

Educational Organisation Using Servicenow

Objective: To develop a ServiceNow solution that streamlines student services, automates administrative workflows, and provides dashboards for academic and operational insights.

Skills: ServiceNow app development, Flow Designer, reporting & dashboards, JavaScript, database design, and workflow automation.

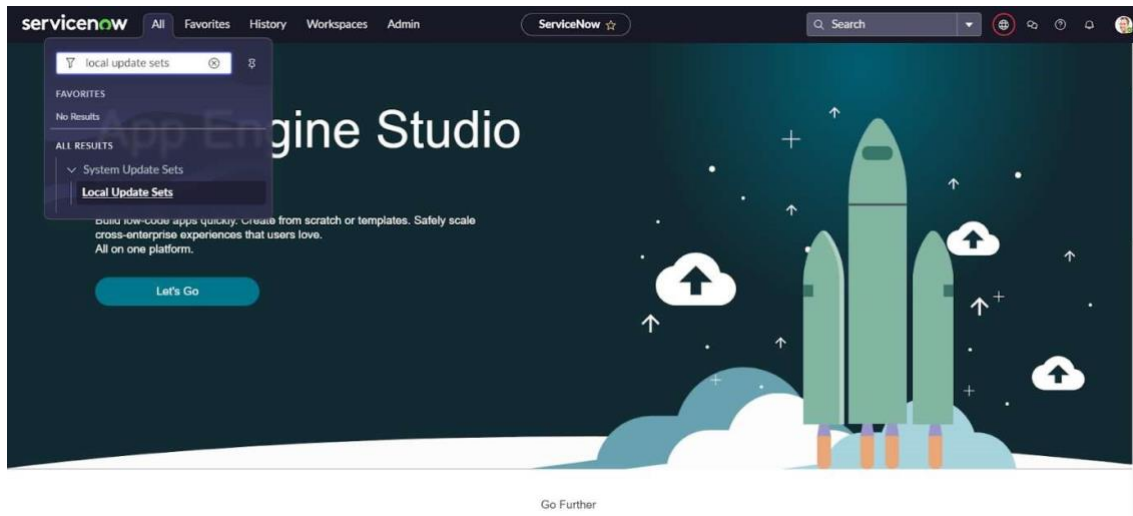
TASK INITIATION

Milestone 1 :Users

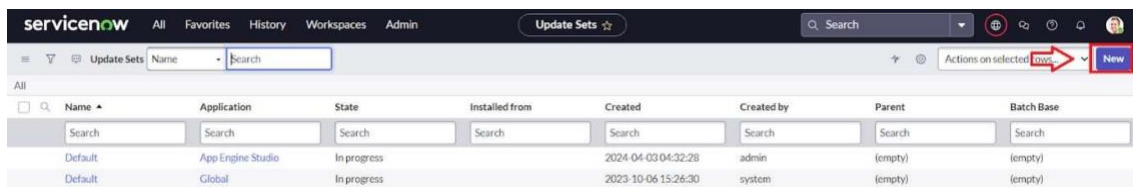
Activity 1: Create Users

Creating a Update Set

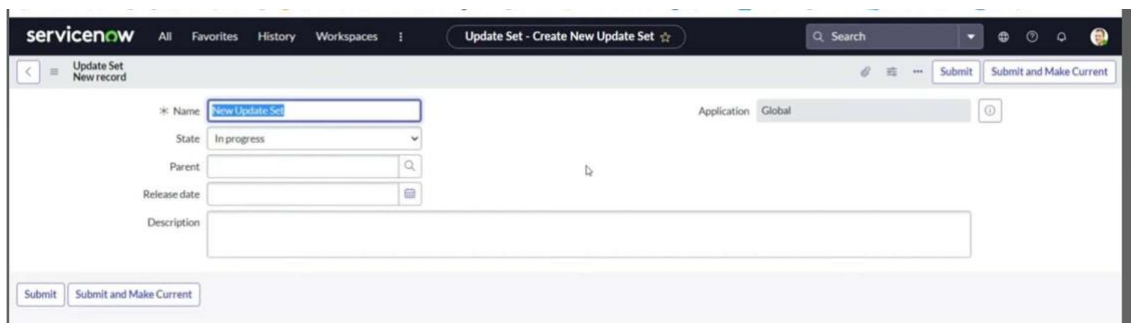
1. Click on All >> Local update sets .



