



## 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.

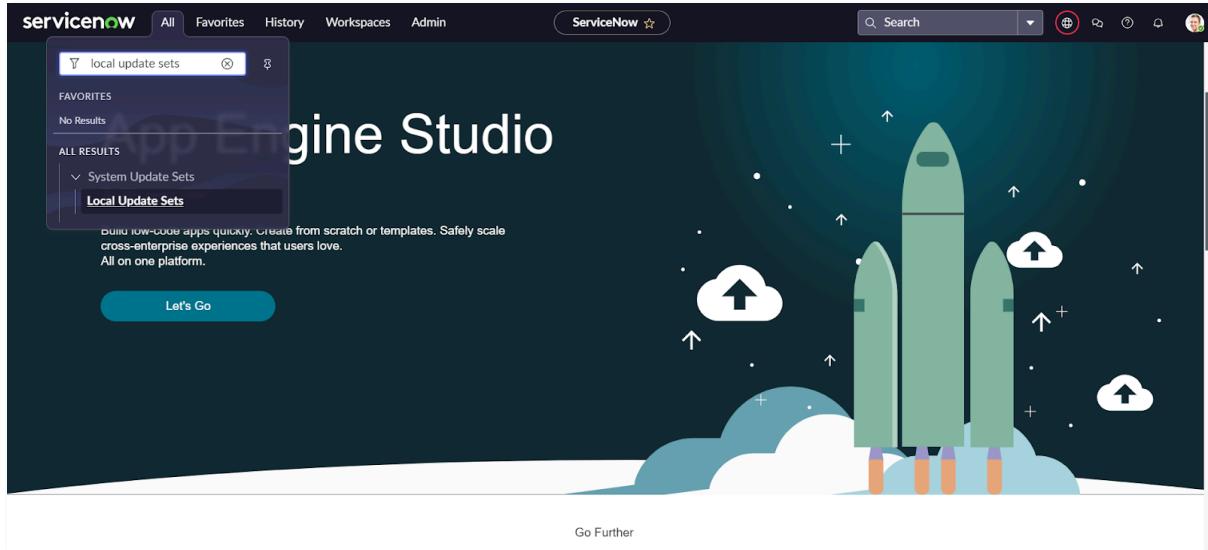
### Setting up ServiceNow Instance

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.

servicenow All Favorites History Workspaces : Update Set - Create New Update Set 

Update Set  
New record

\* Name:  Application: Global 

State:  

Parent:   

Release date:  

Description:

## Creating a Table

## Creating Salesforce Table.

- All >> Tables.

The screenshot shows the ServiceNow Import Tables interface. On the left, a sidebar menu is open under 'System Definition'. The 'Tables' option is highlighted with a red box and a red arrow pointing to it. The main area displays a table with columns: Created by user, Filename, Active, Expiration days, Expire on date, and Expired. Each column has a search input field. Below the table, a message says 'No records to display'.

- Click on new

Tables					Search
Tables		Name	Actions on selected rows...		
	Label	Name	Extends table	Extensible	Updated
<input type="checkbox"/>	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.

This screenshot shows the 'Table - New Record' page in ServiceNow. At the top, there are tabs for 'All', 'Favorites', 'History', 'Workspaces', and 'Admin'. The main title is 'Table - New Record'. Below the title, there's a message about creating custom tables in scoped applications. A blue header bar contains the text '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.' There are several input fields and checkboxes for configuration, including 'Label', 'Name', 'Extends table', 'Application' (set to 'Global'), 'Create module' (checked), 'Create mobile module' (checked), 'Add module to menu' (dropdown set to '-- Create new --'), and '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 .

This screenshot shows the 'Table - New Record' page with annotations. A red arrow points to the 'Column label' column in the 'Table Columns' table, indicating where to double-click to enter the column label. The table has columns for 'Type' (with a dropdown set to 'for text') and 'Search'. Other columns include 'Dictionary Entries', 'Reference', and 'Max length'. Buttons for 'Submit' and 'Cancel' are at the bottom.

