

Project

Educational Organisation Using ServiceNow

Team ID: NM2025TMID13584

Team Members: 04

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Problem Statement: In many educational organisations, daily operations such as admissions, student progress tracking, staff management, and communication are often handled manually or through different disconnected systems. This creates several challenges like delays in processes, lack of transparency for students and staff, and difficulties in managing large amounts of data. Without proper automation, tasks such as approvals, notifications, and report generation consume more time and effort. Moreover, the absence of a single digital platform leads to communication gaps between students, teachers, and administrators. These issues highlight the need for a centralized and automated system to make educational management more efficient and reliable.

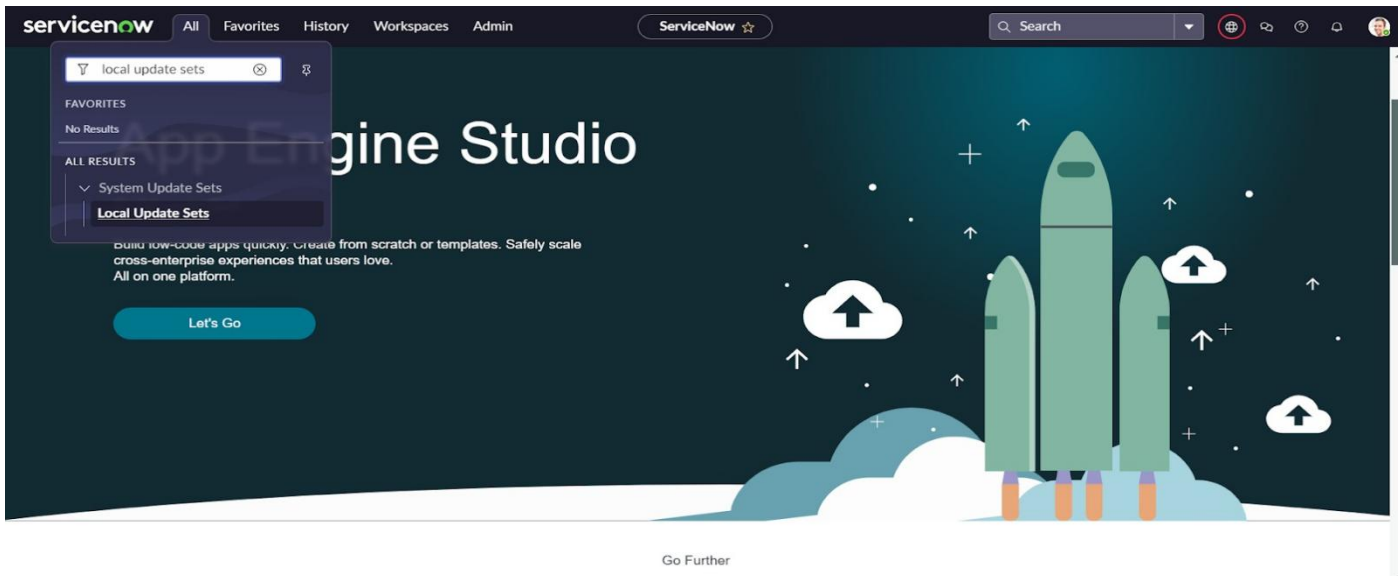
Objective: The project aims to develop a system for schools and colleges to manage admissions, student details, and academic progress, making the entire process quick, paperless, and user-friendly.

Skills:

