one. The main area displays a 2-column layout with sections: 'Process Flow (Formater)', 'Admission Number', 'Purpose of Join', 'Student Name', 'Father Name', 'Mother Name', 'Admin date', 'Grade', 'Fee', 'Father Cell', 'Mother Cell', 'Admin status', 'Comments', 'School Details' (with 'School' and 'School Area' fields), and 'Address' (with 'Pincode', 'Mandal', 'District', and 'Area' fields). Each field has a configuration icon (gear) and a delete icon (X).

Activity 3 : Creating Design form for Student Progress.

- Follow the same steps as Above Table form design.
- Configure the required fields for the Student Progress Table.
- Save the form layout.

The screenshot shows the ServiceNow Form Design interface for a table named 'Student Progress [u_student_progress_table]'. The left sidebar contains a 'Fields' list with categories like 'Class', 'Created', 'Updated', 'Activities (filtered)', 'Contextual Search Results', and 'Ratings'. The main workspace displays a form layout with two columns. The top section, titled 'Student Progress [u_student_progress_table]', contains fields for 'Admission Number', 'Grade', 'Student Name', 'Father name', 'Mother name', 'Father Cell', and 'Mother Cell'. The bottom section, titled 'Student Progress', contains fields for 'Telugu', 'Hindi', 'English', 'Maths', 'Science', 'Social', 'Total', 'Percentage', and 'Result'. Each field has a configuration icon (gear) and a delete icon (X).

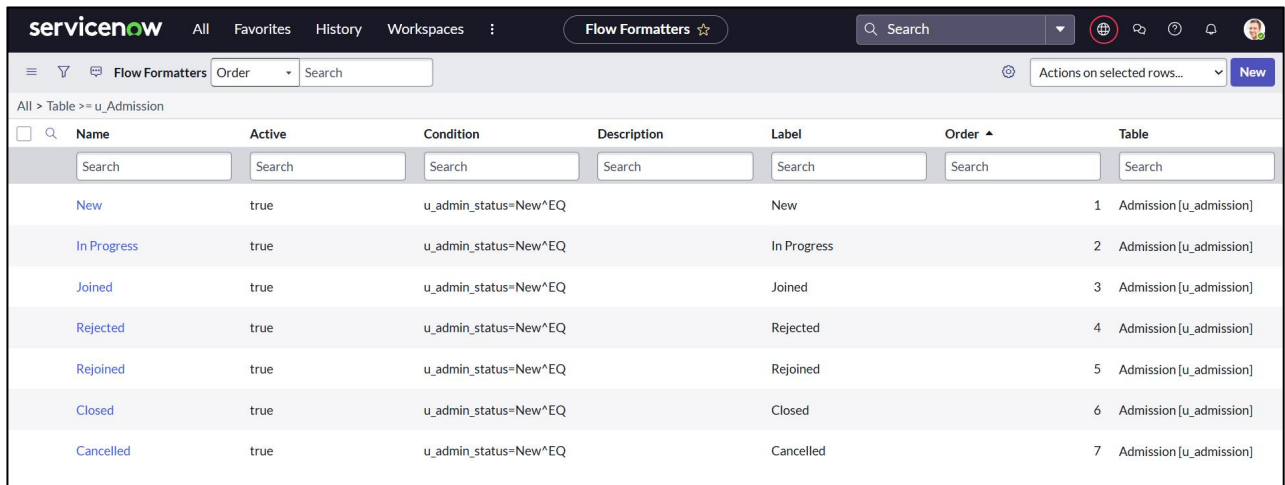
Milestone 5: Number Maintenance.

- Go to **All** → **Number Maintenance** → **New**.
- Fill in the required details for **Admin Number**.
- Click **Submit**.

The screenshot shows the ServiceNow Number Maintenance form for a table named 'Salesforce'. The form includes the following fields: 'Table' (Salesforce), 'Prefix' (SAL), 'Number' (1,000), 'Application' (Global), and 'Number of digits' (7). There are 'Update' and 'Delete' buttons at the top right and bottom left. Below the form, there is a 'Related Links' section with a link to 'Show Counter'.

