

ServiceNow Administration

Project Documentation

Team Details

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Team Size: 3

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Project Title – Educational Organization Using ServiceNow

Problem Statement

Educational institutions face challenges in managing student admissions, parent communication, and tracking academic progress. Manual systems result in delays, errors, and inefficiencies, especially in capturing, maintaining, and analyzing student data.

This project aims to provide a complete digital solution using **ServiceNow**. Our system includes modules for student admission, student progress tracking, and parental contact information through custom forms and tables, with dynamic functionalities, calculated fields, and update sets for deployment.

Implementation Workflow

1. Setting Up ServiceNow Instance

- Logged into ServiceNow Developer site
- Requested personal developer instance
- Activated the instance and opened ServiceNow studio

2. Create Local Update Set

• **Purpose:** To track all changes made during the development of the **Educational Organisation Using ServiceNow**

1. Log in to your ServiceNow instance.

2. Navigate to:

All → Update Sets → Local Update Sets

3. Click New to create a new update set.

4. Fill in the following details:

◦ Name: **Educational Organisation Using ServiceNow**

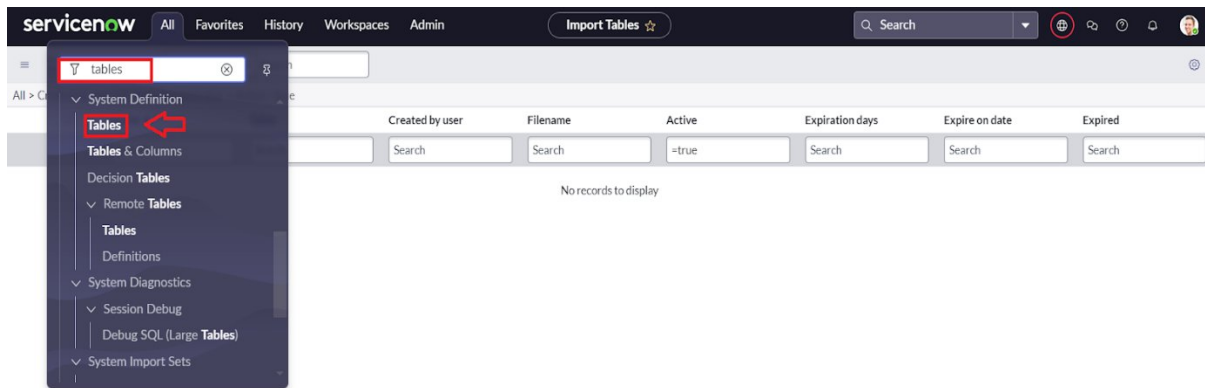
5. Click **Submit** and then click **Make Current** to activate the update set.

The screenshot shows the ServiceNow web interface for creating a new update set. The browser address bar shows a URL with parameters for the update set. The page title is 'Update Set - Create Educational Organisation 2'. The form includes the following fields: 'Name' (with a required asterisk) containing 'Educational Organisation', 'State' set to 'In progress', 'Parent' (with a search icon), 'Release date' (with a calendar icon), and 'Description' (a large text area). The 'Application' dropdown is set to 'Global'. At the bottom, there are two buttons: 'Submit' and 'Submit and Make Current'.

3. Creating Tables

✓ Creating a Salesforce Table

- All >> Tables.



➤ Click on New

Label	Name	Extends table	Extensible	Updated
Search	Search	Search	Search	Search
Adaptive Authentication Event	adaptive_auth_event	(empty)	false	2024-03-29 07:44:59
Agent Assist Recommendation	agent_assist_recommendation	Application File	false	2023-10-06 15:44:09
MID Server File	agent_file	(empty)	false	2023-10-06 15:29:08
Record Producer Configuration	aisa_rp_config	Application File	false	2023-10-06 15:47:19
Search Actions	aisa_ui_action	Application File	false	2023-10-06 15:47:19
AI Search ACL Overrides	ais_acl_overrides	Application File	false	2023-10-06 15:15:20
AI Search Active Table Ingestion Tracker	ais_active_table_ingestion_tracker	(empty)	false	2023-10-06 15:15:18

➤ Enter the Label: Salesforce >> Click on Name it will Automatically generate Api name.