This screenshot shows the 'Table' page in ServiceNow. It displays a list of columns with their properties. The columns are: Admin Date, Admin Number, Father Cell, Father Name, Grade, Mother Cell, Mother Name, and Student Name. The table includes columns for 'Type', 'Default Value', 'Script', and 'Max length'. A red arrow points to the 'Type' column for the 'Admin Date' row, which is currently set to 'Date'.

	Type	Default Value	Script	Max length
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.

The screenshot shows the Salesforce Table Editor for a table named "Salesforce". The "Controls" tab is selected. In the list of columns, the "Admin Number" column is selected. A context menu is open at the top right, with the "Save" option highlighted by a red box and a red arrow pointing to it. Other options in the menu include "Analyze Access", "Show File Properties", "Move to Application...", "Show Latest Update", "Create Child Table", and "Show Dictionary Record". The main table area shows various system columns like Class, Created by, Created, Sys ID, etc., with their respective types, references, and display settings.

- Click on controls >> Enable Extensible.

The screenshot shows the Salesforce Table Editor with the "Controls" tab selected. The "Extensible" checkbox is checked and highlighted with a red box and a red arrow. Other controls shown include "Live feed" (unchecked), "Prefix" (SAL), "Number" (1,000), "Number of digits" (7), "Create access controls" (checked), and "User role" (u\_salesforce\_user). A red circle highlights the "Controls" tab itself.

- 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 .

The screenshot shows the "Default Value" configuration screen. The "Default Value" tab is selected. The "Use dynamic default" checkbox is checked. The "Dynamic default value" field contains the value "Get Next Padded Number".

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

The screenshot shows the ServiceNow interface for managing dictionary entries. The top navigation bar includes links for All, Favorites, History, Workspaces, Admin, and the current page, Dictionary Entry - Grade. The main content area displays a table titled "Choices (13)". The table has columns for Label, Value, Language, Sequence, Inactive, and Updated. The data shows various grade levels from Prept to X, each with a unique label and value, and updated at different times in April 2024.

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 interface for creating a new table record. The top navigation bar includes links for All, Favorites, History, Workspaces, Admin, and the current page, Table - New Record. The main content area shows the "Table - New Record" form for the "Admission" table. The form fields include:
 

- \* Label: Admission
- \* Name: u\_admission
- Extends table: **Salesforce** (highlighted with a red box)
- Application: Global
- Create module:
- Create mobile module:
- Add module to menu: **Salesforce** (highlighted with a red box)

 Below the form, there is a table titled "Dictionary Entries" with columns for Column label, Type, Reference, Max length, Default value, and Display. A new row is being added, indicated by a plus sign (+).

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

- 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

Choices

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:

Access Controls Choices (3) Attributes Labels (1) Dictionary Overrides

Label Search Actions on selected rows... New

Choices

Label	Value	Language	Sequence	Inactive	Updated
509358	509358	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:

Access Controls Choices (3) Attributes Labels (1) Dictionary Overrides

Label Search Actions on selected rows... New

Choices

Label	Value	Language	Sequence	Inactive	Updated
Tution	Tution	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:

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:

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...					