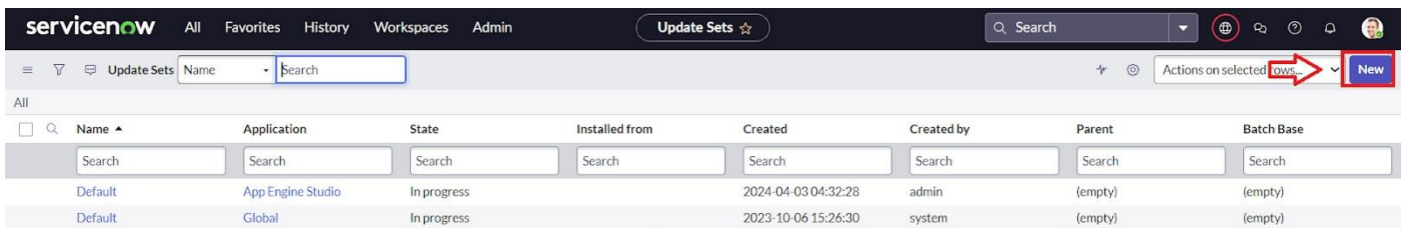
- ❖ ServiceNow Platform Knowledge
- ❖ Scripting (JavaScript)
- ❖ Database Concepts (RDBMS)
- ❖ Web Technologies (HTML, CSS, PHP/Node.js)
- ❖ Workflow Automation
- ❖ Problem-Solving
- ❖ Team Collaboration
- ❖ Project Presentation
- ❖ Analytical Thinking

TASK INITIATION

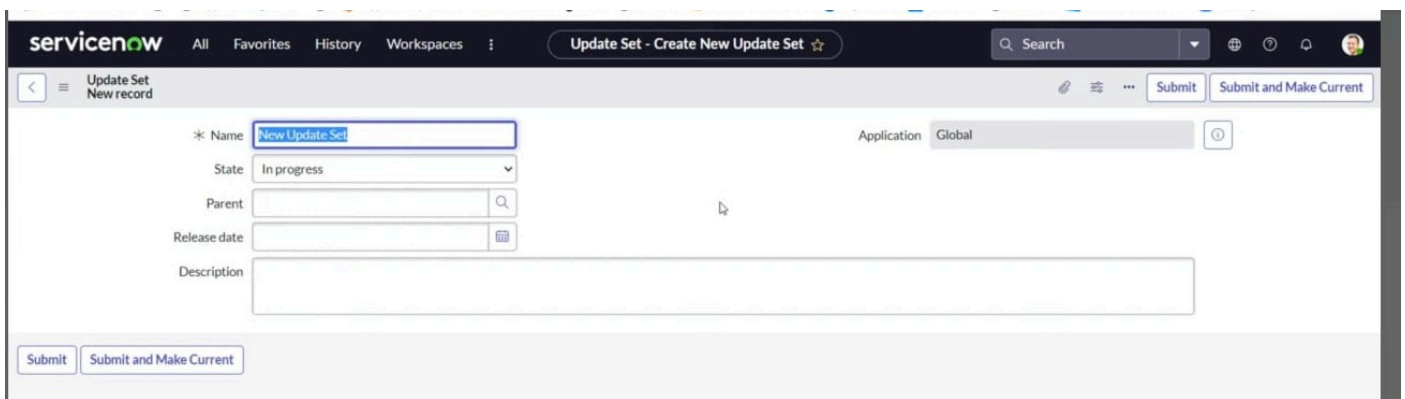
▪ Module 1: Creating an Update Set



Step 1: Click on All >> Local update sets.