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

Create columns as given below, Double Click on Column label and Enter the Column labels and click on the tick mark >> Give Type as given .

Table Salesforce

This record is in the Global application, but Educational Organisation is the current application. To edit this record click [here](#).

Admin Date	Date	(empty)	40	false
Admin Number	String	(empty)	40	javascript:getNextObjNumberPadded();
Father Cell	String	(empty)	40	false
Father Name	String	(empty)	40	false
Grade	Choice	(empty)	40	false
Mother Cell	String	(empty)	40	false
Mother Name	String	(empty)	40	false
Student Name	String	(empty)	40	false

- For “Admin Number” Give Display as True and right click on the toggle bar on top >> save.

Table Salesforce

Columns Controls Application Access

Table Columns for text Search

Dictionary Entries

Column label	Type	Reference	Max length	Display
Class	System Class Name	(empty)	80	false
Created by	String	(empty)	40	false
Created	Date/Time	(empty)	40	false
Sys ID	Sys ID (GUID)	(empty)	32	false
Updates	Integer	(empty)	40	false
Updated by	String	(empty)	40	false
Updated	Date/Time	(empty)	40	false

Save

- Analyze Access
- Show File Properties
- Move to Application...
- Show Latest Update
- Create Child Table
- Show Dictionary Record
- Configure >
- Export >
- View >
- Create Favorite
- Copy URL
- Copy sys_id
- Show XML
- History >
- Reload form

Click on controls >> Enable Extensible.

Columns Controls Application Access

Extensible ☒ Live feed ☐

Prefix SAL

Number 1,000

Number of digits 7

Create access controls ☒

* User role u_salesforce_user

- Click on “Admin Number” column, In Related Links Click on Advanced View >> Default View (Enable Use dynamic default) >> select Get Next Padded Number in Dynamic default value >> Update .

Choice List Specification Calculated Value Default Value

Use dynamic default ☒

Dynamic default value Get Next Padded Number

- Click on “Grade” Column >> Click on Choices and give Label, Value and Sequence as given below.

Dictionary Entry - Grade						
<div>Access Controls Choices (13) Attributes Labels (1) Dictionary Overrides</div>						
<div>Label Search Actions on selected rows... New</div>						
Choices						
<input type="checkbox"/>	Label	Value	Language	Sequence	Inactive	Updated
<input checked="" type="checkbox"/>	Prept	Prept	en	1	false	2024-04-02 02:10:36
<input checked="" type="checkbox"/>	Nursery	Nursery	en	2	false	2024-04-02 02:10:40
<input checked="" type="checkbox"/>	UKG	UKG	en	3	false	2024-04-02 02:10:43
<input checked="" type="checkbox"/>	I	1st	en	4	false	2024-04-02 02:12:50
<input checked="" type="checkbox"/>	II	2nd	en	5	false	2024-04-02 02:13:16
<input checked="" type="checkbox"/>	III	3rd	en	6	false	2024-04-02 02:13:23
<input checked="" type="checkbox"/>	IV	4th	en	7	false	2024-04-02 02:13:30
<input checked="" type="checkbox"/>	V	5th	en	8	false	2024-04-02 02:13:53
<input checked="" type="checkbox"/>	VI	6th	en	9	false	2024-04-02 02:14:57
<input checked="" type="checkbox"/>	VII	7th	en	10	false	2024-04-02 02:15:02
<input checked="" type="checkbox"/>	VIII	8th	en	11	false	2024-04-02 02:15:06
<input checked="" type="checkbox"/>	IX	9th	en	12	false	2024-04-02 02:15:12
<input checked="" type="checkbox"/>	X	10th	en	13	false	2024-04-02 02:15:15

- Added necessary columns like Admission Number, Student Name, Grade, etc.