2. Click on new

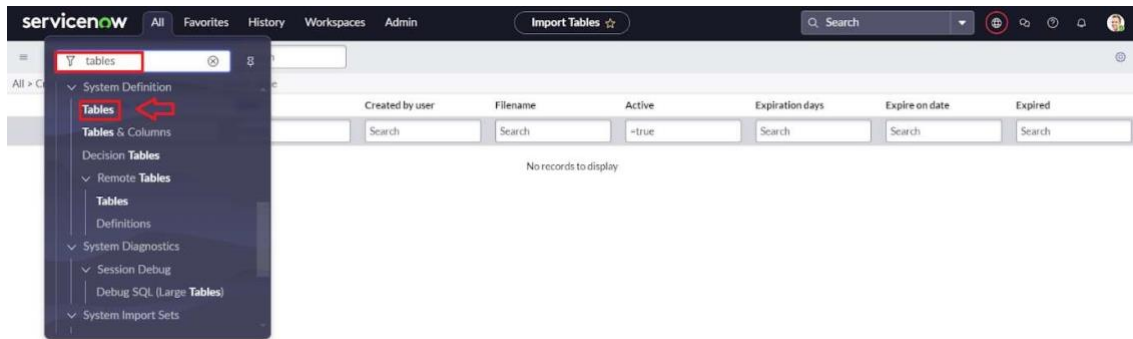


3. Enter the Details Name: Educational Organisation >> Click on Submit and make Current.

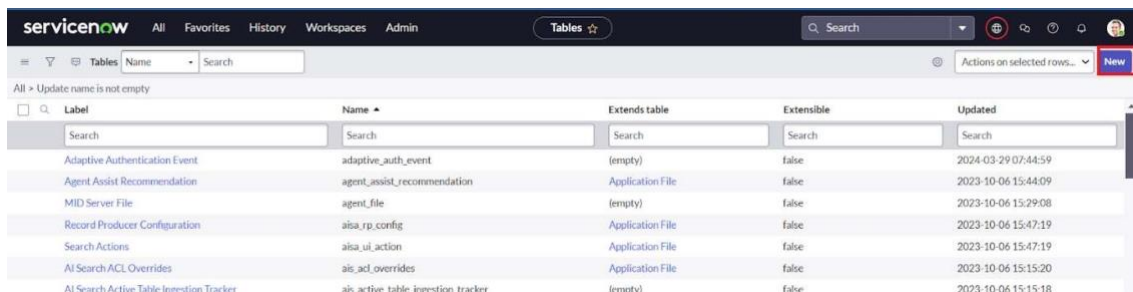


Creating Salesforce Table.

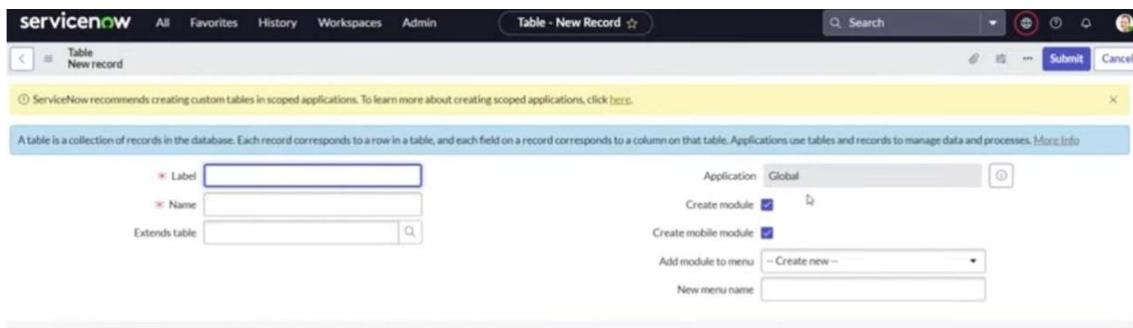
- All >> Tables.



