

# **M.A.M COLLEGE OG ENGINEERING**

**PROJECT NAME: Educational Organisation Using ServiceNow**

**TEAM MEMBERS:**

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## Educational Organisation Using ServiceNow

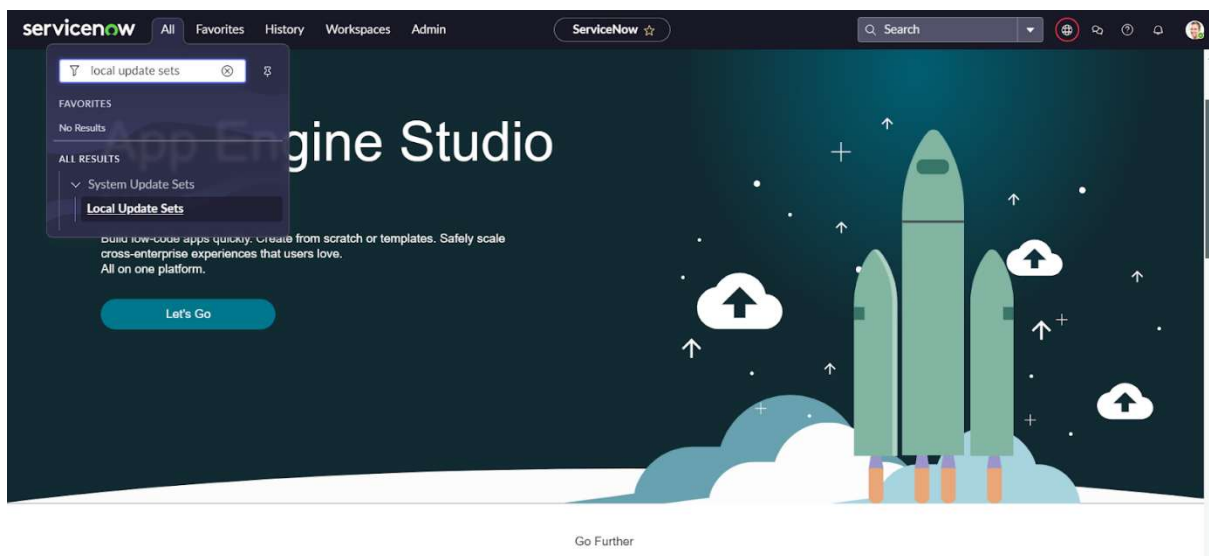
The Educational Management System is a comprehensive platform designed to streamline administrative tasks within educational institutions. It facilitates efficient management of student and teacher data, simplifies the admission process, and provides tools for monitoring student progress.

### Setting up ServiceNow Instance

1. Sign up for a developer account on the ServiceNow Developer site "https://developer.servicenow.com".
2. Once logged in, navigate to the "Personal Developer Instance" section.
3. Click on "Request Instance" to create a new ServiceNow instance.
4. Fill out the required information and submit the request.
5. You'll receive an email with the instance details once it's ready.
6. Log in to your ServiceNow instance using the provided credentials.
7. Now you will navigate to the ServiceNow.

### Creating a Update Set

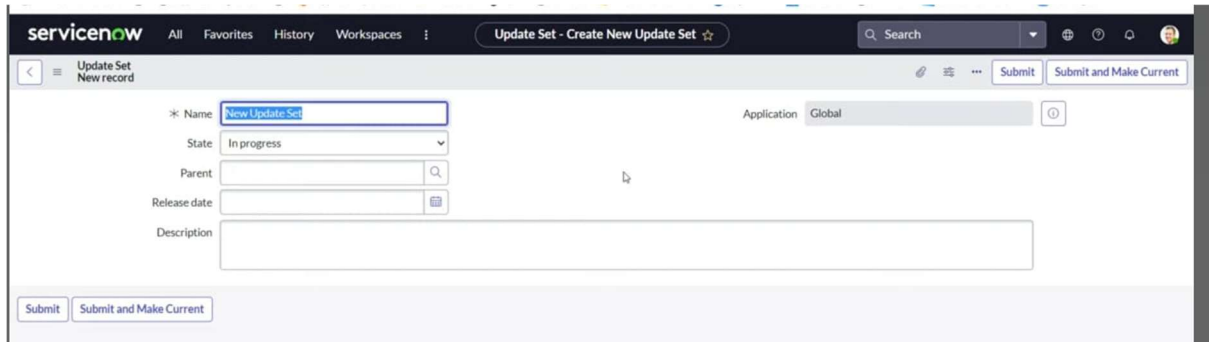
1. Click on All >> Local update sets .



