

## **Educational Organisation Using Servicenow**

**Team ID : NM2025TMID07474**

**Team Size : 3**

**Team Leader : Shreya S.A**

**Team member : Pooja L.V**

**Team member : Gopika R.S**

**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 :User**

## Activity 1: Create Users

### Creating a Update Set

- Click on All >> Local update sets .



- Click on new

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

- 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: In progress

Parent:  

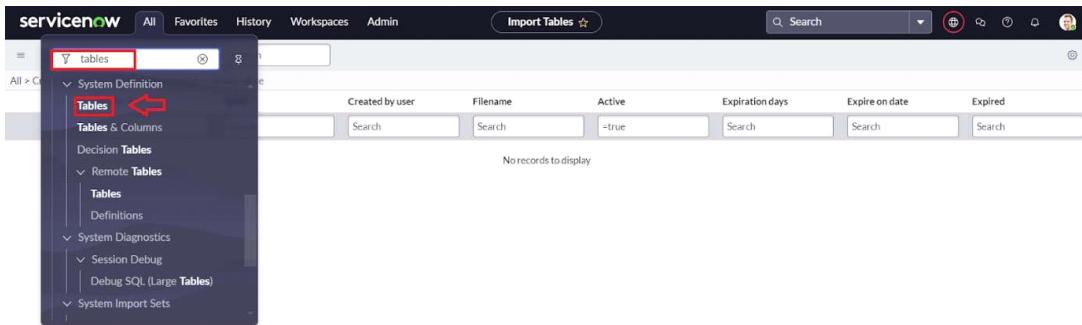
Release date:  

Description:

## **Creating Salesforce Table.**

- All >> Tables.



- Click on new

Tables					Search
Actions on selected rows...		New			
Label	Name	Extends table	Extensible	Updated	
Search	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.

ServiceNow All Favorites History Workspaces Admin Table - New Record

Table New record

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

A table is a collection of records in the database. Each record corresponds to a row in a table, and each field on a record corresponds to a column on that table. Applications use tables and records to manage data and processes. [More Info](#)

\* Label:

\* Name:

Extends table:

Application: Global

Create module:

Create mobile module:

Add module to menu:   New menu name:

ServiceNow All Favorites History Workspaces Admin Table - New Record

Table New record

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

\* Label:

\* Name:

Extends table:

Create module:

Create mobile module:

Add module to menu:   New menu name:

Columns \* Controls Application Access

Table Columns for text Search

Dictionary Entries

Column label	Type	Reference	Max length
<input type="text"/>	<input type="button" value=""/>		

Submit Cancel

- 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 .

Admin Date	Date	(empty)	40	false
Admin Number	String	(empty)	40	true
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	De	Display
Class	System Class Name	(empty)	80	jav	false
Created by	String	(empty)	40	View	false
Created	Date/Time	(empty)	40		
Sys ID	Sys ID (GUID)	(empty)	32		
Updates	Integer	(empty)	40		
Updated by	String	(empty)	40		
Updated	Date/Time	(empty)	40		

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 Reloadform

- Click on controls >> Enable Extensible.

Columns Controls Application Access

Extensible   Live feed

Prefix SAL Number 1,000  
Number 7  
Number of digits

Create access controls   
User role u.salesforce.user

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

Choice List Specification | Calculated Value | Default Value

Use dynamic default

Dynamic default value: Get Next Padded Number

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

	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 two ServiceNow tables being configured:

- Table - New Record** (Top):
  - Label: Admission
  - Name: u\_admission
  - Extends table: Salesforce (highlighted with a red box)
  - Application: Global
  - Create module: checked
  - Create mobile module: checked
  - Add module to menu: Salesforce (highlighted with a red box)
- Table Admission** (Bottom):
  - Dictionary Entries 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** screen for the **Admin Status** choice list:

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:

Choices						
	Label	Value	Language	Sequence	Inactive	Updated
<input type="checkbox"/>	509358	509358	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

- Create choice for Purpose of Join as:

Choices						
	Label	Value	Language	Sequence	Inactive	Updated
<input type="checkbox"/>	Tuition	Tuition	en	1	false	2024-04-02 21:17:09
<input type="checkbox"/>	Coaching	Coaching	en	2	false	2024-04-02 21:17:31
<input type="checkbox"/>	Teacher	Teacher	en	3	false	2024-04-02 21:17:53