- Click on new



- 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 .

servicenow All Favorites History Workspaces Admin **Table - New Record** ☆

< Table New record

① This form has annotations - click ⓘ to toggle them - ([click here](#) to never show this again)

* Label

* Name

Extends table 🔍

Crez

Ad

Columns * Controls Application Access

Table Columns for text Search

Dictionary Entries

	Column label	Type	Reference	Max length
+	<input type="text"/>	🟢 🟡 🟠 📄		

Submit Cancel

X

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:getNextObj(NumberPadded);
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

1 to 15 of 15 New

- Click on controls >> Enable Extensible.



Columns **Controls** Application Access

Extensible ☒ 

Live feed ☐

Prefix

Number

Number of digits

Create access controls ☒

* User role

- 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 .

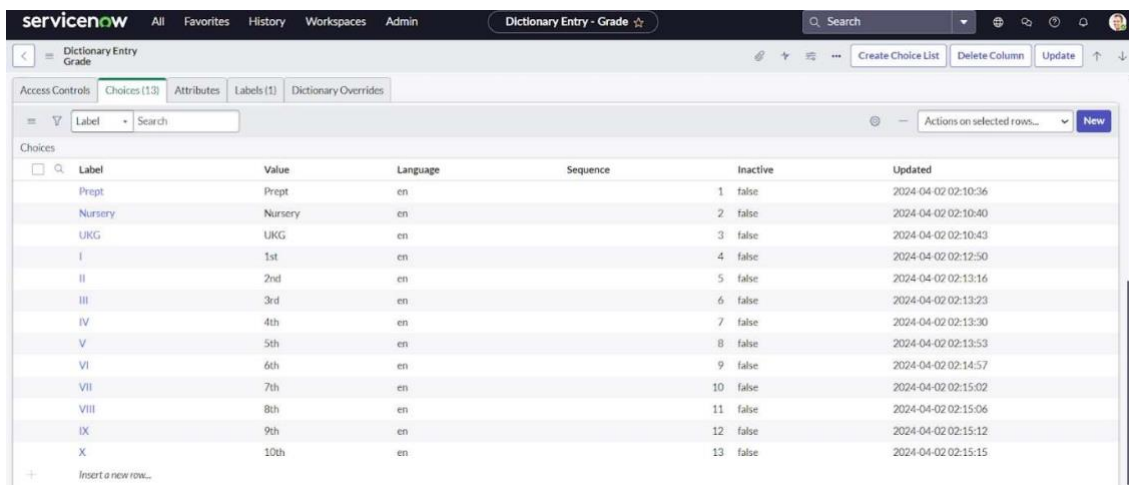


Choice List Specification Calculated Value **Default Value**

Use dynamic default ☒

Dynamic default value

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



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
URKG	URKG	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

servicenow All Favorites History Workspaces Admin Table - New Record

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](#)

* Label Admission
 * Name u_admission
 Extends table Salesforce

Application Global
 Create module ☒
 Create mobile module ☒
 Add module to menu Salesforce

Columns Controls Application Access

Table Columns for text Search

Dictionary Entries

Column label	Type	Reference	Max length	Default value	Display

Submit Cancel

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 (\$JRID)	{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.getTabletName();	false

- Create choice for Admin Status as:

Dictionary Entry Admin Status

Create Choice List Delete Column Update

Related Links

Show Table
 Run Point Scan
 Advanced view

Access Controls Choices (7) Attributes Labels (1) Dictionary Overrides

Label Search

Actions on selected rows... New

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

Insert a new row...

- Create choice for Pincode as:

Access Controls

Choices (3)

Attributes

Labels (1)

Dictionary Overrides

Label

Search

Actions on selected rows...

New

Choices

	Label	Value	Language	Sequence	Inactive	Updated
<input type="checkbox"/>	509350	509350	en		1 false	2024-04-02 21:15:19
<input type="checkbox"/>	500079	500079	en		2 false	2024-04-02 21:15:46
<input type="checkbox"/>	500081	500081	en		3 false	2024-04-02 21:16:05
<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

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

Insert a new row...