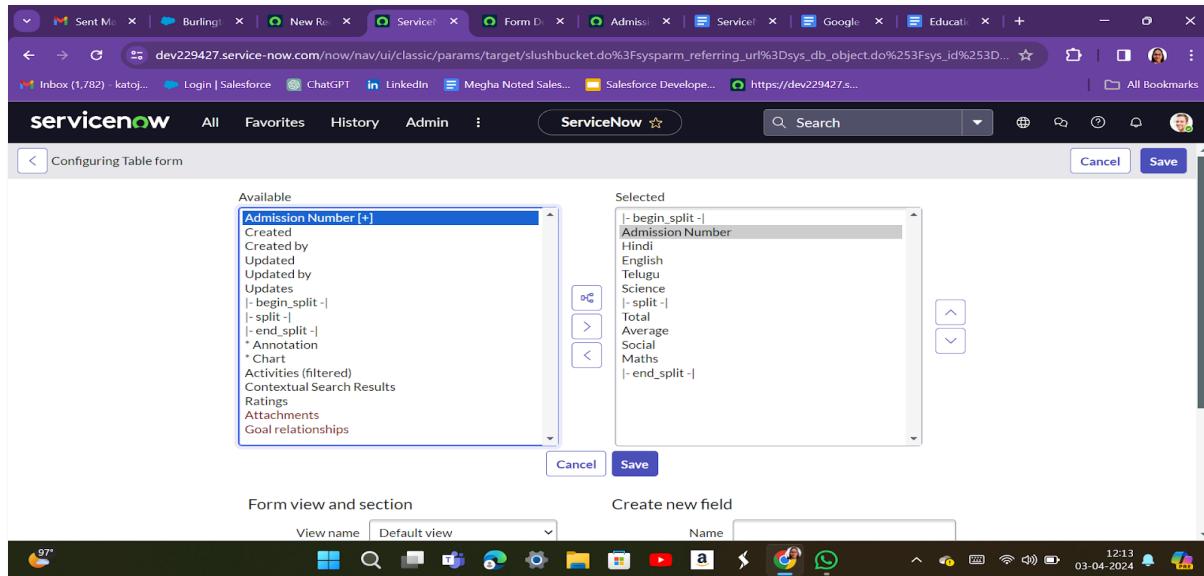
## Form Layout

### Configuring Table form for Student Progress Table

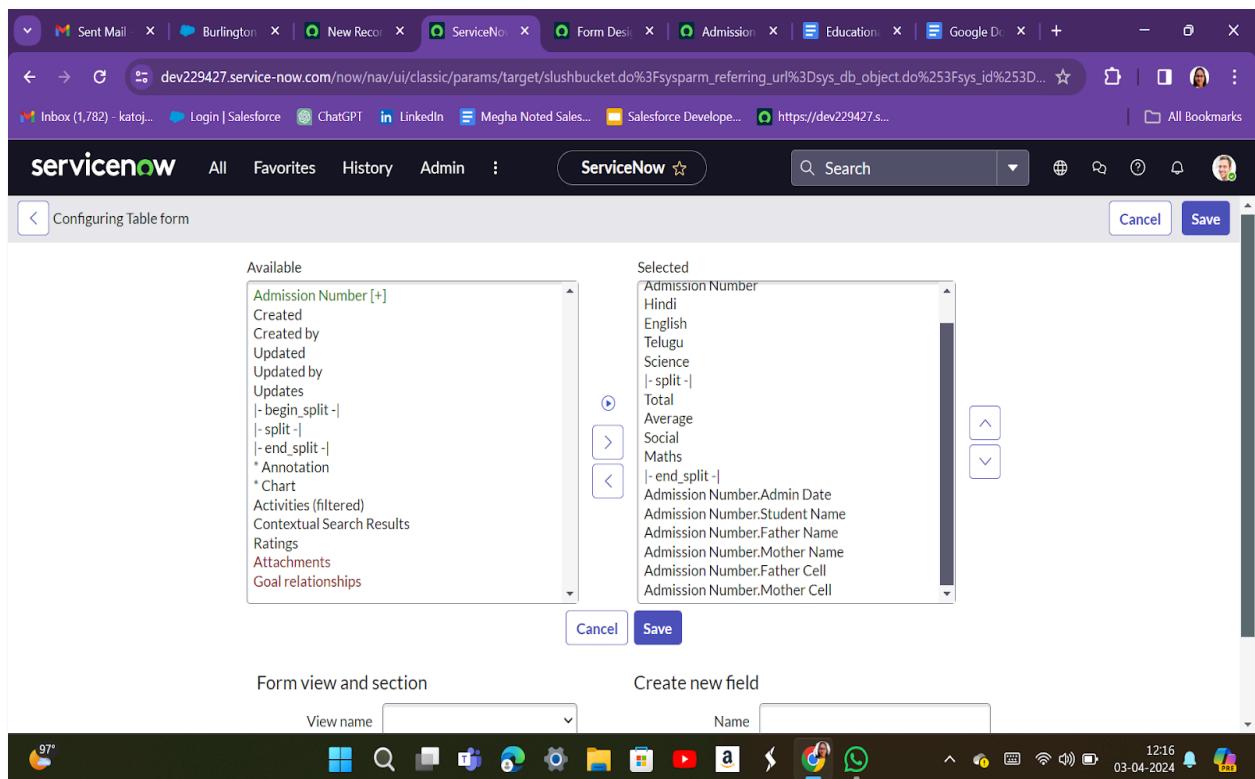
- In the Student Progress Table Page , Click on Layout form