2. Click on new

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)

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

The screenshot shows the ServiceNow interface for creating a new update set. The header bar includes the ServiceNow logo, navigation tabs (All, Favorites, History, Workspaces), and a search bar. The main form area is titled 'Update Set - Create New Update Set' and contains several input fields: 'Name' (with a blue border and the text 'New Update Set'), 'State' (a dropdown menu set to 'In progress'), 'Parent' (a searchable text field), 'Release date' (a date picker), and 'Description' (a large text area). The 'Application' field is set to 'Global'. At the bottom of the form, there are two buttons: 'Submit' and '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 .

x

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.

## 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 form includes the following fields and sections:

- Label:** Admission
- Name:** u\_admission
- Extends table:** Salesforce
- Application:** Global
- Create module:** ☒
- Create mobile module:** ☒
- Add module to menu:** Salesforce

Below these fields is a 'Columns' section with a table for defining columns. The table has the following columns: Column label, Type, Reference, Max length, Default value, and Display. The table is currently empty.

Column label	Type	Reference	Max length	Default value	Display
--------------	------	-----------	------------	---------------	---------

Table Admission						
Columns Controls Application Access						
Table Columns for text Search 1 to 29 of 29 New						
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.getTableNamed();	false	

- Create choice for Admin Status as:

Dictionary Entry Admin Status

Create Choice List

Delete Column

Update

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

Choices

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

<div><div></div><div></div></div>	Label	Value	Language	Sequence	Inactive	Updated
<div><div></div><div></div></div>	509350	509350	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></div></div> Label	Value	Language	Sequence	Inactive	Updated
<div>Near Market</div>	Near Market	en	1	false	2024-04-02 21:20:53
<div>Near Bus Stand</div>	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...					