- Create choice for School as:

Choices						
	Label	Value	Language	Sequence	Inactive	Updated
<input type="checkbox"/>	Stanley	Stanley	en	1	false	2024-04-02 21:19:14
<input type="checkbox"/>	Naresh It	Naresh It	en	2	false	2024-04-02 21:19:35

- Create choice for School Area as:

Choices						
	Label	Value	Language	Sequence	Inactive	Updated
<input type="checkbox"/>	Near Market	Near Market	en	1	false	2024-04-02 21:20:53
<input type="checkbox"/>	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:

<input type="checkbox"/>	Admission Number	Reference	Salesforce	32	false
<input type="checkbox"/>	English	String	(empty)	40	false
<input type="checkbox"/>	Hindi	String	(empty)	40	false
<input type="checkbox"/>	Maths	String	(empty)	40	false
<input type="checkbox"/>	Percentage	String	(empty)	40	false
<input type="checkbox"/>	Result	String	(empty)	40	false
<input type="checkbox"/>	Science	String	(empty)	40	false
<input type="checkbox"/>	Social	String	(empty)	40	false
<input type="checkbox"/>	Telugu	String	(empty)	40	false
<input type="checkbox"/>	Total	String	(empty)	40	false

## Configuring Table form for Student Progress Table

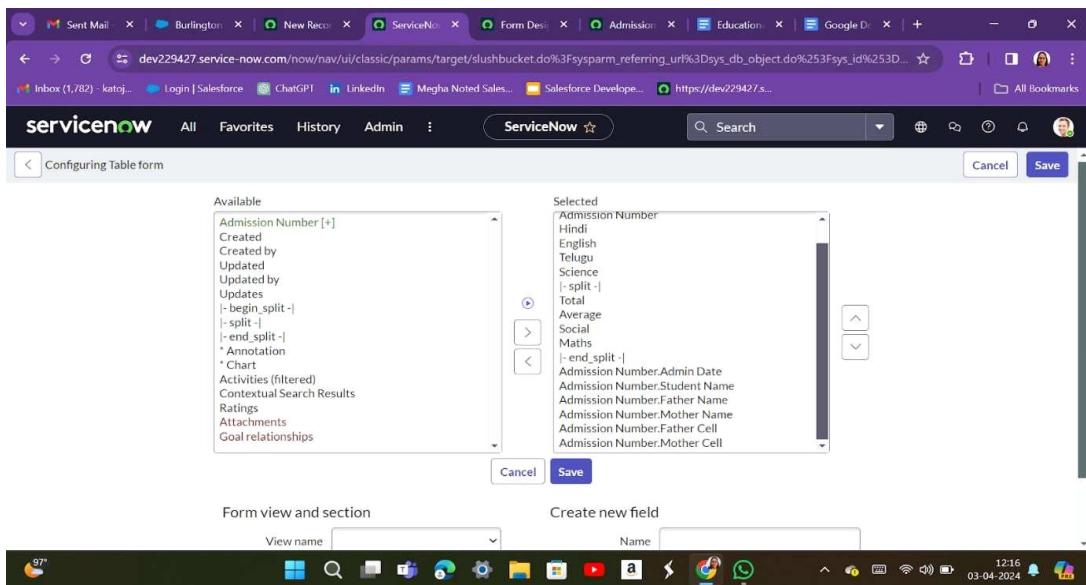
- In the Student Progress Table Page , Click on Layout form .

The screenshot shows the 'Layout Form' configuration for the 'student progress' table. The table has two columns: 'Telugu' (String) and 'Total' (String). Both columns have '(empty)' values and a width of 40. Below the table is a button bar with 'Update', 'Delete', and 'Delete All Records'. On the left, under 'Related Links', the 'Layout Form' link is highlighted. Other links include Design Form, Layout List, Show Form, Show List, Show Schema Map, Add to Service Catalog, Run Point Scan, and Explore REST API.

- Click on Admission Number [+] .