Table student progress					
X	Telugu	String	(empty)	40	
X	Total	String	(empty)	40	
+ Insert a new row...					
<input type="button" value="Update"/> <input type="button" value="Delete"/> <input type="button" value="Delete All Records"/>					
<b>Related Links</b> <a href="#">Design Form</a> <a href="#">Layout Form</a> <a href="#">Layout List</a> <a href="#">Show Form</a> <a href="#">Show List</a> <a href="#">Show Schema Map</a> <a href="#">Add to Service Catalog</a> <a href="#">Run Point Scan</a> <a href="#">Explore REST API</a>					

- Click on Admission Number [+].



- 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 .

The screenshot shows the ServiceNow 'Tables' screen. A red arrow points to the search bar at the top where 'salesforce' has been typed. Below the search bar, a table lists several records. The first record, 'Salesforce', is selected and highlighted in blue. Its details are visible in the main pane: Label is 'Salesforce', Name is 'u\_salesforce', and Extends table is 'Table [sys\_db\_object]'. Other records listed include 'Adaptive Authentication Event' and 'Agent Assist Recommendation'.

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

The screenshot shows the 'Table - Salesforce' configuration screen. A red arrow points to the 'Configure' dropdown menu, which is open to show options like 'Form Builder', 'Form Design' (highlighted in blue), 'Export', 'View', etc. The main pane displays the table's columns and controls. The 'Name' field is set to 'u\_salesforce'.

4. In drop down select Salesforce(u\_salesforce).

The screenshot shows the 'Form Design' configuration interface for the 'Table [sys\_db\_object]' record. A red arrow points to the 'Table [sys\_db\_object]' dropdown in the top left, which is currently set to 'Salesforce (u\_salesforce)'. The main pane contains sections for 'Annotation', 'Columns', and 'Controls', each with various configuration options for the table fields.

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

1. Save.

## Creating Form Design for Admission Table

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

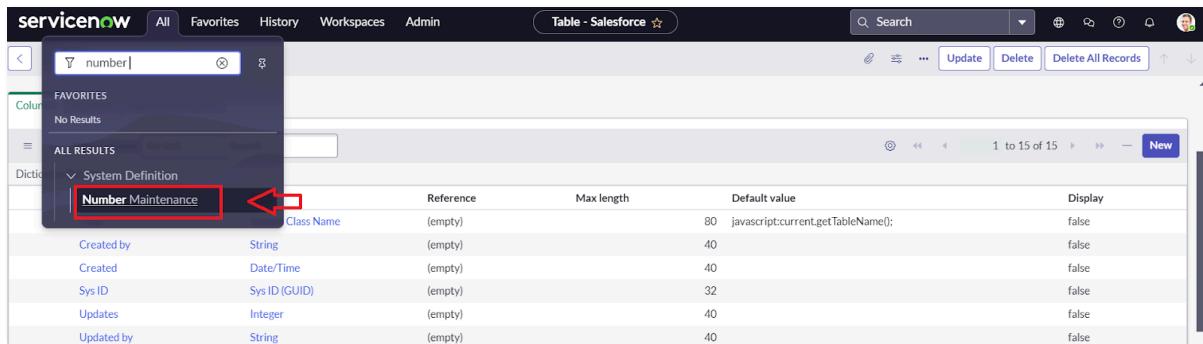
## Creating Form Design for Student progress Table

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

## Number Maintenance

### Creating Number Maintenance for Admin Number

- All >> Number Maintenance >> New



The screenshot shows the ServiceNow search interface with the search term 'number' entered. The results list shows various system definitions, with 'Number Maintenance' highlighted by a red box and a red arrow pointing to it. The table includes columns for Reference, Max length, Default value, and Display.

