

SMARTINTERNZ NAAN MUDHALVAN PROJECT

Project Title: Educational Organisation Using ServiceNow

Team ID : NM2025TMID20147

Team Size : 4

Team Leader : RAGAVENDRA D

Team member : SANTHOSH KUMAR S

Team member : GOKUL PRAKASH S

Team member : GOPINATH B

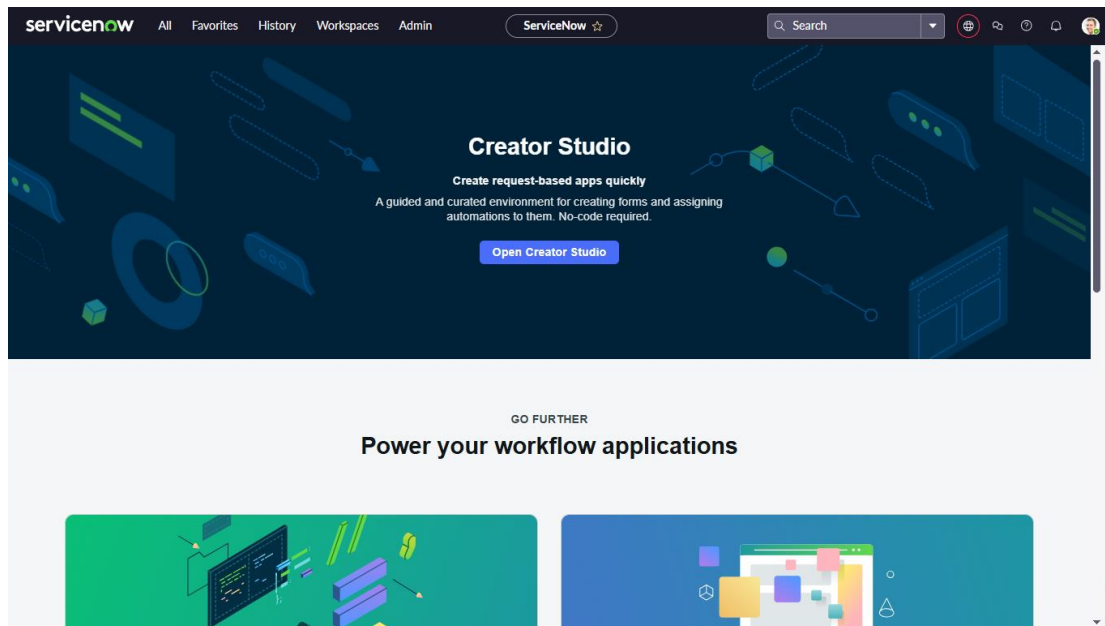
Problem Statement: Educational Organisation Using ServiceNow

Category: ServiceNow System Administrator

TASK INSTRUCTION WITH OUTPUT:

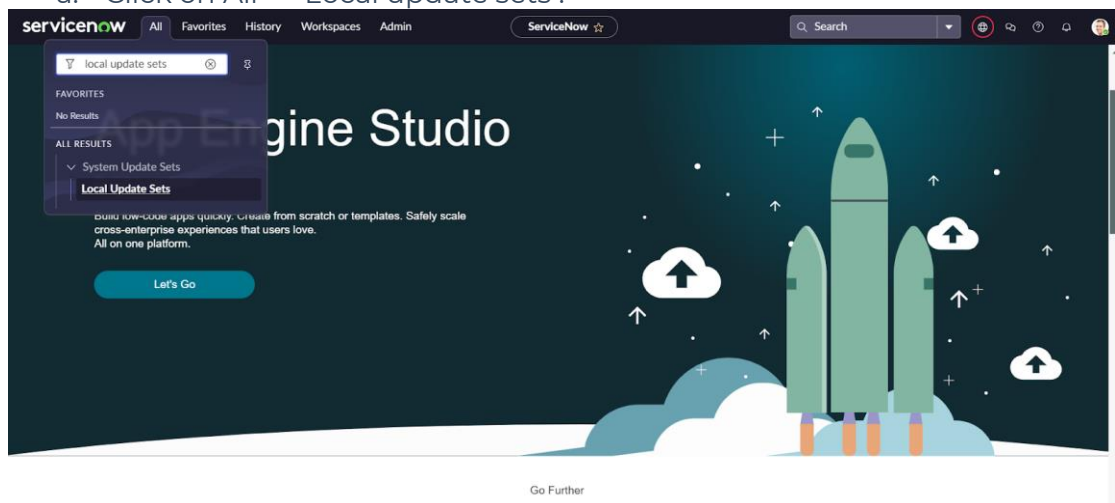
1-Setting up ServiceNow Instance

1. Sign up on the [ServiceNow Developer site](#) and log in.
2. Go to **Personal Developer Instance**.
3. Click **Request Instance** and fill in the details.
4. Check your email for instance credentials.
5. Log in to your new ServiceNow instance.