## 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

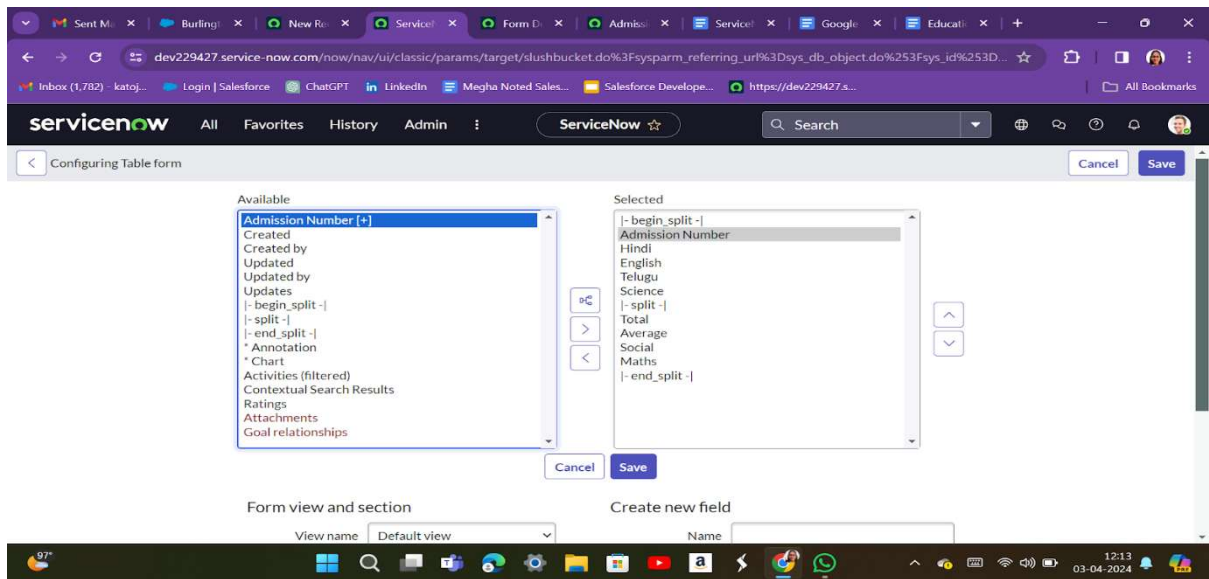
Delete

Delete All Records

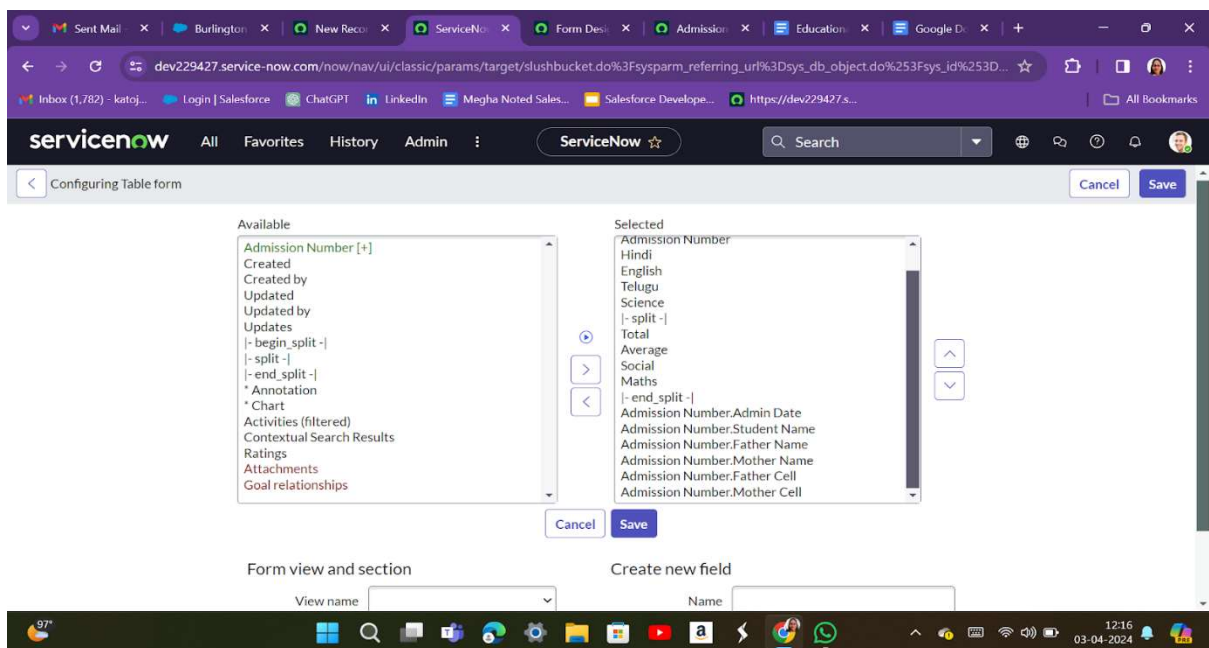
Related Links

[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 [+].

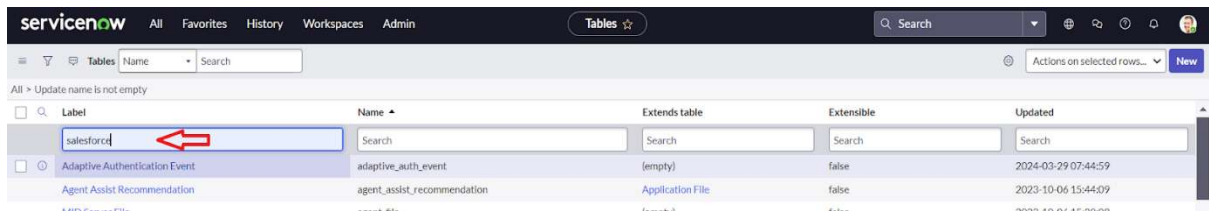


- Select below Admission Number fields in Available side and send it to selected side as below >> save.