Reference	Max length	Default value	Display	
(empty)	80	javascript:current.getTableName();	false	
String	(empty)	40	false	
Date/Time	(empty)	40	false	
Sys ID	Sys ID (GUID)	(empty)	32	false
Updates	Integer	(empty)	40	false
String	(empty)	40	false	

- Fill the details >> Submit.

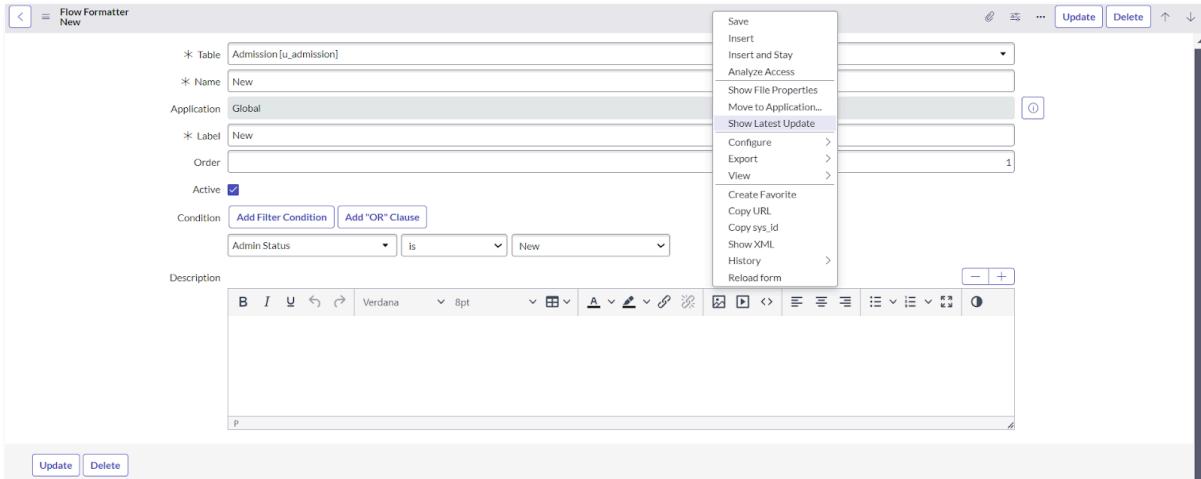


The screenshot shows the 'Number - SAL' creation form. The form fields are: Table (Salesforce), Prefix (SAL), Number (1.000), Application (Global), and Number of digits (7). The 'Update' and 'Delete' buttons are located at the bottom of the form.