Step 2: Click on New

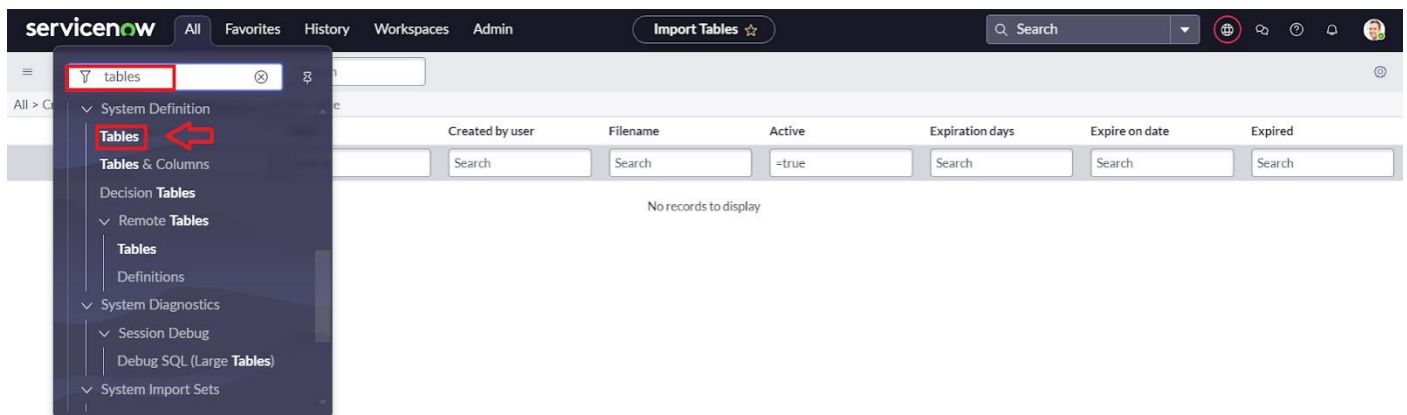


Step 3: Enter the Details Name: Educational Organisation >> Click on Submit and make Current.

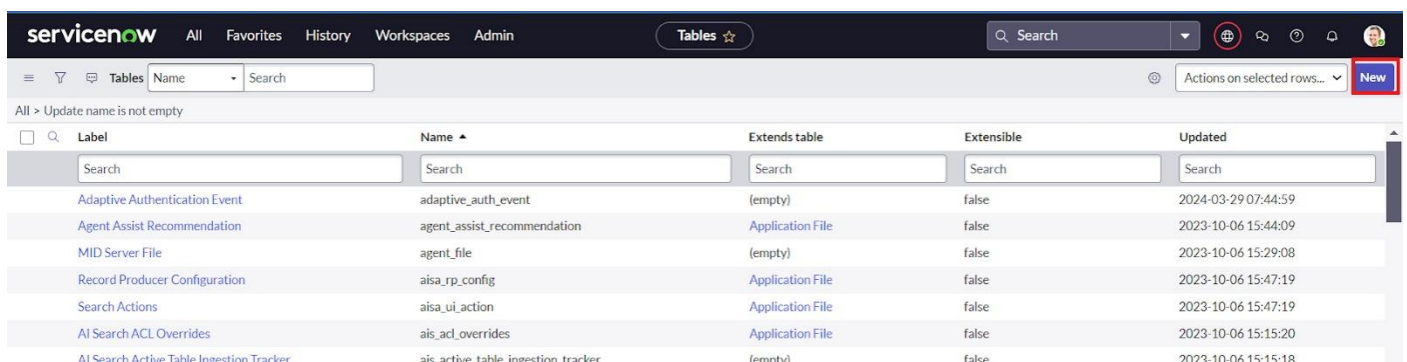
■ Module 2: Creating A Table

Sub Module 1: Creating Salesforce Table.