6. Creating a Update Set

a. Click on All >> Local update sets .



7.

a. Click on new

8.

Name	Application	State	Installed from	Created	Created by	Parent	Batch Base
Default	App Engine Studio	In progress		2024-04-03 04:32:28	admin	(empty)	(empty)
Default	Global	In progress		2023-10-06 15:26:30	system	(empty)	(empty)

9.

10.

11.

12. 3.Enter the Details Name: Educational Organisation >> Click on Submit and make Current.

13.

The screenshot shows the 'Update Set - Create New Update Set' form in ServiceNow. The form has a header with 'servicenow' and navigation tabs: 'All', 'Favorites', 'History', 'Workspaces'. The main form area contains the following fields:

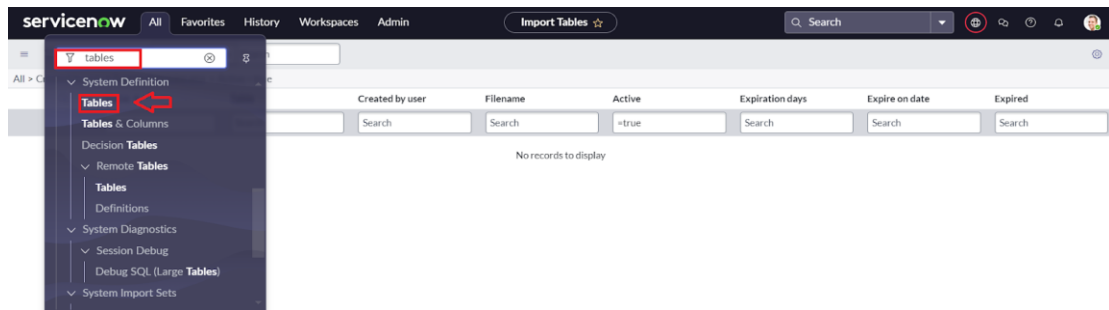
- Name:** A text input field containing 'New Update Set'.
- State:** A dropdown menu currently set to 'In progress'.
- Parent:** A text input field with a search icon.
- Release date:** A date picker icon.
- Description:** A large text area.

 At the bottom of the form, there are two buttons: 'Submit' and 'Submit and Make Current'.

3- Creating a Table

Creating Salesforce Table.

- All >> Tables.



- Click on new

The screenshot shows the 'Tables' page in ServiceNow. A 'New' button is highlighted in the top right corner. The table below lists various system tables with the following columns: 'Label', 'Name', 'Extends table', 'Extensible', and 'Updated'.

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(Anything you want): Salesforce >> Click on Name it will

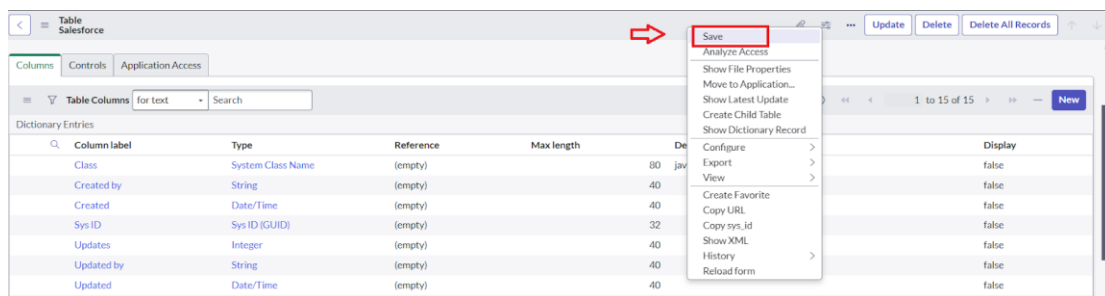
Automatically generate Api name.

- 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 .