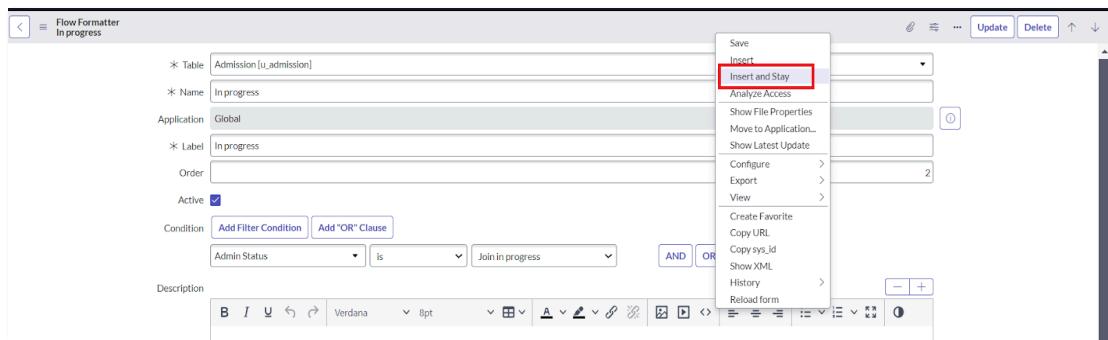
## Process Flow

### 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.

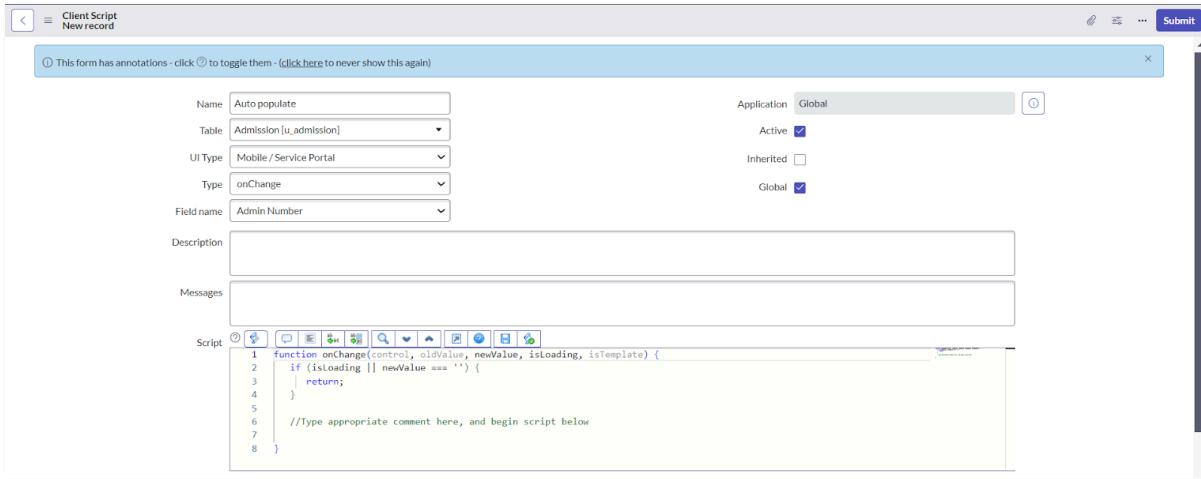


- Replace the Name and Label in order and click on Insert on stay.  
Joined >> Rejected >> Rejoined >> Closed >> Cancelled.
- Order should be New >> InProgress >> Joined >> Rejected >> Rejoined  
>> Closed >> Cancelled.

## 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);
```

```

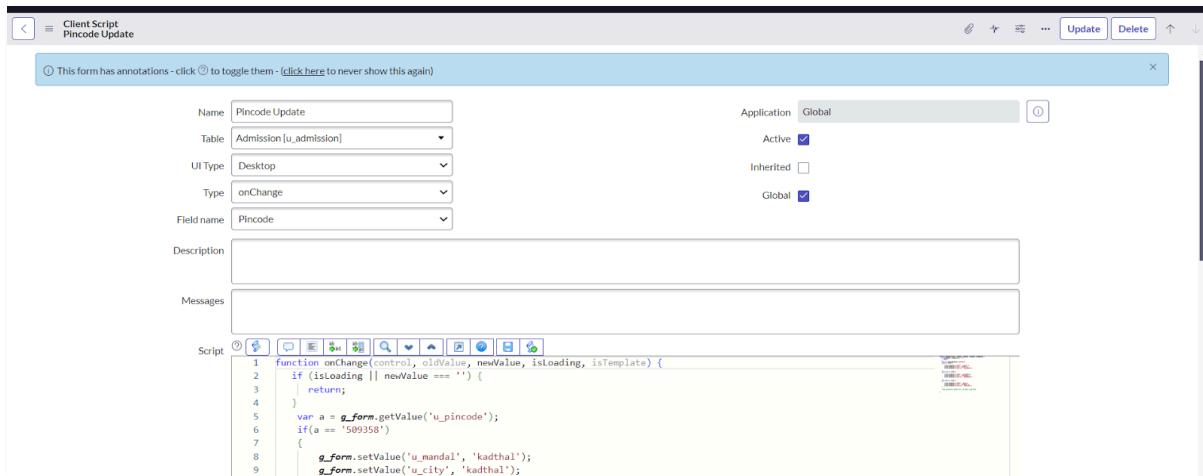
g_form.setDisabled('u_mother_cell',a.u_mother_cell);
}

```

**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');
}

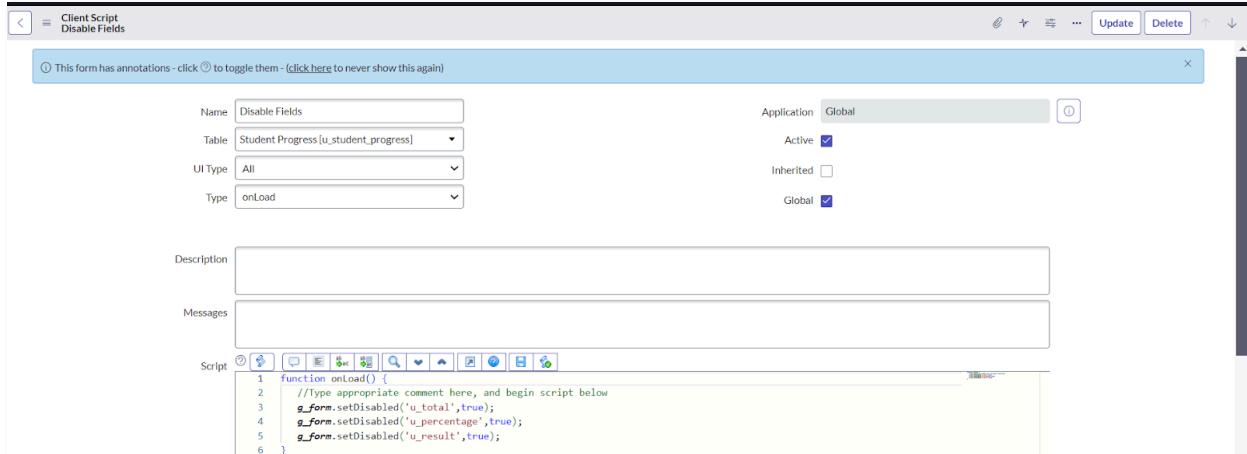
```