Creating Student Progress Table

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

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

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

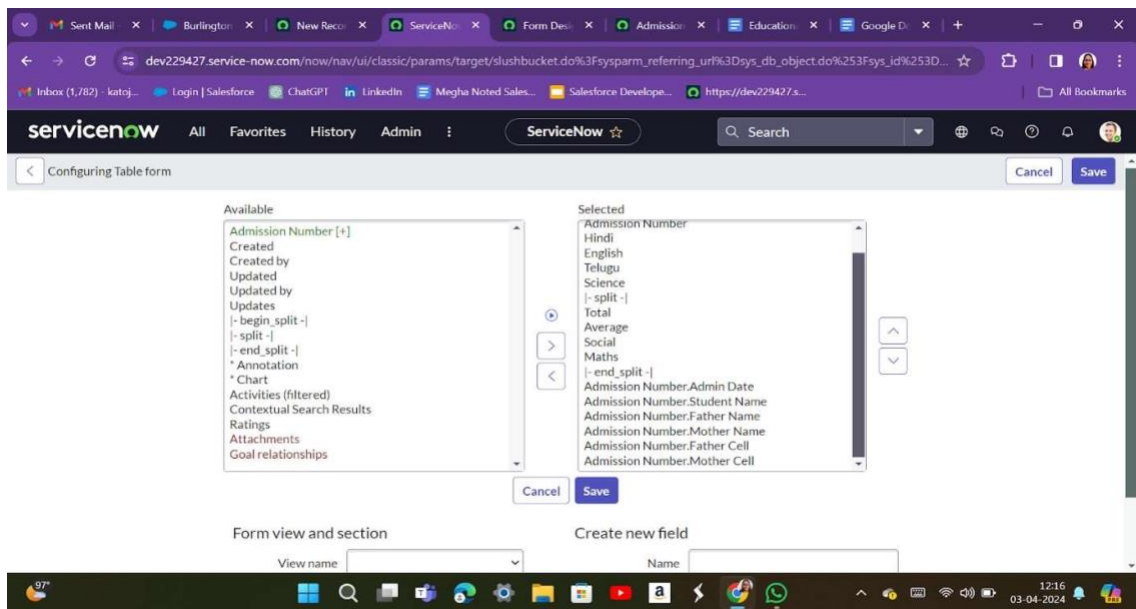
Form view and section

View name: Default view

Create new field

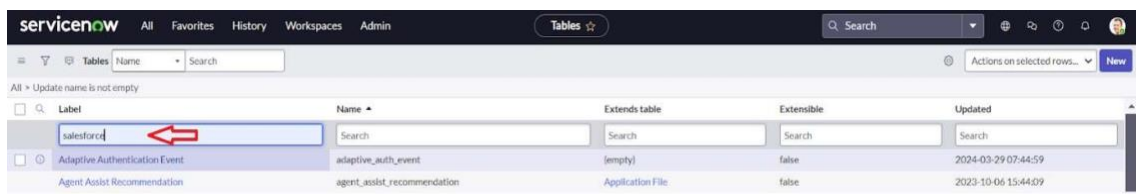
Name:

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

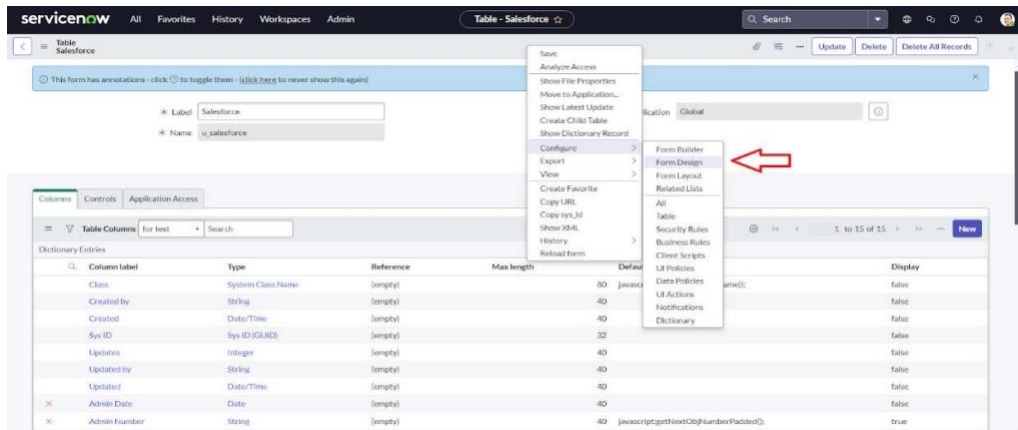


Creating Form Design for Salesforce Table

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' table. The left sidebar contains a 'Fields' list with categories: Fields, Field Types, and Filters. The main area displays the form structure with sections: 'Admission (Form)', 'Process Flow (Form)', 'School Details', and 'Address'. Each section contains a list of fields with their respective data types and validation rules.