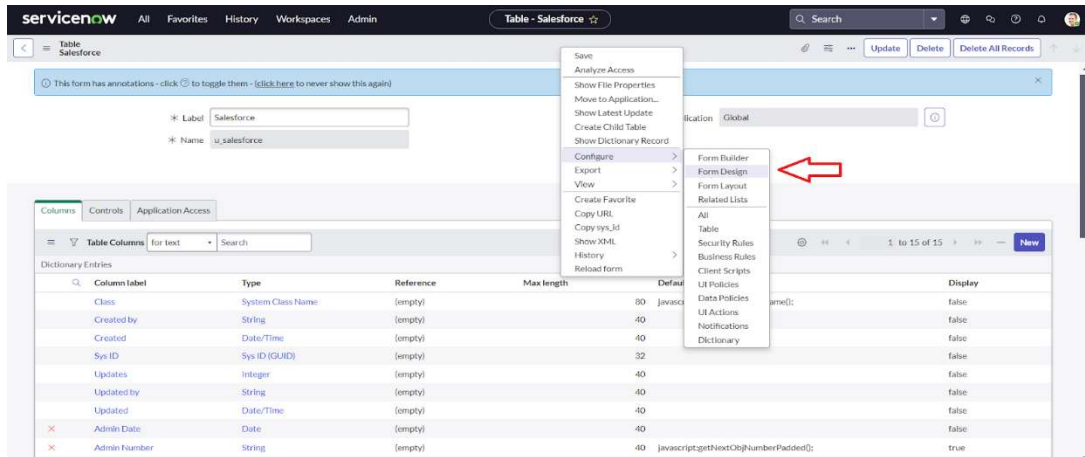


## Creating Form Design for Salesforce Table

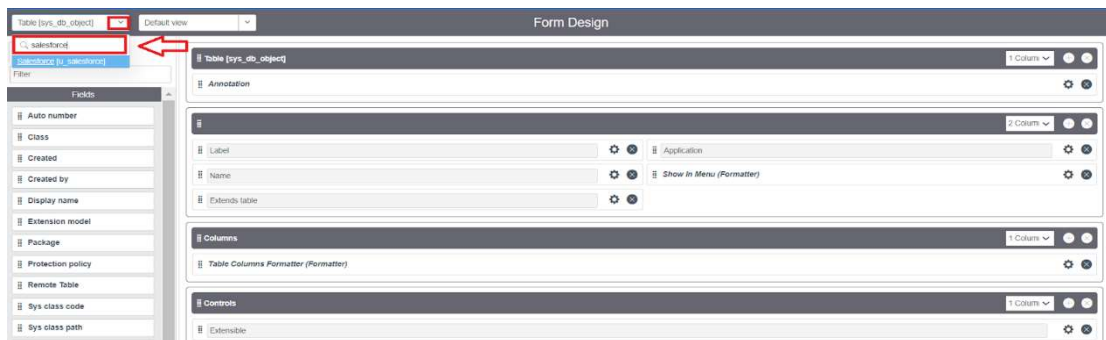
1. All >> System Definition >> Tables .
2. In Label Search for Salesforce and open .



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.



**Salesforce [u\_salesforce]** | Default view | Form Design | Undo | Save

**Fields** | Field Types

Filter

**Fields**

- Class
- Created
- Created by
- Updated
- Updated by
- Updates

**Formatters**

- Activities (filtered)
- Contextual Search Results
- Ratings

**Salesforce [u\_salesforce]** | 2 Column

Admin Number		Father Name	
Admin Date		Mother Name	
Grade		Father Cell	
Student Name		Mother Cell	

6.Save.