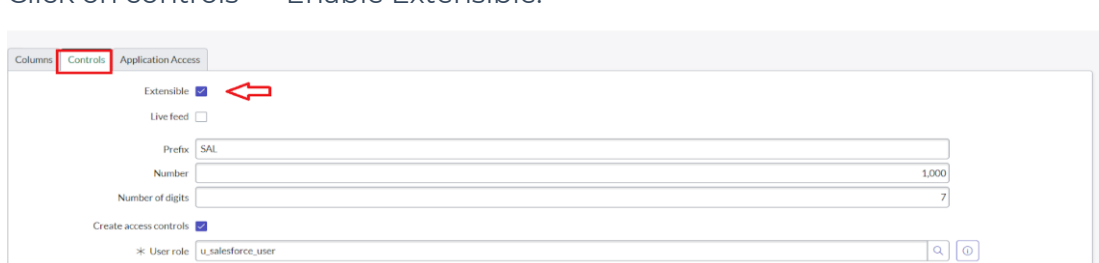
X

Column label	Type	Reference	Max length
Admin Date	Date	(empty)	40
Admin Number	String	(empty)	40
Father Cell	String	(empty)	40
Father Name	String	(empty)	40
Grade	Choice	(empty)	40
Mother Cell	String	(empty)	40
Mother Name	String	(empty)	40
Student Name	String	(empty)	40

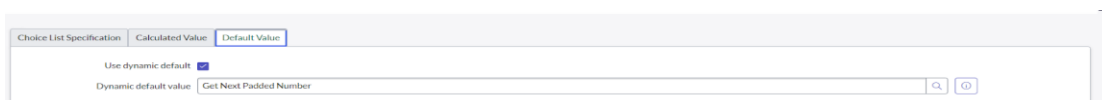
- For “Admin Number” Give Display as True and right click on the toggle bar on top
>> save.



- Click on controls >> Enable Extensible.



- 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 .



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

servicenow						
Dictionary Entry - Grade						
Access Controls Choices (13) Attributes Labels (1) Dictionary Overrides						
Label Search						
Label	Value	Language	Sequence	Inactive	Updated	
Prept	Prept	en	1	false	2024-04-02 02:10:36	
Nursery	Nursery	en	2	false	2024-04-02 02:10:40	
UKG	UKG	en	3	false	2024-04-02 02:10:43	
I	1st	en	4	false	2024-04-02 02:12:50	
II	2nd	en	5	false	2024-04-02 02:13:16	
III	3rd	en	6	false	2024-04-02 02:13:23	
IV	4th	en	7	false	2024-04-02 02:13:30	
V	5th	en	8	false	2024-04-02 02:13:53	
VI	6th	en	9	false	2024-04-02 02:14:57	
VII	7th	en	10	false	2024-04-02 02:15:02	
VIII	8th	en	11	false	2024-04-02 02:15:06	
IX	9th	en	12	false	2024-04-02 02:15:12	
X	10th	en	13	false	2024-04-02 02:15:15	

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

The screenshot shows the ServiceNow 'Table - New Record' form. The 'Extends table' is set to 'Salesforce' and 'Add module to menu' is set to 'Salesforce'. Below the form, the 'Table Columns' section is visible, showing a list of columns for the 'Admission' table.

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

- Create choice for Admin Status as:

The screenshot shows the 'Dictionary Entry Admin Status' interface. At the top, there are tabs for 'Access Controls', 'Choices (7)', 'Attributes', 'Labels (1)', and 'Dictionary Overrides'. The 'Choices (7)' tab is active. Below the tabs, there is a search bar and a table of choices. The table has columns: Label, Value, Language, Sequence, Inactive, and Updated. The data is as follows:

Label	Value	Language	Sequence	Inactive	Updated
New	New	en	1	false	2024-04-02 21:10:25
Join in progress	In progress	en	2	false	2024-04-02 21:11:03
Joined	Joined	en	3	false	2024-04-02 21:11:26
Rejected	Rejected	en	4	false	2024-04-02 21:12:00
Closed	Closed	en	5	false	2024-04-02 21:13:05
Rejoined	Rejoined	en	6	false	2024-04-02 21:13:08
Cancelled	Cancelled	en	7	false	2024-04-02 21:13:27

- Create choice for Pincode as:

The screenshot shows the 'Dictionary Entry Pincode' interface. At the top, there are tabs for 'Access Controls', 'Choices (3)', 'Attributes', 'Labels (1)', and 'Dictionary Overrides'. The 'Choices (3)' tab is active. Below the tabs, there is a search bar and a table of choices. The table has columns: Label, Value, Language, Sequence, Inactive, and Updated. The data is as follows:

Label	Value	Language	Sequence	Inactive	Updated
509258	509258	en	1	false	2024-04-02 21:15:19
500079	500079	en	2	false	2024-04-02 21:15:46
500081	500081	en	3	false	2024-04-02 21:16:05

- Create choice for Purpose of Join as:

The screenshot shows the 'Dictionary Entry Purpose of Join' interface. At the top, there are tabs for 'Access Controls', 'Choices (3)', 'Attributes', 'Labels (1)', and 'Dictionary Overrides'. The 'Choices (3)' tab is active. Below the tabs, there is a search bar and a table of choices. The table has columns: Label, Value, Language, Sequence, Inactive, and Updated. The data is as follows:

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

- Create choice for School as:

The screenshot shows the 'Dictionary Entry School' interface. At the top, there are tabs for 'Access Controls', 'Choices (2)', 'Attributes', 'Labels (1)', and 'Dictionary Overrides'. The 'Choices (2)' tab is active. Below the tabs, there is a search bar and a table of choices. The table has columns: Label, Value, Language, Sequence, Inactive, and Updated. The data is as follows:

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

- Create choice for School Area as:

The screenshot shows the 'Dictionary Entry School Area' interface. At the top, there are tabs for 'Access Controls', 'Choices (2)', 'Attributes', 'Labels (1)', and 'Dictionary Overrides'. The 'Choices (2)' tab is active. Below the tabs, there is a search bar and a table of choices. The table has columns: Label, Value, Language, Sequence, Inactive, and Updated. The data is as follows:

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

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...				

Form Layout

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 [+].

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

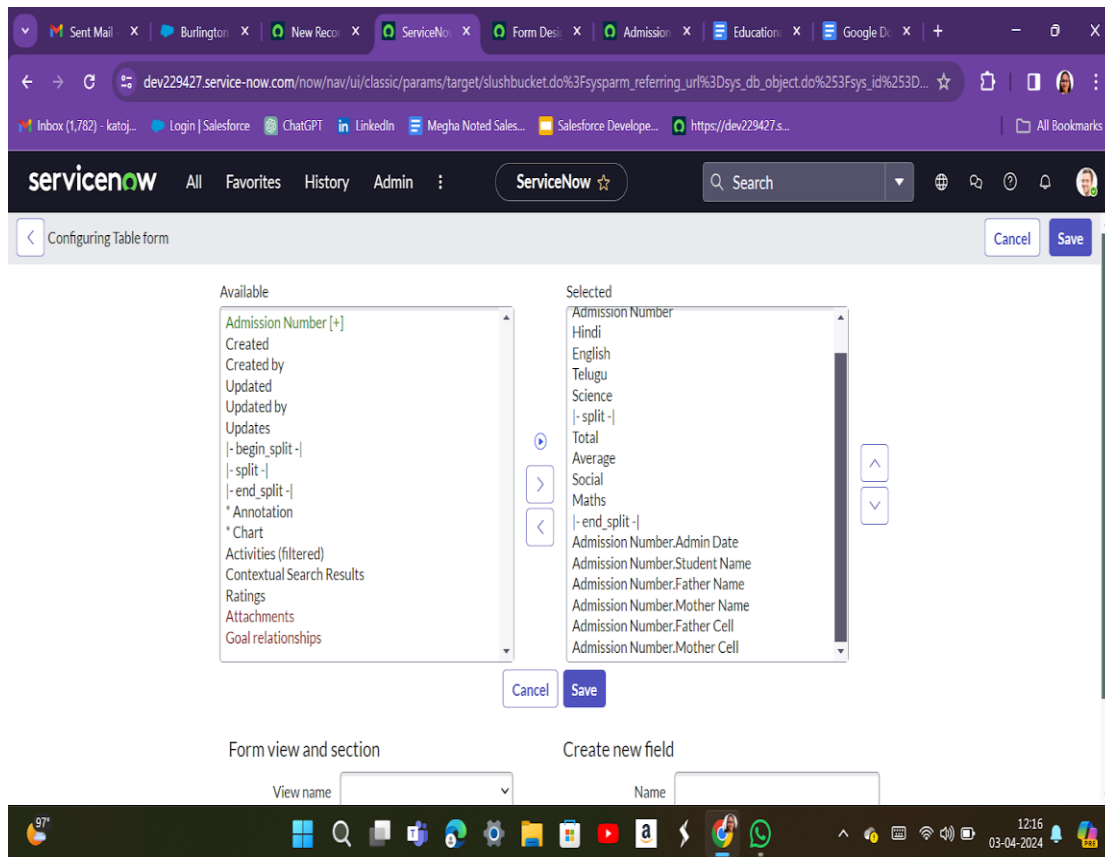
- [- begin_split -]
- Admission Number
- Hindi
- English
- Telugu
- Science
- [- split -]
- Total
- Average
- Social
- Maths
- [- end_split -]

Cancel Save

Form view and section View name Default view

Create new field Name

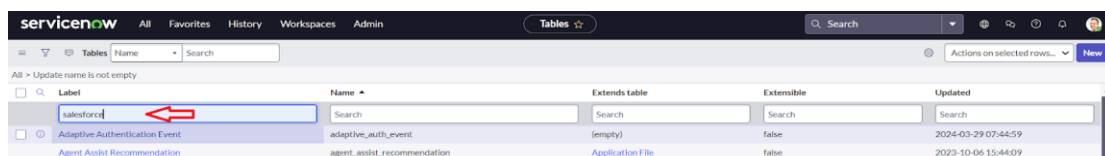
- Select below Admission Number fields in Available side and send it to selected side as below >> save.