✓ .Creating Admission Table

- Create an Admission Table with Columns given.
- Select Extends Table >> Salesforce and also Select Add module to menu >> Salesforce.
- Create Fields as shown

servicenow

AllFavoritesHistoryWorkspacesAdmin

Table - New Record

Search

SubmitCancel

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

This form has annotations - click ⓘ to toggle them - ([click here](#) to never show this again)

* LabelAdmission

* Nameu_admission

Extends tableSalesforce

ApplicationGlobal

Create module☒

Create mobile module☒

Add module to menuSalesforce

ColumnsControlsApplication Access

Table Columnsfor textSearch

Dictionary Entries

Column label	Type	Reference	Max length	Default value	Display

SubmitCancel

Table Admission						
Columns Controls Application Access						
Table Columns for text Search						
Dictionary Entries						
Column label	Type	Reference	Max length	Default value	Display	
Sys ID	Sys ID (GUID)	(empty)	32		false	
Admin Status	Choice	(empty)	40		false	
Admission Number	Reference	Salesforce	32		false	
Area	String	(empty)	40		false	
City	String	(empty)	40		false	
Comments	String (Full UTF-8)	(empty)	255		false	
District	String	(empty)	40		false	
Fee	Price	(empty)	20		false	
House No	String	(empty)	40		false	
Mandal	String	(empty)	40		false	
Pincode	Choice	(empty)	40		false	
Purpose of join	Choice	(empty)	40		false	
School	Choice	(empty)	40		false	
School Area	Choice	(empty)	40		false	
Class	System Class Name	(empty)	80	javascript:current.getTableName();	false	

After That:

- Create choice for Admin Status as:

Dictionary Entry

Admin Status

- Create choice for Pincode as:

Access Controls

Choices (3)

Attributes

Labels (1)

Dictionary Overrides

Label

Search

Actions on selected rows...

New

Choices

<div><div></div><div></div></div>	Label	Value	Language	Sequence	Inactive	Updated
<div><div></div><div></div></div>	509358	509358	en		1 false	2024-04-02 21:15:19
<div><div></div><div></div></div>	500079	500079	en		2 false	2024-04-02 21:15:46
<div><div></div><div></div></div>	500081	500081	en		3 false	2024-04-02 21:16:05
<div><div></div><div></div></div>	Insert a new row...					

- Create choice for Purpose of Join as:

Access Controls

Choices (3)

Attributes

Labels (1)

Dictionary Overrides

=

▼

Label

▼

Search

⊙

—

Actions on selected rows...

▼

New

Choices

□

Q

Label

Value

Language

Sequence

Inactive

Updated

Tuition

Tuition

en

1 false

2024-04-02 21:17:09

Coaching

Coaching

en

2 false

2024-04-02 21:17:31

Teacher

Teacher

en

3 false

2024-04-02 21:17:53

+

Insert a new row...

- Create choice for School as:

Access Controls

Choices (2)

Attributes

Labels (1)

Dictionary Overrides

≡

▼

Label

Search

⊗

—

Actions on selected rows...

New

Choices

🔍

Label

Value

Language

Sequence

Inactive

Updated

Stanley

Stanley

en

1

false

2024-04-02 21:19:14

Naresh It

Naresh It

en

2

false

2024-04-02 21:19:35

+

Insert a new row...

- Create choice for School Area as:

Access Controls

Choices (2)

Attributes

Labels (1)

Dictionary Overrides

Label

Search

—

Actions on selected rows...