## Creating Form Design for Admission Table

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

**Admission [u\_admission]** | Default view | Form Design | Undo | Save

**Fields** | Field Types

Filter

**Fields**

- Class
- Created
- Created by
- Updated
- Updated by
- Updates

**Formatters**

- Activities (filtered)
- Contextual Search Results
- Ratings

**Admission [u\_admission]** | 1 Column

Process Flow Formatted

**Admission [u\_admission]** | 2 Column

Admission Number	Admission Date
Purpose of join	Grade
Student Name	Fee
Father Name	Father Cell
Mother Name	Mother Cell
Admission Status	

**Comments** | 1 Column

**School Details** | 2 Column

School Area	School
-------------	--------

**Address** | 1 Column

Pincode	Area
Mandal	City
House No	District

## Creating Form Design for Student progress Table

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

**Student Progress [u\_studpr]** | Default view | Form Design | Undo | Save

**Fields** | Field Types

Filter

**Fields**

- Class
- Created
- Created by
- Updated
- Updated by
- Updates

**Formatters**

- Activities (filtered)
- Contextual Search Results
- Ratings

**New Section** | 1 Column

Admission Number

**Admission Number** | 2 Column

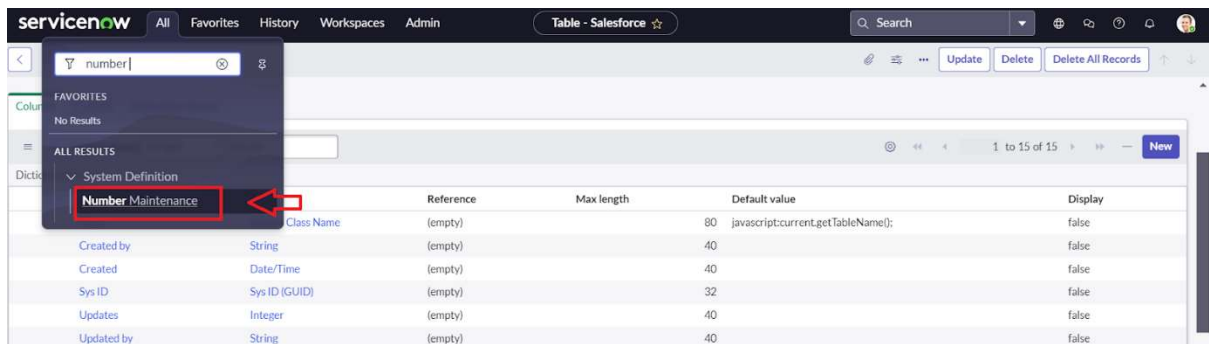
Admission Number Grade	Admission Number Father Name
Admission Number Student Name	Admission Number Mother Name
	Admission Number Father Cell
	Admission Number Mother Cell