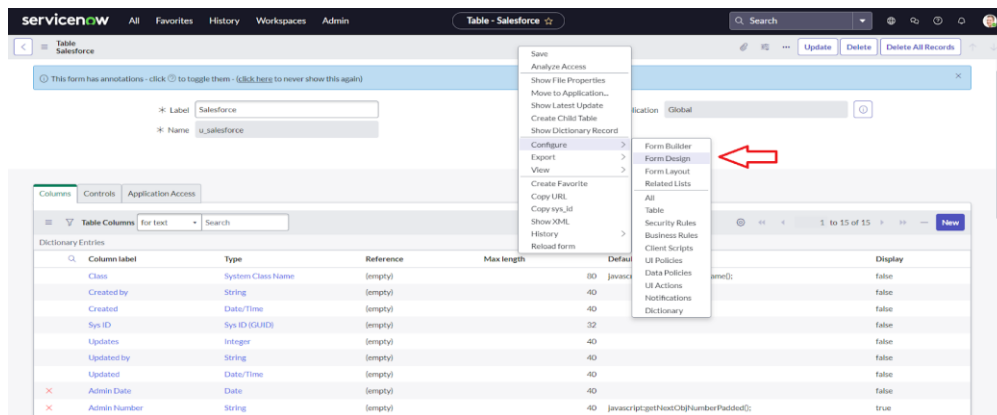
Form Design

Creating Form Design for Salesforce Table

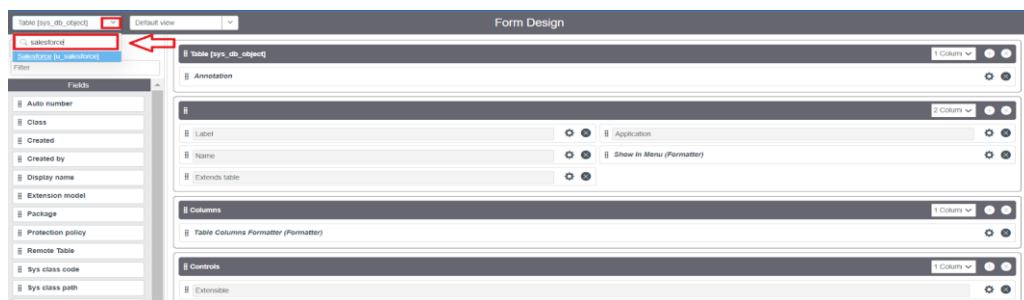
1. All >> System Definition >> Tables .
2. In Label Search for Salesforce and open .



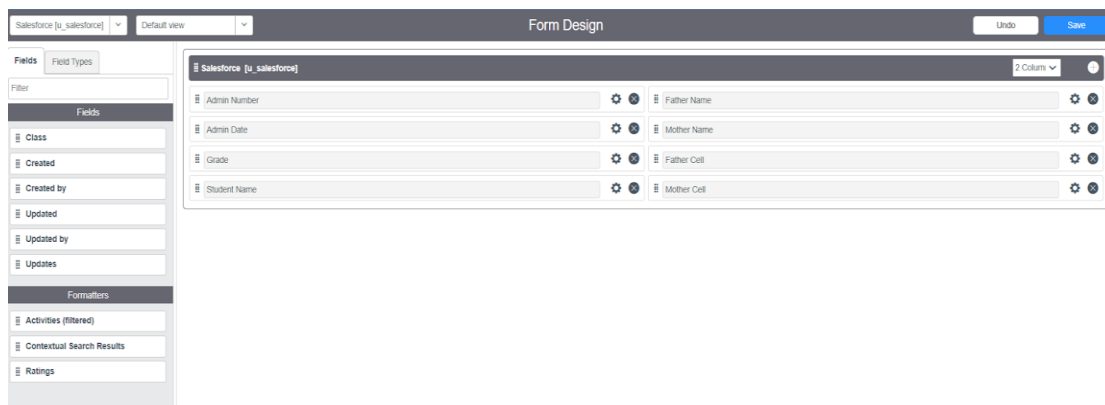
3. Right Click on top Toggle >> Configure >> Form Design.