New

Choices

<div><div></div><div></div></div>	Label	Value	Language	Sequence	Inactive	Updated
	Near Market	Near Market	en	1	false	2024-04-02 21:20:53
	Near Bus Stand	Near Bus Stand	en	2	false	2024-04-02 21:21:24
<div><div>+</div><div>Insert a new row...</div></div>						

✓ Creating Student Progress Table

- Create a Student Progress Table with Columns given.
- Select Add module to menu >> Salesforce.
- Create Fields as shown:

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

4. Form Layout

- Modified form sections for clarity
- **Configuring Table form for Student Progress Table**
- In the Student Progress Table Page, Click on Layout form .

Table student progress			
×	Telugu	String	(empty) 40
×	Total	String	(empty) 40
+	Insert a new row...		

Update Delete Delete All Records

Related Links

[Design Form](#)
[Layout Form](#)
[Layout List](#)
[Show Form](#)
[Show List](#)
[Show Schema Map](#)
[Add to Service Catalog](#)
[Run Point Scan](#)
[Explore REST API](#)

- Click on Admission Number [+].

servicenow All Favorites History Admin ServiceNow Search

Configuring Table form

Available

- Admission Number (+)
- Created
- Created by
- Updated
- Updated by
- Updates
- begin_split -
- split -
- end_split -
- * Annotation
- * Chart
- Activities (filtered)
- Contextual Search Results
- Ratings
- Attachments
- Goal relationships

Selected

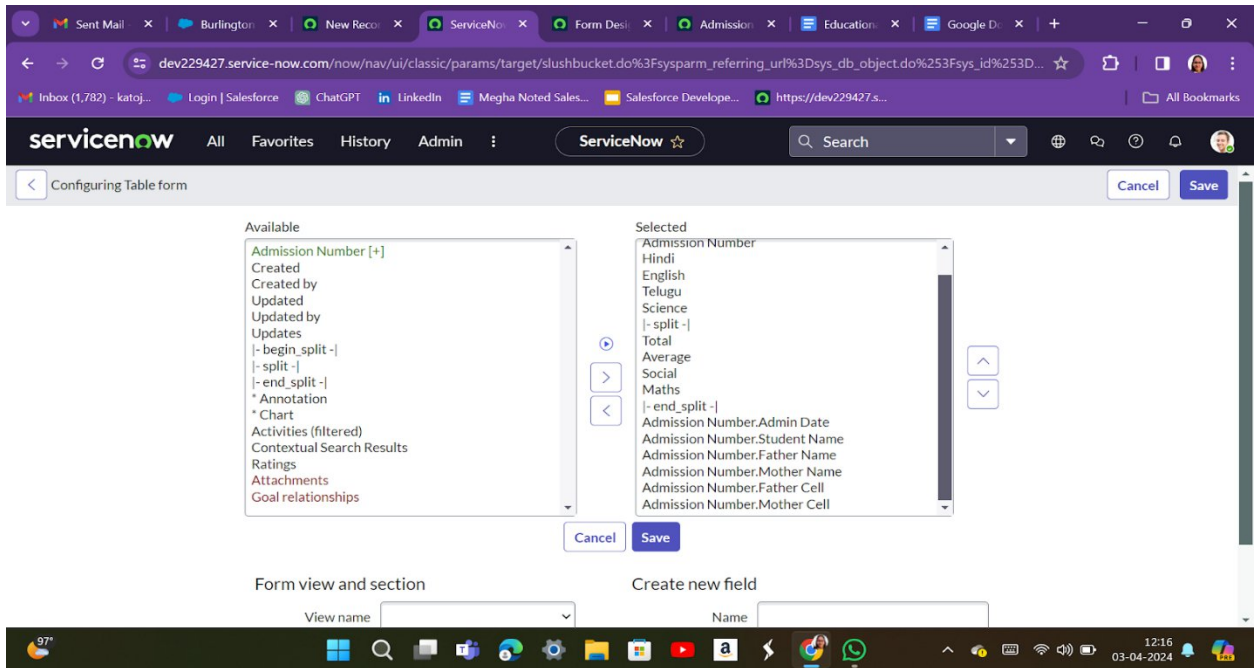
- begin_split -
- Admission Number
- Hindi
- English
- Telugu
- Science
- split -
- Total
- Average
- Social
- Maths
- end_split -

Cancel Save

Form view and section View name Default view

Create new field Name

- Select below Admission Number fields in Available side and send it to selected side as below >> save.