//Type appropriate comment here, and begin script below

```
}
```

## Creating “Disable Fields” Client Scripts for Student progress Table

- Fill the Details as given.



- 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 ServiceNow Client Script editor. The top navigation bar includes 'All', 'Favorites', 'History', 'Workspaces', and 'Admin'. The title bar says 'Client Script - Total Up...'. The main form has fields for 'Name' (Total Update), 'Table' (Student Progress [u\_student\_progress]), 'UI Type' (All), 'Type' (onChange), and 'Field name' (Social). The 'Script' tab is selected, showing the following code:

```

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);
    }
}

```

The 'Isolate script' checkbox is checked at the bottom left.

- 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'));

```

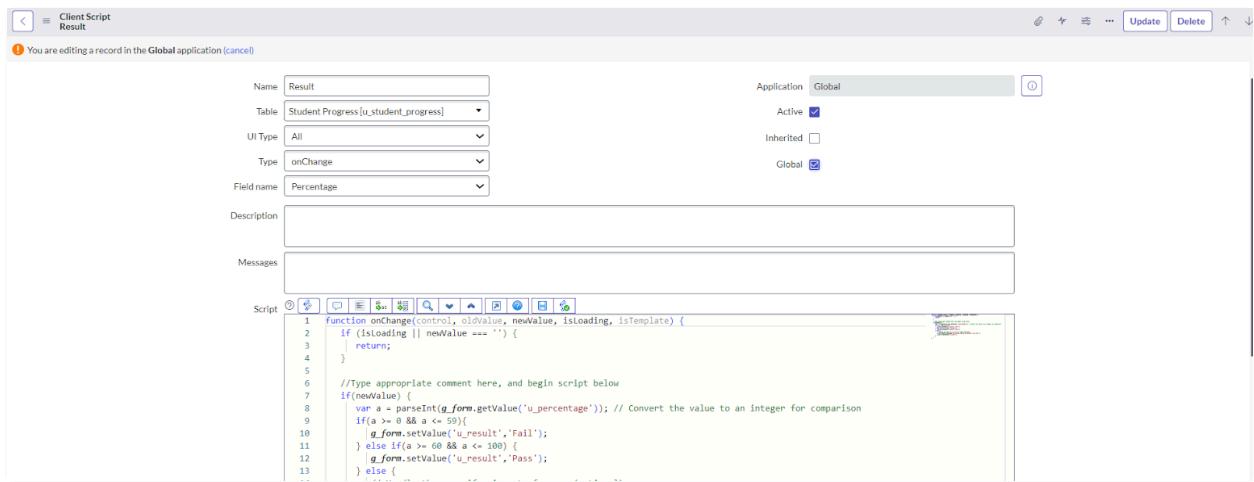
```