4. In drop down select Salesforce(u_salesforce).



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



6. Save.

Creating Form Design for Admission Table

Follow the same steps as Activity1,Configure the fields as below and
Save.

The screenshot shows the 'Form Design' interface for the 'Admission (u_admission)' form. The sidebar on the left contains a 'Fields' section with a list of fields including 'Admission Number', 'Class', 'Created', 'Created by', 'Updated', 'Updated by', 'Updated', 'Updated by', and 'Updated'. Below this is a 'Formatters' section with a list of formatters including 'Activities (Thread)', 'Contextual Search Results', and 'Ratings'. The main area displays the form layout, which includes sections for 'Admission (u_admission)', 'Process Flow (Formater)', 'Admission Details', 'Comments', 'School Details', and 'Address'. Each section contains various fields with dropdown menus for selection and a 'Save' button.

Creating Form Design for Student progress

Table

Follow the same steps as Activity1,Configure the fields as below and
Save.

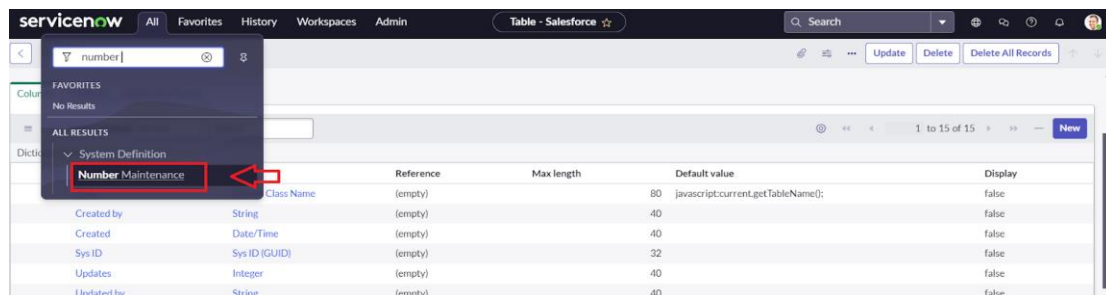
The screenshot shows the 'Form Design' interface for the 'Student Progress (u_student)' form. The sidebar on the left contains a 'Fields' section with a list of fields including 'Class', 'Created', 'Created by', 'Social', 'Updated', 'Updated by', 'Updated', 'Updated by', and 'Updated'. Below this is a 'Formatters' section with a list of formatters including 'Activities (Thread)', 'Contextual Search Results', and 'Ratings'. The main area displays the form layout, which includes sections for 'New Section', 'Student Progress', and 'Student Progress'. Each section contains various fields with dropdown menus for selection and a 'Save' button.

Number Maintenance

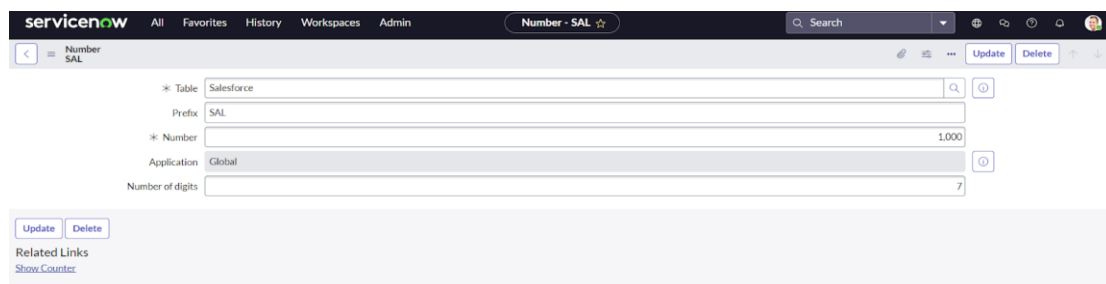
Creating Number Maintenance for Admin

Number

- All >> Number Maintenance >> New



- Fill the details >> Submit.



Process Flow

Creating Process Flow for Admission Table

- All >> Process Flow>> New.
- Fill the Details as given Below

Flow Formatter New

* Table: Admission [u_admission]

* Name: New

Application: Global

* Label: New

Order:

Active: ☒

Condition: Add Filter Condition Add "OR" Clause

Admin Status is New

Description:

Update Delete

- Right Click on toggle and click on the save .
- Replace the Name and Label as below and click on Insert on stay.

Flow Formatter In progress

* Table: Admission [u_admission]

* Name: In progress

Application: Global

* Label: In progress

Order:

Active: ☒

Condition: Add Filter Condition Add "OR" Clause

Admin Status is Join in progress

Description:

Update Delete

- Replace the Name and Label in order and click on Insert on stay.

Joined >> Rejected >> Rejoined >> Closed >> Cancelled.