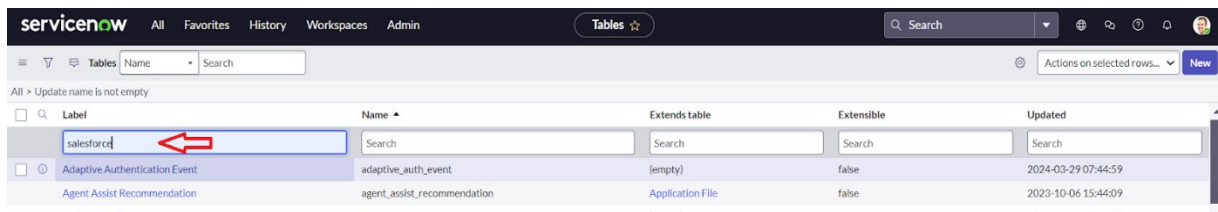


- Added tabs like **School Details** and **Address** under the Admission form

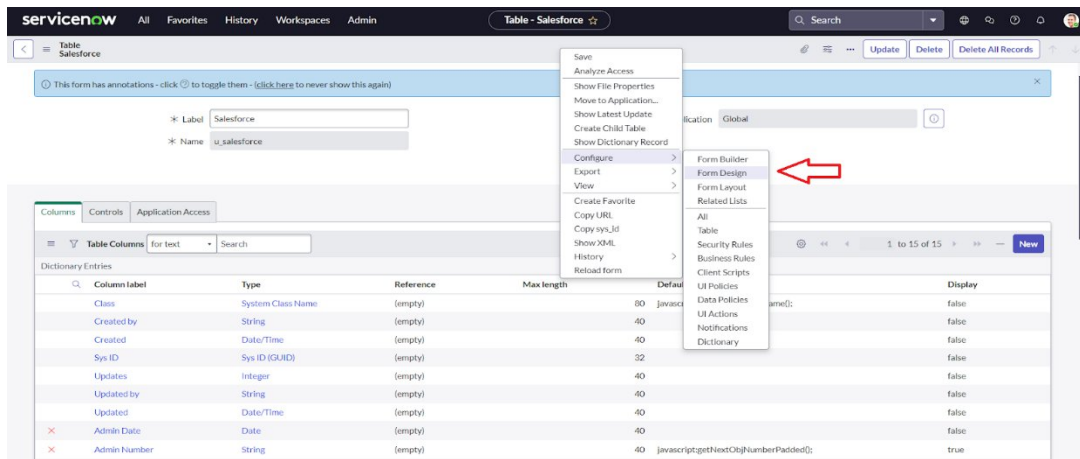
5. Form Design

Creating Form Design for Salesforce Table

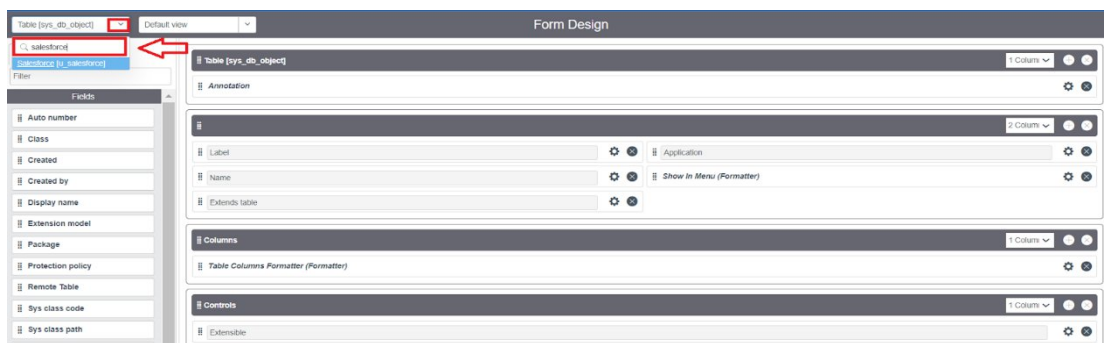
1. All >> System Definition >> Tables .
2. In Label Search for Salesforce and open .