Section	Field Name	Field Type	Validation
Admission (Form)	Admission Number	Text	Required
	Created	Text	Required
	Created by	Text	Required
	Updated	Text	Required
	Updated by	Text	Required
	Updates	Text	Required
Process Flow (Form)	Admission Date	Text	Required
	Class	Text	Required
	Fee	Text	Required
	Admission Status	Text	Required
School Details	School Name	Text	Required
	School	Text	Required
Address	Phone	Text	Required
	Mobile	Text	Required
	Area	Text	Required
	City	Text	Required

Creating Form Design for Student progress Table

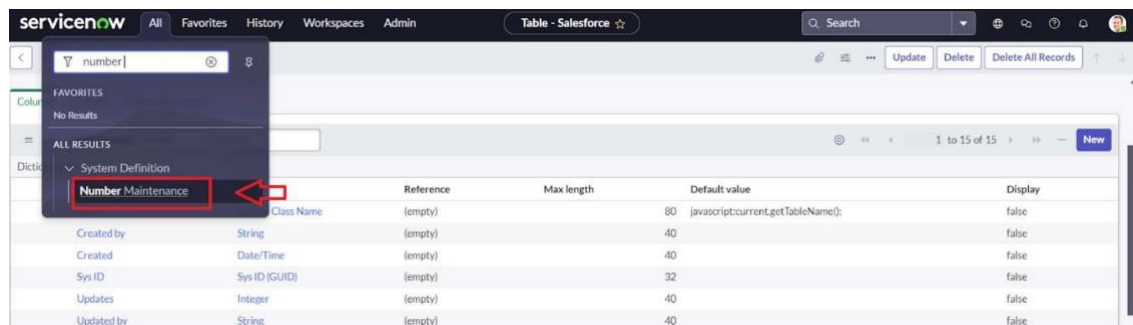
Follow the same steps as Activity1, Configure the fields as below and Save.

The screenshot shows the 'Form Design' interface for the 'Student Progress' table. The left sidebar contains a 'Fields' list with categories: Fields, Field Types, and Filters. The main area displays the form structure with sections: 'New Section' and 'Student Progress'. Each section contains a list of fields with their respective data types and validation rules.

Section	Field Name	Field Type	Validation
New Section	Admission Number	Text	Required
	Admission Number Grade	Text	Required
Student Progress	Admission Number Father Name	Text	Required
	Admission Number Mother Name	Text	Required
	Admission Number Father Cell	Text	Required
	Admission Number Mother Cell	Text	Required

Creating Number Maintenance for Admin Number

- All >> Number Maintenance >> New



- Fill the details >> Submit.

The screenshot shows the 'Number - SAL' form in ServiceNow. The form includes the following fields:

- Table: Salesforce
- Prefix: SAL
- Number: 1,000
- Application: Global
- Number of digits: 7