- Order should be New >> InProgress >> Joined >> Rejected >> Rejoined >> Closed >> Cancelled.

Client Script

Creating “Auto populate” Client Scripts for Admission Table

- All >> Client Scripts >> New.
- Fill the Details as given.

- 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);

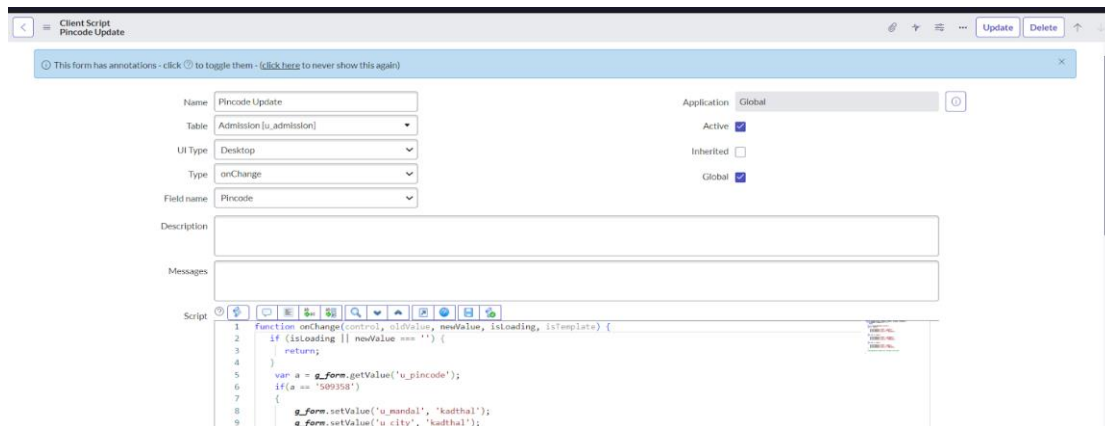
g_form.setDisabled('u_mother_cell',a.u_mother_cell);

}
```

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

Creating “Pincode Update” Client Scripts for Admission Table

- Fill the Details as given.



- 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 Student progress Table

- Fill the Details as given.

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

Name: Disable Fields

Table: Student Progress [u_student_progress]

UI Type: All

Type: onLoad

Application: Global ⓘ

Active: ☒

Inherited: ☐

Global: ☒

Description:

Messages:

Script

```

1 function onLoad() {
2   //Type appropriate comment here, and begin script below
3   g_form.setDisabled('u_total',true);
4   g_form.setDisabled('u_percentage',true);
5   g_form.setDisabled('u_result',true);
6 }

```

- 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);

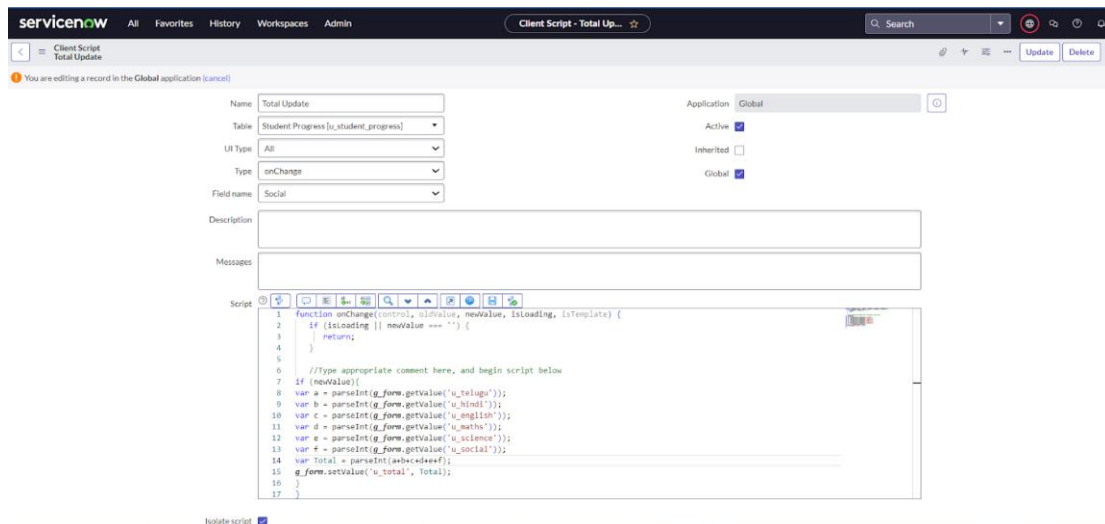
    g_form.setDisabled('u_result',true);

}

```

Creating “Total Update” Client Scripts for Student progress Table

- Fill the Details as given.