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.



```

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 {
      g_form.setValue('u_result','Pending');
    }
  }
}
```

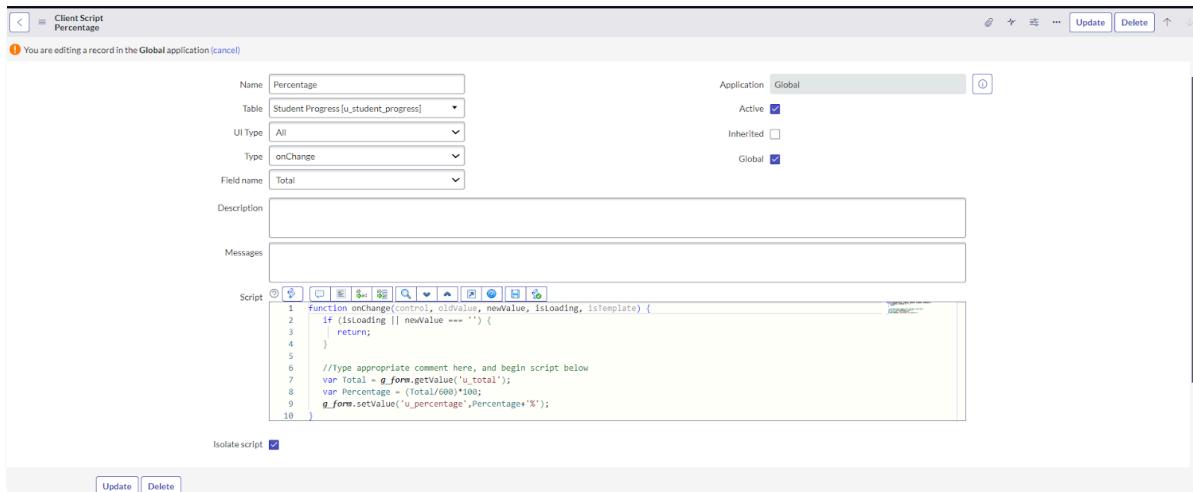
```

} 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+'');
```

{}

## Result

Salesforce New record

Admin Number	SAL0001078	Father Name	<input type="text"/>
Admin Date	<input type="text"/>	Mother Name	<input type="text"/>
Grade	-- None --	Mother Cell	<input type="text"/>
Student Name	<input type="text"/>	Father Cell	<input type="text"/>

**Submit**

Admission New record

New	In progress	Joined	Rejected	Rejoined	Closed	Cancelled	
Admission Number	<input type="text"/>	Admin Date	<input type="text"/>	Grade	-- None --		
Purpose of join	-- None --	Fee	\$ 0.00	Father Cell	<input type="text"/>		
Student Name	<input type="text"/>	Mother Cell	<input type="text"/>	Mother Name	<input type="text"/>	Admin Status	-- None --
Father Name	<input type="text"/>	Comments	<input type="text"/>	School Details	<input type="text"/>	Address	<input type="text"/>
Mother Name	<input type="text"/>	School Area	-- None --	School	-- None --		

**Submit**

New Section New record

Admission Number	<input type="text"/>	Father Name	<input type="text"/>
Grade	-- None --	Mother Name	<input type="text"/>
Student Name	<input type="text"/>	Father Cell	<input type="text"/>
		Mother Cell	<input type="text"/>

Student Progress

Telugu	<input type="text"/>	Total	<input type="text"/>
Hindi	<input type="text"/>	Percentage	<input type="text"/>
English	<input type="text"/>	Result	<input type="text"/>
Maths	<input type="text"/>		
Science	<input type="text"/>		
Social	<input type="text"/>		

**Submit**