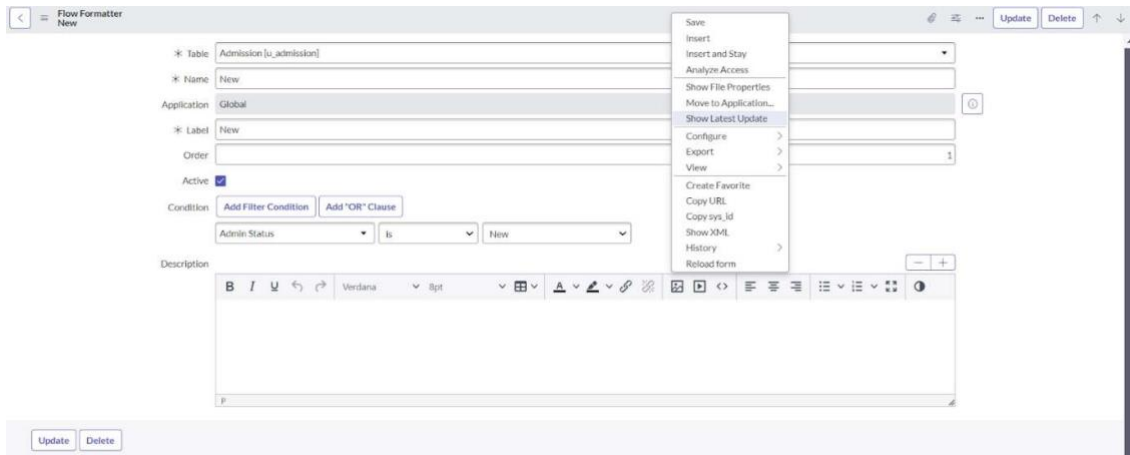
Below the form are 'Update' and 'Delete' buttons. Under 'Related Links', there is a 'Show Counter' link. Below the form, there are two sections for 'Daily Expenses [u_daily_expenses]':

- The first section is titled '2 Column' and contains four fields: 'Number', 'Family Member Name', 'Date', and 'Expense'.
- The second section is titled '1 Column' and contains one field: 'Comments'.

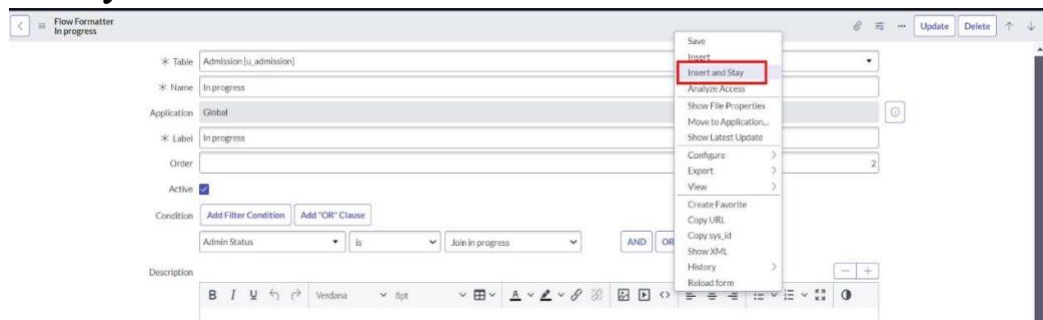
Creating Process Flow for Admission Table

All >> Process Flow >> New.

- Fill the Details as given Below



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



- 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.

Creating “Auto populate” Client Scripts for Admission Table

1. All >> Client Scripts >> New.
2. 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   //Type appropriate comment here, and begin script below
6
7
8 }