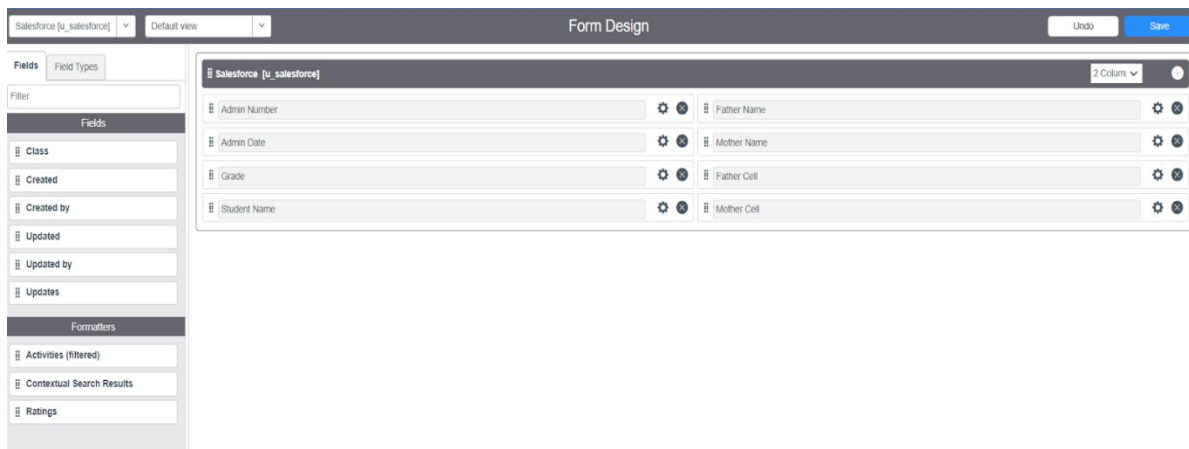
3. Right Click on top Toggle >> Configure >> Form Design.