The screenshot shows the 'Configuring Table form' dialog. In the 'Available' list, 'Admission Number [+]' is selected. In the 'Selected' list, it is shown along with other fields: '|-begin\_split -|', 'Admission Number', 'Hindi', 'English', 'Telugu', 'Science', '|-split -|', 'Total', 'Average', 'Social', 'Maths', and '|-end\_split -|'. At the bottom, there are 'Cancel' and 'Save' buttons. Below the dialog, the 'Form view and section' and 'Create new field' sections are visible, along with a toolbar and system status indicators at the bottom.

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



## Creating Form Design for Salesforce Table

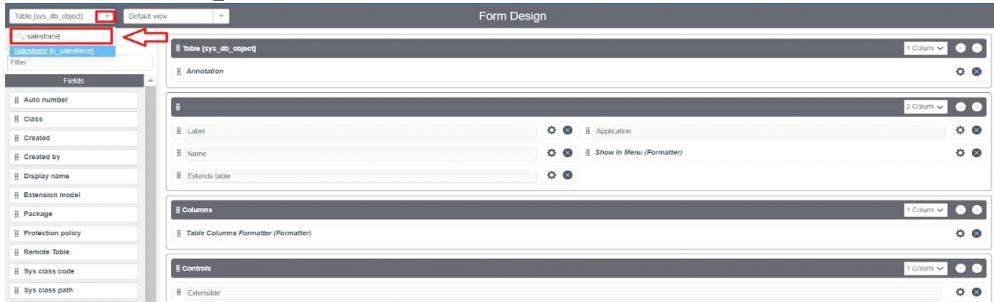
- All >> System Definition >> Tables .
- In Label Search for Salesforce and open .

Label	Name	Extends table	Extensible	Updated
salesforce	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

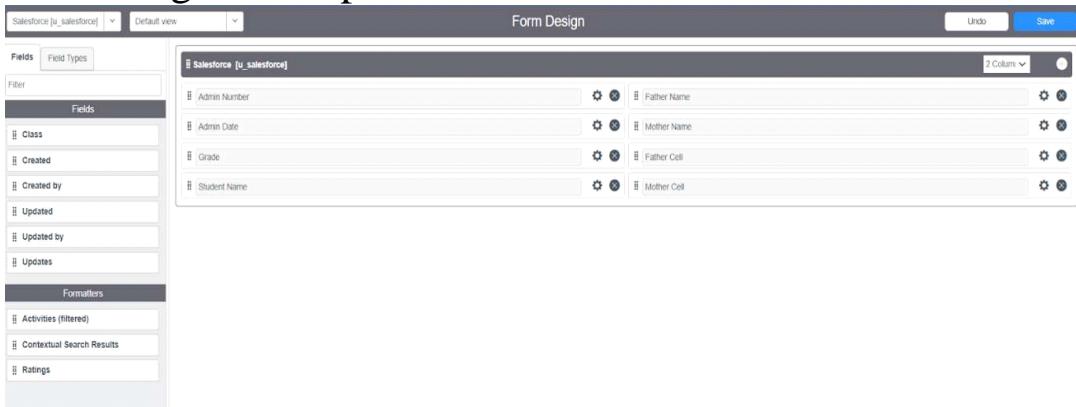
- Right Click on top Toggle >> Configure >> Form Design.

Column label	Type	Reference	Max length	Default	Display
Class	System Class Name:	(empty)	80	javaScript	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
Admin Date	Date	(empty)	40	javascript:getNextObjNumberPadded();	false
Admin Number	String	(empty)	40	javascript:getNextObjNumberPadded();	true

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



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



- 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 [x]\_admission' module. The left sidebar contains filters for 'Fields' (Class, Created, Created by, Updated, Updated by, Updates) and 'Formatters' (Activities (filtered), Contextual Search Results, Ratings). The main area displays a grid of fields:

- Section 1:** Fields for admission number and purpose of join. Columns include Admin Number, Purpose of join, Student Name, Father Name, Mother Name, Admin Date, Grade, Fees, Father Cell, Mother Cell, Admin Status.
- Section 2:** Fields for contact details. Columns include Contact Person, Contact Number, Address, Area, City, District.