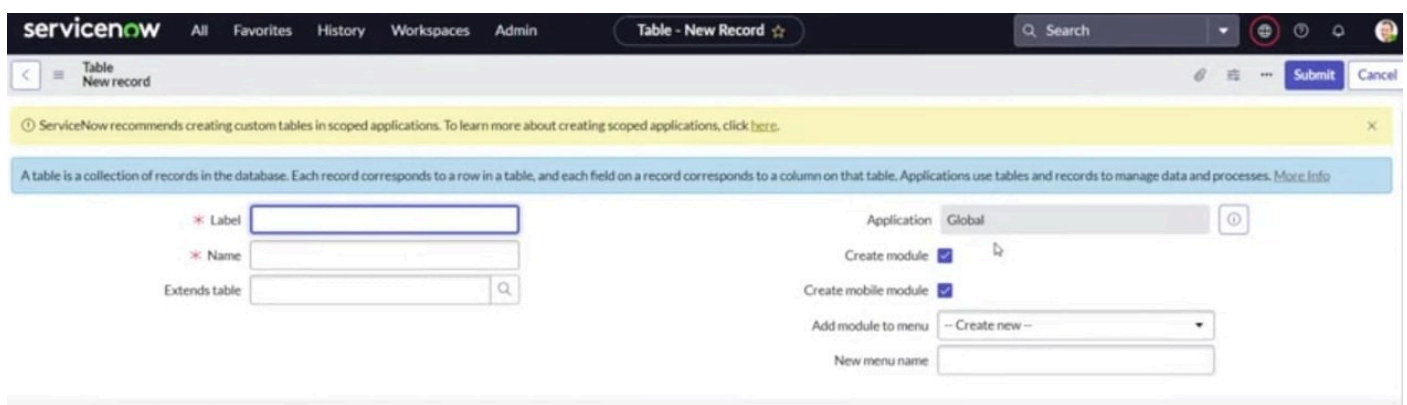
Step 1: All>>Tables



Step 2: Click On New



Step 3: Enter the Label (Anything you want): Salesforce >> Click on Name it will Automatically generate Api name.



Step 4: 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.

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

* Label

* Name

Extends table

🔍

Creaz

Ad

Columns

* Controls

Application Access

≡

⌵

Table Columns

for text

Search

Dictionary Entries

<div>🔍</div>	Column label		Type	Reference	Max length
<div>+</div>	<div></div>	<div>✓</div> <div>✗</div>	<div></div>		

Submit

Cancel

Step 5: For “Admin Number” Give Display as True and right click on the toggle bar on top >> save.

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:getNextObjNumberPadded(); 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

Table Editor

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

Step 6: Click on controls >> Enable Extensible.

Columns **Controls** Application Access

Extensible ☒ 

Live feed ☐

Prefix

Number

Number of digits

Create access controls ☒

* User role

Step 7: 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

Step 8: Click on “Grade” Column >> Click on Choices and give Label, Value and Sequence as given below.

servicenow All Favorites History Workspaces Admin Dictionary Entry - Grade

Dictionary Entry Grade

Access Controls **Choices (13)** Attributes Labels (1) Dictionary Overrides

Label Search

	Label	Value	Language	Sequence	Inactive	Updated
<input type="checkbox"/>	Prept	Prept	en	1	false	2024-04-02 02:10:36
<input type="checkbox"/>	Nursery	Nursery	en	2	false	2024-04-02 02:10:40
<input type="checkbox"/>	UKG	UKG	en	3	false	2024-04-02 02:10:43
<input type="checkbox"/>	I	1st	en	4	false	2024-04-02 02:12:50
<input type="checkbox"/>	II	2nd	en	5	false	2024-04-02 02:13:16
<input type="checkbox"/>	III	3rd	en	6	false	2024-04-02 02:13:23
<input type="checkbox"/>	IV	4th	en	7	false	2024-04-02 02:13:30
<input type="checkbox"/>	V	5th	en	8	false	2024-04-02 02:13:53
<input type="checkbox"/>	VI	6th	en	9	false	2024-04-02 02:14:57
<input type="checkbox"/>	VII	7th	en	10	false	2024-04-02 02:15:02
<input type="checkbox"/>	VIII	8th	en	11	false	2024-04-02 02:15:06
<input type="checkbox"/>	IX	9th	en	12	false	2024-04-02 02:15:12
<input type="checkbox"/>	X	10th	en	13	false	2024-04-02 02:15:15

Insert a new row...

Sub Module 2: Creating Admission Table

Step 1: Create an Admission Table with Columns given.

Step 2: Select Extends Table >> Salesforce and also Select Add module to menu >> Salesforce.

Step 3: Create Fields as shown.

ServiceNow interface showing the 'Table - New Record' form. The 'Extends table' field is set to 'Salesforce' and 'Add module to menu' is set to 'Salesforce'. The 'Columns' tab is active, showing a table with columns: Column label, Type, Reference, Max length, Default value, and Display.

Column label	Type	Reference	Max length	Default value	Display

ServiceNow interface showing the 'Table Admission' form. The 'Columns' tab is active, showing a table with columns: Column label, Type, Reference, Max length, Default value, and Display. The table contains 14 rows of data.

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.getTable();	false

Step 4: Create choice for Admin Status as:

Sub Module 3: Creating Student Progress Table

Step 1: Create a Student Progress Table with Columns given.

Step 2: Select Add module to menu >> Salesforce.

Step 3: 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...				