4. In drop down select Salesforce(u_salesforce).



5. Drag and drop the fields to the left side as below.

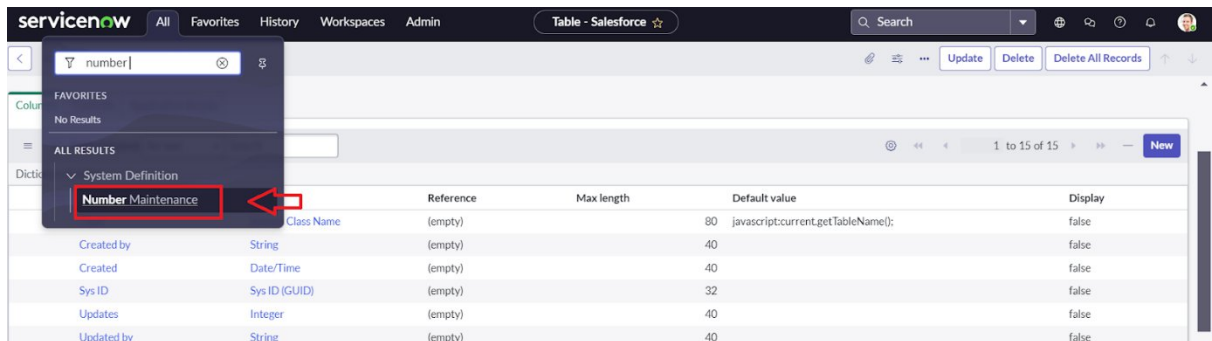


1. Save.

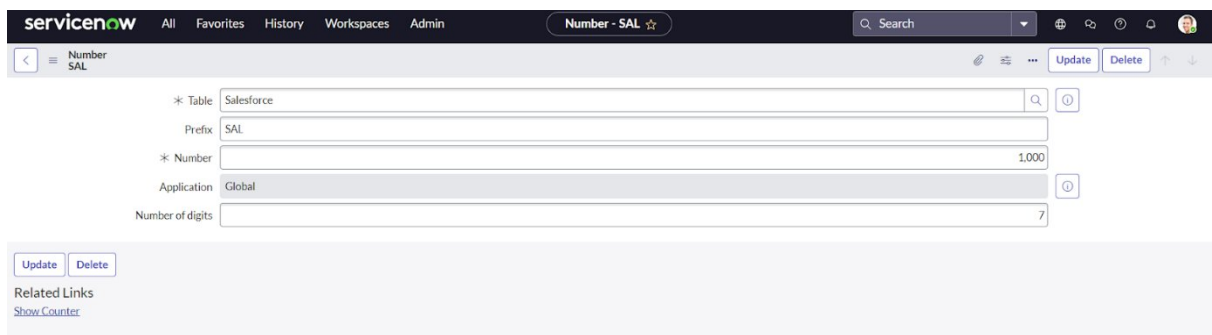
➤ **DO same for Admission Table and Student Progress Table As per our Project Requirements .You Can Organize in Form Design**

6. Number Maintenance

- **Creating Number Maintenance for Admin Number**
- All >> Number Maintenance >> New

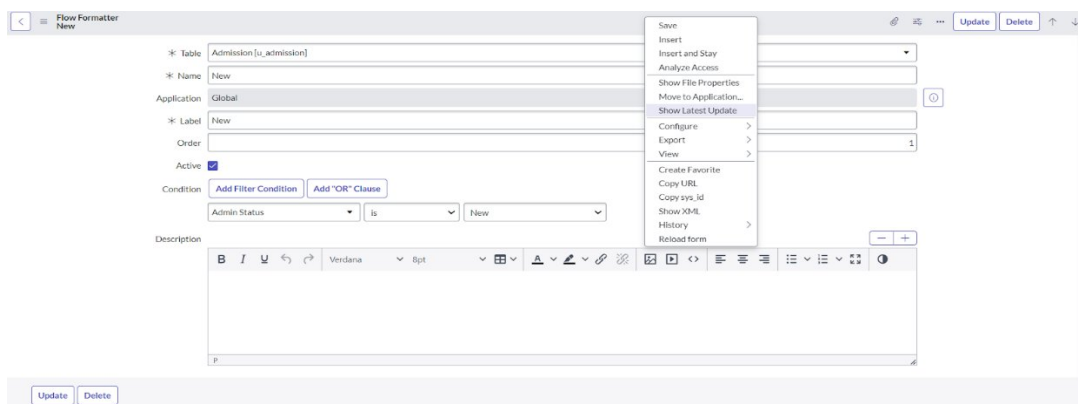


- Fill the details >> Submit.



- Configured prefix SAL and a format for sequential IDs

7. Process Flow



- Created a flow for admission status:
 - New → In Progress → Joined → Rejected → Rejoined → Closed → Cancelled
- Added business logic to transition between stages

8. Client Script:

- **Creating “Auto populate” Client Scripts for Admission Table**
- All >> Client Scripts >> New.
- Fill the Details as given.