## 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 [x]\_student' module. The left sidebar contains filters for 'Fields' (Class, Created, Created by, Social, Updated, Updated by, Updates) and 'Formatters' (Activities (filtered), Contextual Search Results, Ratings). The main area displays a grid of fields:

- Section 1:** Fields for admission number and its components. Columns include Admission Number, Grade, Student Name, Father Name, Mother Name, Father Cell, Mother Cell.
- Section 2:** Fields for student progress across Telugu, Hindi, English, Maths, and Science. Columns include Telugu, Hindi, English, Maths, Science, Total, Percentage, Result.

## Creating Number Maintenance for Admin Number

- All >> Number Maintenance >> New

The screenshot shows the ServiceNow interface for the 'Table - Salesforce' application. A red box highlights the 'Number Maintenance' record in the list. An arrow points from the text 'Number Maintenance' in the list to the red box.

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

- Fill the details >> Submit.

The screenshot shows the 'Number - SAL' record creation form. The 'Table' field is set to 'Salesforce'. The 'Prefix' is 'SAL.' and the 'Number' is '1.000'. The 'Application' is 'Global' and 'Number of digits' is '7'. The 'Update' and 'Delete' buttons are visible at the bottom left.

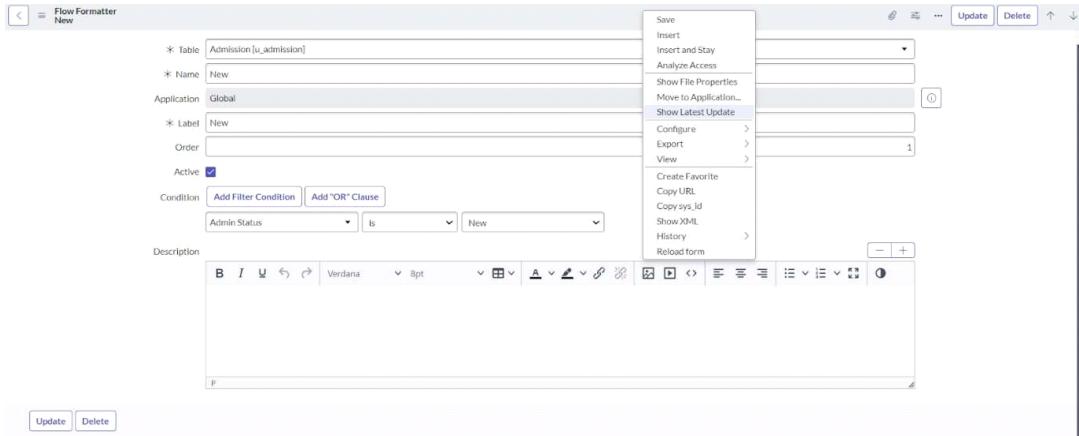
* Table	Salesforce
Prefix	SAL.
* Number	1.000
Application	Global
Number of digits	7

Related Links:  
Show Counter

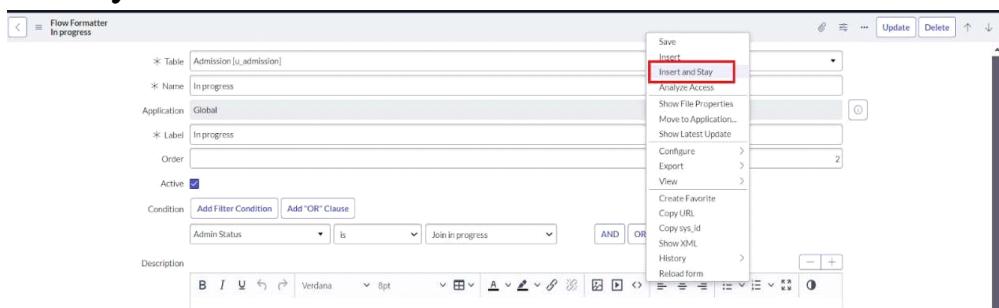
Fields:  
Number Expenses [u\_daily\_expenses]  
Date Family Member Name  
Comments Expense