■ Module 3: Form Layout

Step 1: 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

Step 2: 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

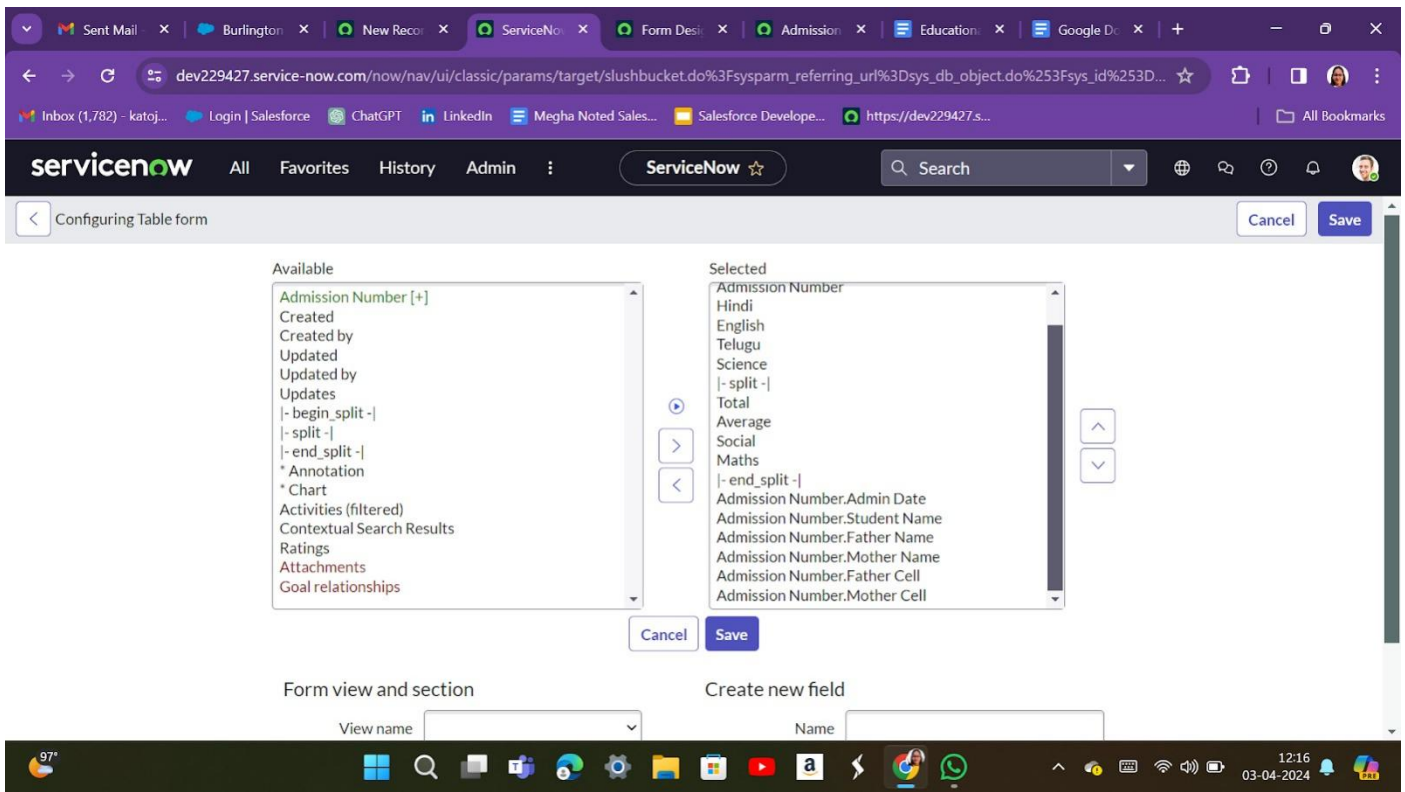
Form view and section

View name Default view

Create new field

Name

Step 3: Select below Admission Number fields in Available side and send it to selected side as below >> save.