**Student Progress** | 2 Column

Telugu	Total
Hindi	Percentage
English	Result
Maths	
Science	

## Creating Number Maintenance for Admin Number

- All >> Number Maintenance >> New

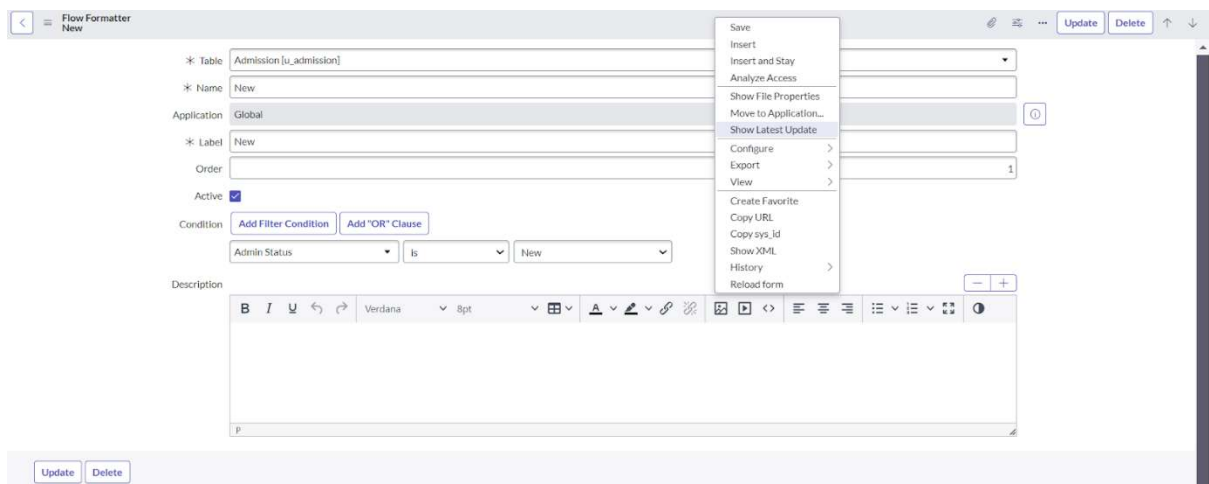


- Fill the details >> Submit.



## 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

- 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.

The screenshot shows the 'Client Script' configuration window for a field named 'Pincode Update'. The configuration includes the following details:

- Name:** Pincode Update
- Table:** Admission [u\_admission]
- UI Type:** Desktop
- Type:** onChange
- Field name:** Pincode
- Application:** Global
- Active:** ☒
- Inherited:** ☐
- Global:** ☒

The script area contains the following code:

```

1 function onChange(control, oldValue, newValue, isLoading, isTemplate) {
2   if (isLoading || newValue === '') {
3     return;
4   }
5   var a = g_form.getValue('u_pincode');
6   if(a == '589358')
7   {
8     g_form.setValue('u_mandal', 'kadthal');
9     g_form.setValue('u_city', 'kadthal');
10  }
11 }

```

- 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' editor for a script named 'Disable Fields'. The script is associated with the 'Student Progress [u\_student\_progress]' table and is triggered on the 'onLoad' event. The script is set to be 'Active' and 'Global'. The script content is as follows:

```

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.

The screenshot shows the 'Client Script' editor for a script named 'Total Update'. The script is associated with the 'Student Progress [u\_student\_progress]' table and is triggered on the 'onChange' event for the 'Social' field. The script is set to be 'Active' and 'Global'. The script content is as follows:

```

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     if (newValue) {
8         var a = parseInt(g_form.getValue('u_telugu'));
9         var b = parseInt(g_form.getValue('u_hindi'));
10        var c = parseInt(g_form.getValue('u_english'));
11        var d = parseInt(g_form.getValue('u_maths'));
12        var e = parseInt(g_form.getValue('u_science'));
13        var f = parseInt(g_form.getValue('u_social'));
14        var Total = parseInt(a+b+c+d+e+f);
15        g_form.setValue('u_total', Total);
16    }
17 }

```

- 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.

The screenshot shows the Salesforce Client Script configuration window for a field named 'Result'. The configuration is as follows:

- Name:** Result
- Table:** Student Progress [c:student\_progress]
- UI Type:** All
- Type:** onChange
- Field name:** Percentage
- Application:** Global
- Active:** ☒
- Inherited:** ☐
- Global:** ☒
- Description:** (Empty text area)
- Messages:** (Empty text area)
- 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   if(newValue) {
8     var a = parseInt(g_form.getValue('u_percentage')); // Convert the value to an integer for comparison
9     if(a >= 0 && a <= 50){
10      g_form.setValue('u_result', 'Fail');
11    } else if(a >= 50 && a <= 100) {
12      g_form.setValue('u_result', 'Pass');
13    } else {

```

- 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 Salesforce Client Script editor interface. The script is named 'Percentage' and is associated with the 'Student Progress [u\_student\_progress]' table. The 'onChange' event is selected for the 'Total' field. The script code is as follows:

```

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)*500;
    g_form.setValue('u_percentage',Percentage+'%');
}

```

The 'Isolate script' checkbox is checked. The 'Update' and 'Delete' buttons are visible at the bottom.

- 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

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