## 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.

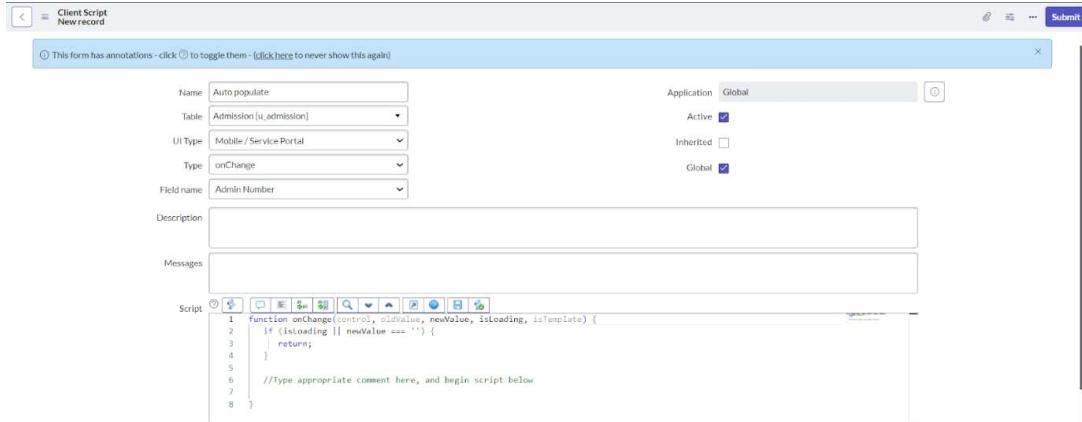
Joined >> Rejected >> Rejoined >> Closed >> Cancelled.

- 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.

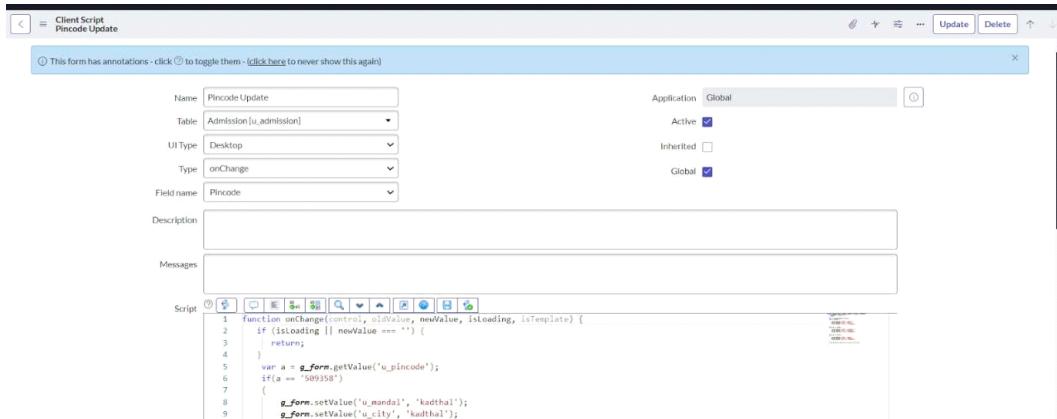


- Write the Code as below, Enable Isolate script and Save.
- function onChange(control, oldValue, newValue, isLoading, isTemplate) {
- if (isLoading || newValue === "") {
- return;
- 8.     }
- //Type appropriate comment here, and begin script below
- var a =  
        g\_form.getReference('u\_admission\_number');
- 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\_na me);
- g\_form.setValue('u\_father\_name',a.u\_father\_name );
- g\_form.setValue('u\_mother\_name',a.u\_mother\_na me);

- 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\_da te);
  - 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\_na me);
  - 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\_c ell);
25. }
- 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');