Milestone 6: Process Flow

- Go to **All** → **Process Flow** → **New**.
- Fill in the required details and **Save**.
- Replace the **Name and Label** as given, then click **Insert and Stay**.
- Set the order of admission status as:
New → **In Progress** → **Joined** → **Rejected** → **Rejoined** → **Closed** → **Cancelled**



The screenshot shows the ServiceNow Flow Formatters interface. At the top, there's a navigation bar with 'servicenow', 'All', 'Favorites', 'History', 'Workspaces', and a 'Flow Formatters' button. Below this is a search bar and a 'New' button. The main area displays a table titled 'All > Table > u_Admission'. The table has columns: Name, Active, Condition, Description, Label, Order, and Table. The data rows are as follows:

Name	Active	Condition	Description	Label	Order	Table
New	true	u_admin_status=New^EQ		New	1	Admission [u_admission]
In Progress	true	u_admin_status=New^EQ		In Progress	2	Admission [u_admission]
Joined	true	u_admin_status=New^EQ		Joined	3	Admission [u_admission]
Rejected	true	u_admin_status=New^EQ		Rejected	4	Admission [u_admission]
Rejoined	true	u_admin_status=New^EQ		Rejoined	5	Admission [u_admission]
Closed	true	u_admin_status=New^EQ		Closed	6	Admission [u_admission]
Cancelled	true	u_admin_status=New^EQ		Cancelled	7	Admission [u_admission]

Milestone 7: Client Script.

Activity 1: Create “Auto Populate” Client Script for Admission Table.

- Go to **All** → **Client Scripts** → **New**.
- Fill in the details for the script.
- Add the provided JavaScript code to auto-fill admission details (date, grade, student name, parents' details, contact info).
- Enable Isolate Script and **Save**.
- Note: Ensure that the field names in the script match the ones created in the Admission Table.

Activity 2: Create “Pincode Update” Client Script for Admission Table.

- Go to **All** → **Client Scripts** → **New**.
- Fill in the script details.
- Add the provided JavaScript code to auto-fill Mandal, City, and District based on the entered Pincode.

- Enable Isolate Script and Save.
- Example:
 - 509358 → Kadthal, RangaReddy
 - 500081 → Karmanghat, RangaReddy
 - 500079 → Abids, Hyderabad

Activity 3 : Create “Disable Fields” Client Script for Student Progress Table.

- Go to All → Client Scripts → New.
- Fill in the script details.
- Add the provided JavaScript code to disable Total, Percentage, and Result fields so they cannot be edited manually.
- Enable Isolate Script and Save.

Activity 4 : Create “Total Update” Client Script for Student Progress Table

- Go to All → Client Scripts → New.
- Fill in the script details.
- Add the JavaScript code to calculate the Total marks automatically from subject fields (Telugu, Hindi, English, Maths, Science, Social).
- The script sets the value of Total based on the sum of all subjects.
- Enable Isolate Script and Save.

Activity 5 : Create “Result” Client Script for Student Progress Table.

- Go to All → Client Scripts → New.
- Fill in the script details.
- Add the JavaScript code to set the Result field automatically based on Percentage:
 - 0–59 → Fail
 - 60–100 → Pass
 - Outside range → show error message.
- Enable Isolate Script and Save.

Activity 6 : Create “Percentage” Client Script for Student Progress Table

- Go to All → Client Scripts → New.
- Fill in the script details.
- Add the JavaScript code to calculate Percentage from the Total marks.
 - Formula: $(\text{Total} \div 600) \times 100$.
 - Sets the value in the Percentage field automatically.

- Enable Isolate Script and Save.

Milestone 8 : Result.