Client Script New record

This form has annotations - click ⓘ to toggle them - (click here to never show this again)

Name: Auto populate

Table: Admission[u_admission]

UI Type: Mobile / Service Portal

Type: onChange

Field name: Admin Number

Application: Global ⓘ

Active: ☒

Inherited: ☐

Global: ☒

Description:

Messages:

Script

```

1 function onChange(control, oldValue, newValue, isLoading, isTemplate) {
2   if (isLoading || newValue === '') {
3     return;
4   }
5
6   //Type appropriate comment here, and begin script below
7
8 }

```

- Write the Code as below, Enable Isolate script and Save.

```

function onChange(control, oldValue, newValue, isLoading, isTemplate) {
  if (isLoading || newValue === '') {
    return;
  }
}

```

//Type appropriate comment here, and begin script below

```

var a = g_form.getReference('u_admission_number');
g_form.setValue('u_admin_date',a.u_admin_date);
g_form.setValue('u_grade',a.u_grade);
g_form.setValue('u_student_name',a.u_student_name);

```

```

g_form.setValue('u_father_name',a.u_father_name);
g_form.setValue('u_mother_name',a.u_mother_name);
g_form.setValue('u_father_cell',a.u_father_cell);
g_form.setValue('u_mother_cell',a.u_mother_cell);

g_form.setDisabled('u_admin_date',a.u_admin_date);
g_form.setDisabled('u_grade',a.u_grade);
g_form.setDisabled('u_student_name',a.u_student_name);
g_form.setDisabled('u_father_name',a.u_father_name);
g_form.setDisabled('u_mother_name',a.u_mother_name);
g_form.setDisabled('u_father_cell',a.u_father_cell);
g_form.setDisabled('u_mother_cell',a.u_mother_cell);
}

```

Note: Make sure the Field names should be the same as you created .

- **Creating “Pincode Update” Client Scripts for Admission Table**

Do As per the Auto Populate Instructions and dor this you have to change the js

- Write the Code as below, Enable Isolate script and Save.

```

function onChange(control, oldValue, newValue, isLoading, isTemplate) {
    if (isLoading || newValue === "") {
        return;
    }

    var a = g_form.getValue('u_pincode');
    if(a == '509358')
    {
        g_form.setValue('u_mandal', 'kadthal');
        g_form.setValue('u_city', 'kadthal');
        g_form.setValue('u_district', 'RangaReddy');

    }
}

```

```

else if(a == '500081')
{
g_form.setValue('u_mandal', 'karmanghat');
g_form.setValue('u_city', 'karmanghat');
g_form.setValue('u_district', 'RangaReddy');

}
else if(a == '500079')
{
g_form.setValue('u_mandal', 'Abids');
g_form.setValue('u_city', 'AsifNagar');
g_form.setValue('u_district', 'Hyderabad');
}

```

//Type appropriate comment here, and begin script below

```

}

```

- **Creating “Disable Fields” Client Scripts for Admission Table**

- Write the Code as below, Enable Isolate script and Save.

```

function onLoad() {
//Type appropriate comment here, and begin script below
g_form.setDisabled('u_total',true);
g_form.setDisabled('u_percentage',true);
g_form.setDisabled('u_result',true);
}

```

- **Creating “Total Update” Client Scripts for Student progress Table**
- **Creating “Result” Client Scripts for Student progress Table**
- **Creating “Percentage” Client Scripts for Student progress Table**

9. Result

Salesforce
New record

Admin Number

SAL0001078

Admin Date

Grade

--None--

Student Name

Father Name

Mother Name

Mother Cell

Father Cell

Submit

Admission

New record

New

In progress

Joined

Rejected

Rejoined

Closed

Cancelled

Admission Number

Purpose of Join

--None--

Student Name

Father Name

Mother Name

Comments

Admin Date

Grade

--None--

Fee

\$

0.00

Father Cell

Mother Cell

Admin Status

--None--

School Details

Address

School Area

--None--

School

--None--

Submit

New Section

New record

Admission Number

Grade

--None--

Student Name

Father Name

Mother Name

Father Cell

Mother Cell

Student Progress

Telugu

Hindi

English

Maths

Science

Social

Total

Percentage

Result

Submit

Conclusion

The Student Management System developed on ServiceNow digitizes the key workflows in an educational organization. It simplifies the admission process, ensures accurate student records, and automates progress tracking.