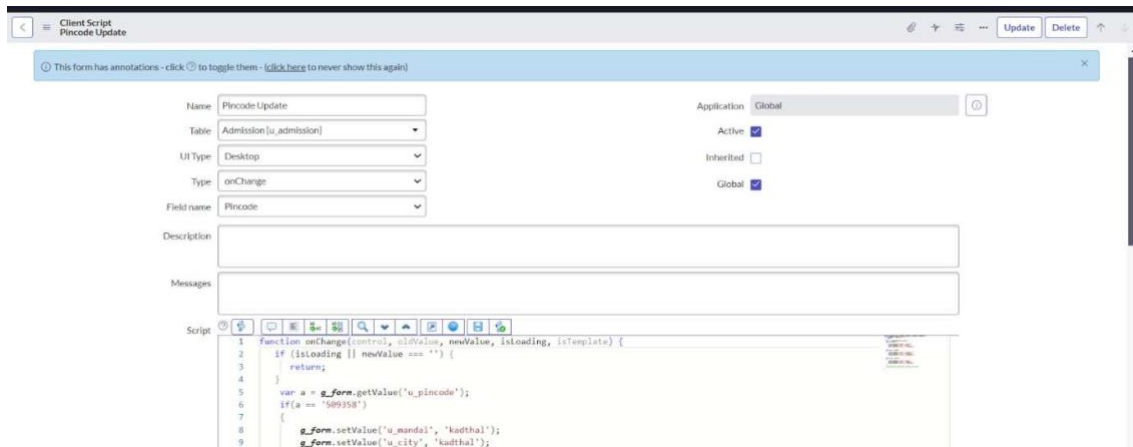
```

- 3.
4. Write the Code as below, Enable Isolate script and Save.
5. function onChange(control, oldValue, newValue, isLoading, isTemplate) {
6. if (isLoading || newValue === "") {
7. return;
8. }
9. //Type appropriate comment here, and begin script below
10. var a =
11. g_form.getReference('u_admission_number');
12. g_form.setValue('u_admin_date',a.u_admin_date);
13. g_form.setValue('u_grade',a.u_grade);
14. g_form.setValue('u_student_name',a.u_student_name);
15. g_form.setValue('u_father_name',a.u_father_name);
16. g_form.setValue('u_mother_name',a.u_mother_name);

16. `g_form.setValue('u_father_cell',a.u_father_cell);`
17. `g_form.setValue('u_mother_cell',a.u_mother_cell)`
`;`
18. `g_form.setDisabled('u_admin_date',a.u_admin_date);`
19. `g_form.setDisabled('u_grade',a.u_grade);`
20. `g_form.setDisabled('u_student_name',a.u_student_name);`
21. `g_form.setDisabled('u_father_name',a.u_father_name);`
22. `g_form.setDisabled('u_mother_name',a.u_mother_name);`
23. `g_form.setDisabled('u_father_cell',a.u_father_cell);`
24. `g_form.setDisabled('u_mother_cell',a.u_mother_cell);`
25. `}`
26. 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.

The screenshot shows the 'Client Script' configuration window for 'Disable Fields'. The window has a title bar with 'Client Script' and 'Disable Fields'. Below the title bar is a blue notification bar that says 'This form has annotations - click [icon] to toggle them - [link] to never show this again'. The main form contains the following fields:

- Name:** Disable Fields
- Table:** Student Progress [u_student_progress]
- UI Type:** All
- Type:** onLoad
- Application:** Global
- Active:** ☒
- Inherited:** ☐
- Global:** ☒
- Description:** (empty text area)
- Messages:** (empty text area)
- 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 }

```

At the bottom right of the window are 'Update' and 'Delete' buttons.

- Write the Code as below, Enable Isolate script and Save.
function onLoad() {

//Type appropriate comment here, and begin script below

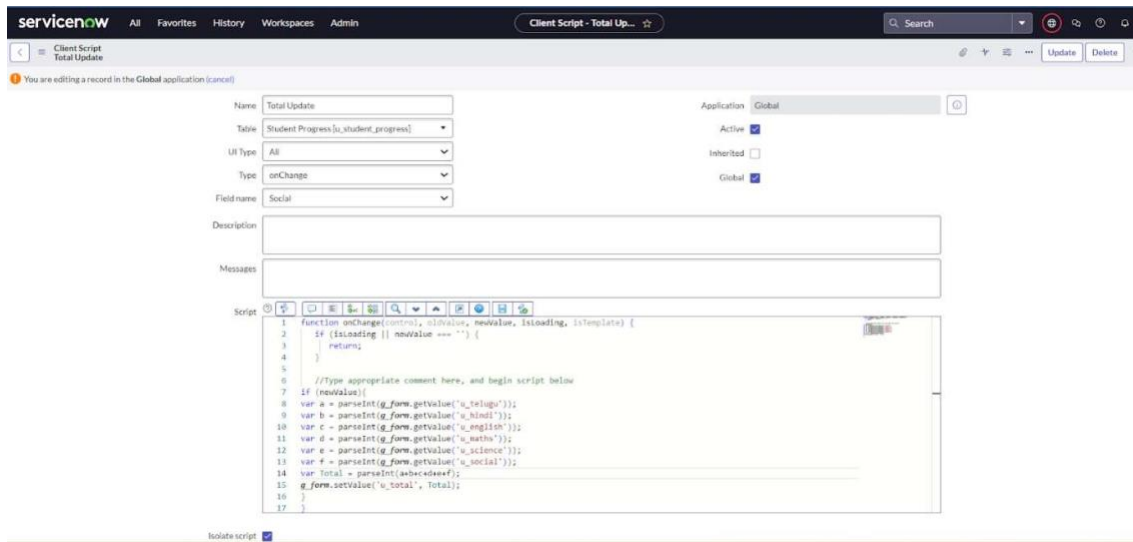
```

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'));
  