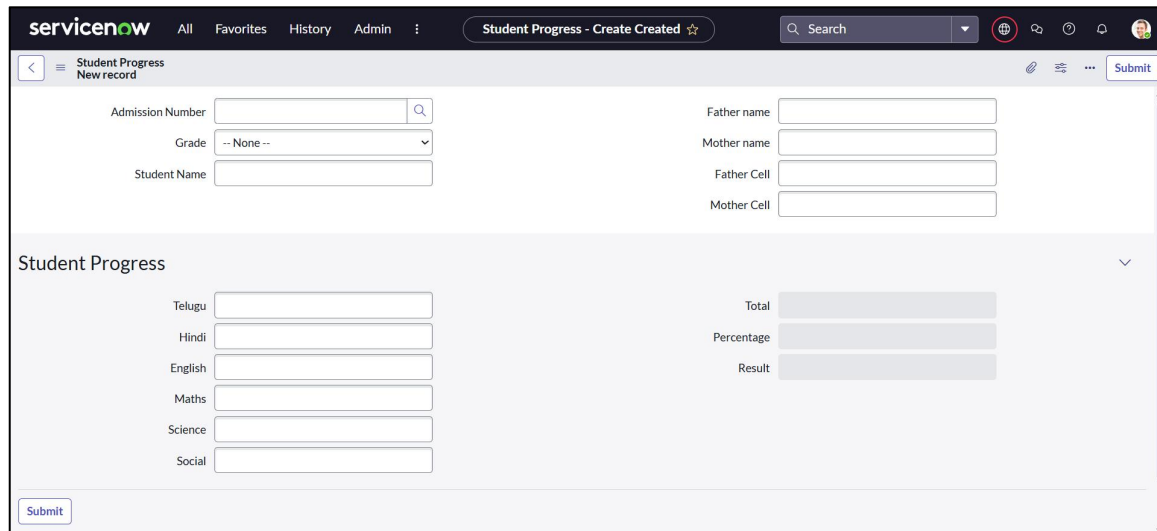
Salesforce Table :

The screenshot shows the Salesforce 'Salesforce - Create SAL0001029' form. The form is titled 'Salesforce New record' and includes a 'Submit' button. The form fields are organized into two columns. The left column contains 'Admin Number' (text input with value 'SAL0001029'), 'Admin date' (calendar icon), 'Grade' (dropdown menu with value '-- None --'), and 'Student Name' (text input). The right column contains 'Father Name' (text input), 'Mother Name' (text input), 'Father Cell' (text input), and 'Mother Cell' (text input). A 'Submit' button is located at the bottom left of the form.

Admission Table:

The screenshot shows the Salesforce 'Admission - Create SAL0001030' form. The form is titled 'Admission New record' and includes a 'Submit' button. The form is divided into two main sections: 'Admission Details' and 'School Details'. The 'Admission Details' section includes a progress bar with stages: New, In Progress, Joined, Rejected, Rejoined, Closed, and Cancelled. Below the progress bar, the form fields are organized into two columns. The left column contains 'Admission Number' (text input), 'Purpose of Join' (dropdown menu with value '-- None --'), 'Student Name' (text input), 'Father Name' (text input), 'Mother Name' (text input), and 'Comments' (text area). The right column contains 'Admin date' (calendar icon), 'Grade' (dropdown menu with value '-- None --'), 'Fee' (text input with value '\$ 0.00'), 'Father Cell' (text input), 'Mother Cell' (text input), and 'Admin status' (dropdown menu with value '-- None --'). The 'School Details' section includes a 'School' dropdown menu with value '-- None --' and a 'School Area' dropdown menu with value '-- None --'. A 'Submit' button is located at the bottom left of the form.

Student Progress :



The screenshot displays the ServiceNow interface for the 'Student Progress' form. The top navigation bar includes the ServiceNow logo, a menu icon, and links for 'All', 'Favorites', 'History', and 'Admin'. The current page title is 'Student Progress - Create Created' with a star icon. A search bar is located on the right. The form itself is titled 'Student Progress' and 'New record'. It contains several input fields: 'Admission Number' (with a search icon), 'Grade' (a dropdown menu currently showing '-- None --'), 'Student Name', 'Father name', 'Mother name', 'Father Cell', and 'Mother Cell'. Below these, there is a section titled 'Student Progress' which includes input fields for 'Telugu', 'Hindi', 'English', 'Maths', 'Science', and 'Social'. To the right of these fields are three summary fields: 'Total', 'Percentage', and 'Result'. A 'Submit' button is located at the bottom left of the form.

Conclusion :

The project **“Educational Organisation using ServiceNow”** automated the admission and student progress process. By creating custom tables, forms, workflows, and client scripts, the system reduced manual work, improved accuracy, and made data management faster. This shows how ServiceNow can be used not only for IT services but also in the education sector.