- 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

```

```

    if (newValue){

```

```

        var a = parseInt(g_form.getValue('u_telugu'));

```

```

        var b = parseInt(g_form.getValue('u_hindi'));

```

```

        var c = parseInt(g_form.getValue('u_english'));

```

```

        var d = parseInt(g_form.getValue('u_maths'));

```

```

        var e = parseInt(g_form.getValue('u_science'));

```

```

        var f = parseInt(g_form.getValue('u_social'));

```

```

var Total = parseInt(a+b+c+d+e+f);

g_form.setValue('u_total', Total);

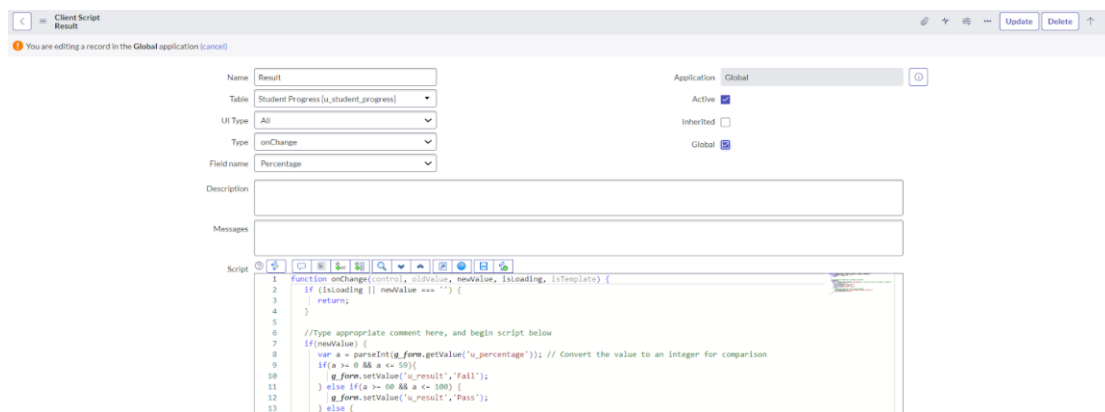
}

}

```

Creating “Result” Client Scripts for Student progress Table

- Fill the Details as given.



- 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

    if(newValue) {

        var a = parseInt(g_form.getValue('u_percentage')); // Convert the
value to an integer for comparison

        if(a >= 0 && a <= 59){

            g_form.setValue('u_result','Fail');

        } else if(a >= 60 && a <= 100) {

            g_form.setValue('u_result','Pass');

        } else {

            // Handle the case if a is out of range (optional)

            g_form.addErrorMessage('Percentage should be between 0 and
100.');
```



```
            g_form.clearValue('u_result');

        }

    }

}
```

Creating “Percentage” Client Scripts for Student progress Table

- Fill the Details as given.

The screenshot shows the 'Client Script' editor for the 'Percentage' field. The form includes the following fields and values:

- Name: Percentage
- Table: Student Progress [u_student_progress]
- UI Type: All
- Type: onChange
- Field name: Total
- Application: Global
- Active: ☒
- Inherited: ☐
- Global: ☒

The Description and Messages fields are empty. The Script field contains the following code:

```
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     var total = g_form.getValue('u_total');  
8     var Percentage = (total/100)*100;  
9     g_form.setValue('u_percentage', Percentage+'%');  
10 }
```

The 'Isolate script' checkbox is checked.

- 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 Total = g_form.getValue('u_total');
```

```

var Percentage = (Total/600)*100;

g_form.setValue('u_percentage',Percentage+'%');

}

```

Result

Substance

New record

Submit

Admission Number

SAL0001078

Admission Date

Grade

--None--

Student Name

Father Name

Mother Name

Mother Cell

Father Cell

Submit

Admission

New record

Submit

New

In progress

Joined

Rejected

Rejoined

Closed

Cancelled

Admission Number

Purpose of join

--None--

Student Name

Father Name

Mother Name

Comments

Admission Date

Grade

--None--

Fee

\$ + 0.00

Father Cell

Mother Cell

Admission Status

--None--

School Details

Address

School Area

--None--

School

--None--

Submit

New Section

New record

Submit

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 project “*Educational Organisation using ServiceNow*” demonstrates how the platform can be customized to manage and track household expenses efficiently by creating tables for family members and expenses, establishing relationships, and applying queries. It shows the flexibility of ServiceNow in addressing real-life scenarios beyond IT services, while also improving skills in table creation, form design, and data management. This project provides a simple yet effective solution for maintaining expense records and lays the foundation for further enhancements like reports and dashboards for better financial planning.