```

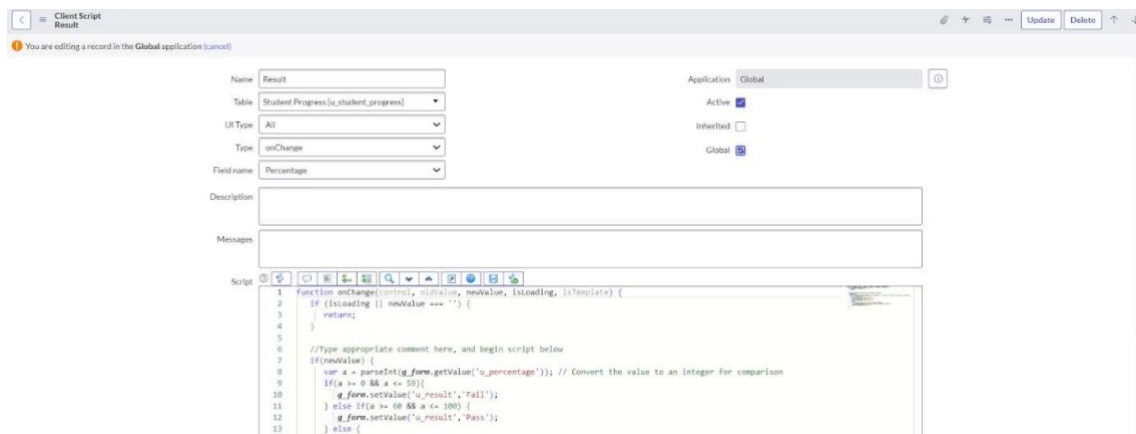
```

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');
```

```

            }
```

```

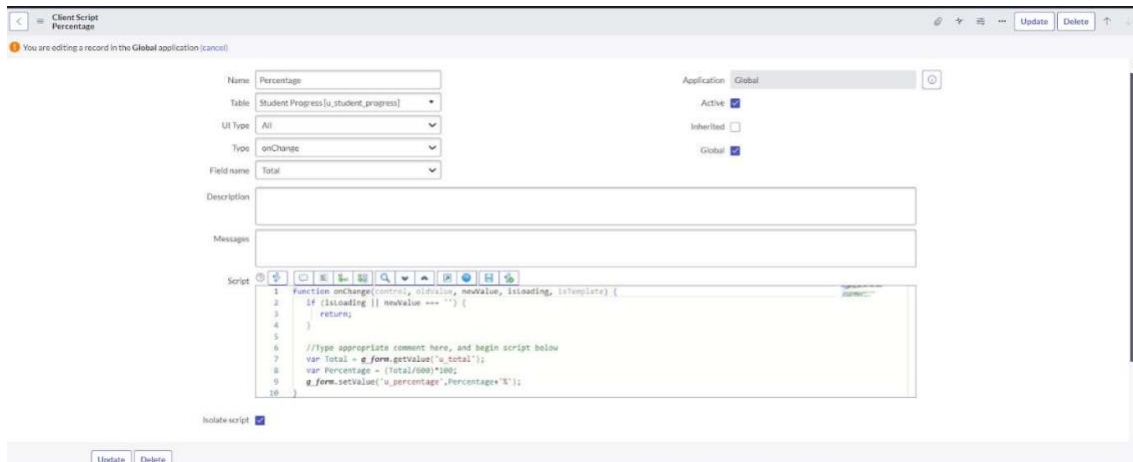
        }
```

```

    }
```

Creating “Percentage” Client Scripts for Student progress Table

- Fill the Details as given.



- 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+'%');
}

```

Conclusion : Whether for business or personal use, servicenow proves to be powerful tool for structured expense management.