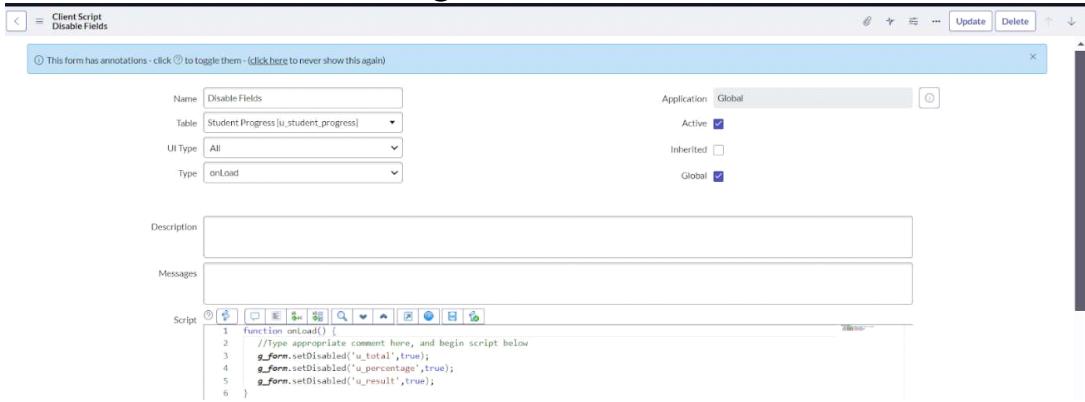
}

//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 configuration interface. The script is titled 'Total Update' and is set to run on the 'Student Progress [u\_student\_progress]' table. It is configured to trigger on 'onChange' events for the 'Social' field across all UI types. The script itself is a simple function that adds up values from other fields and sets the total in the 'Social' field. The 'Isolate script' option is checked.

```

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);
    }
}

```

- 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);

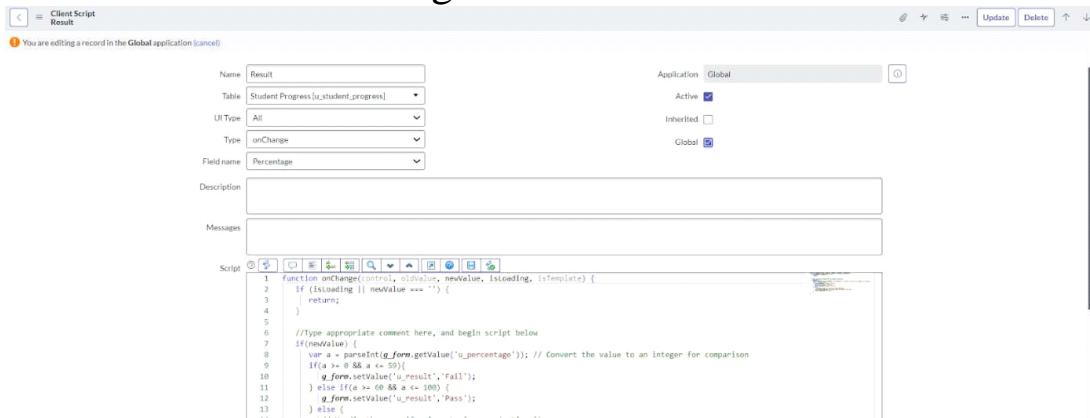
}

}

```

## 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');

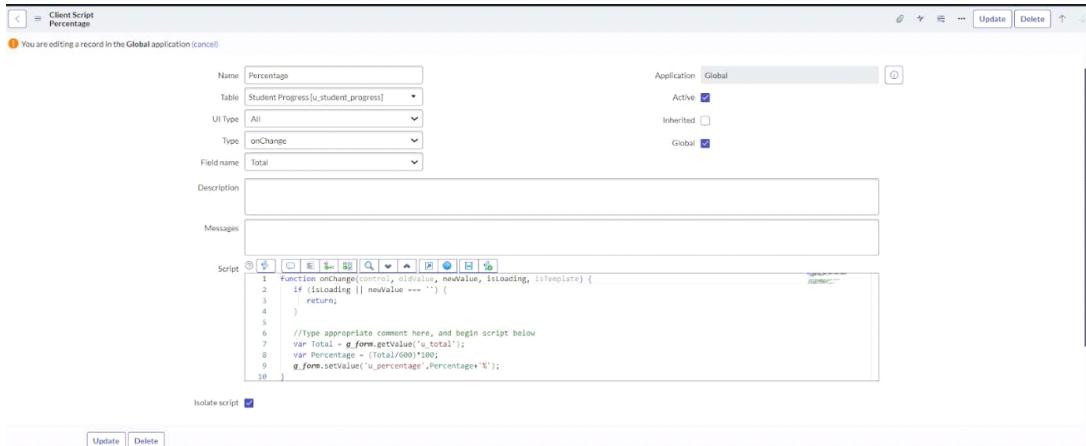
    }

}

```

## **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.