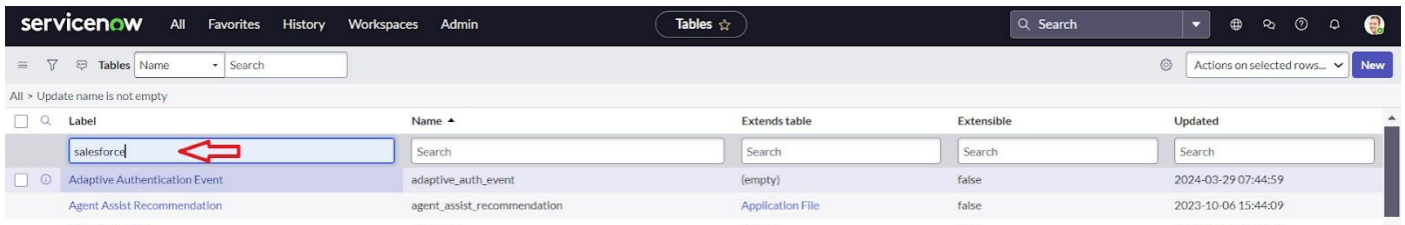


▪ Module 4: Form Layout

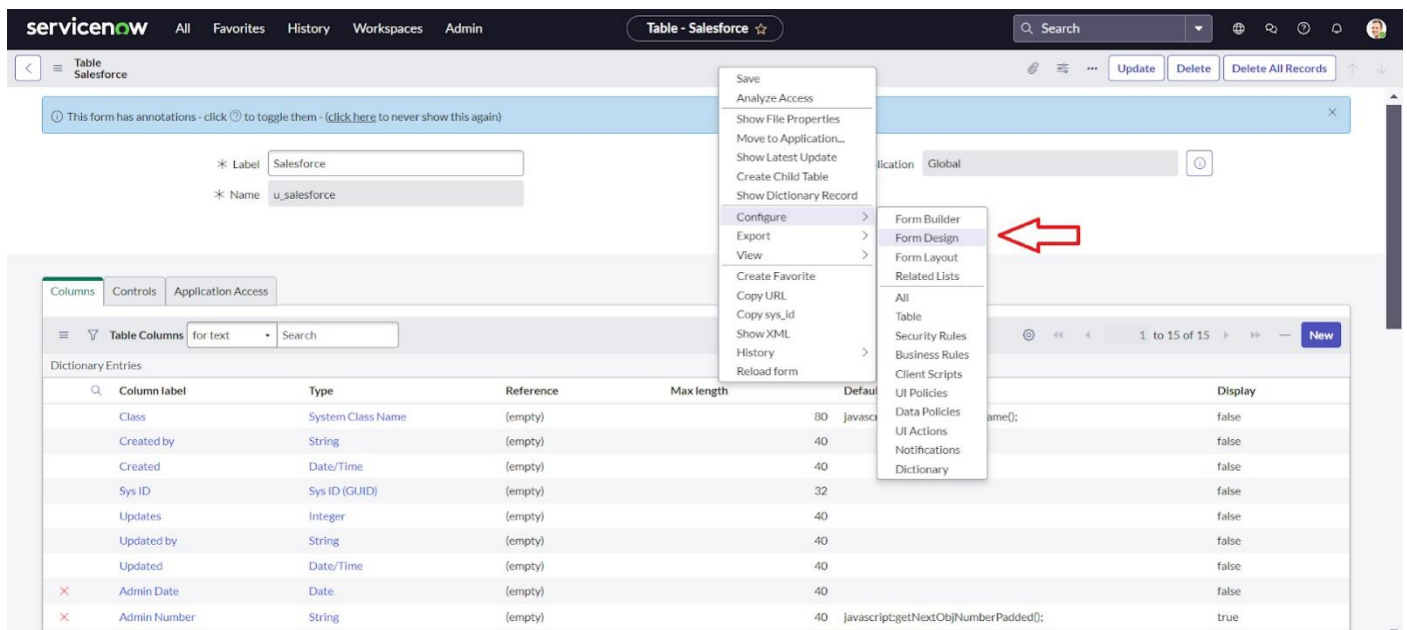
Sub Module 1: Creating Form Design for Salesforce Table

Step 1: All >> System Definition >> Tables.

Step 2: In Label Search for Salesforce and open.



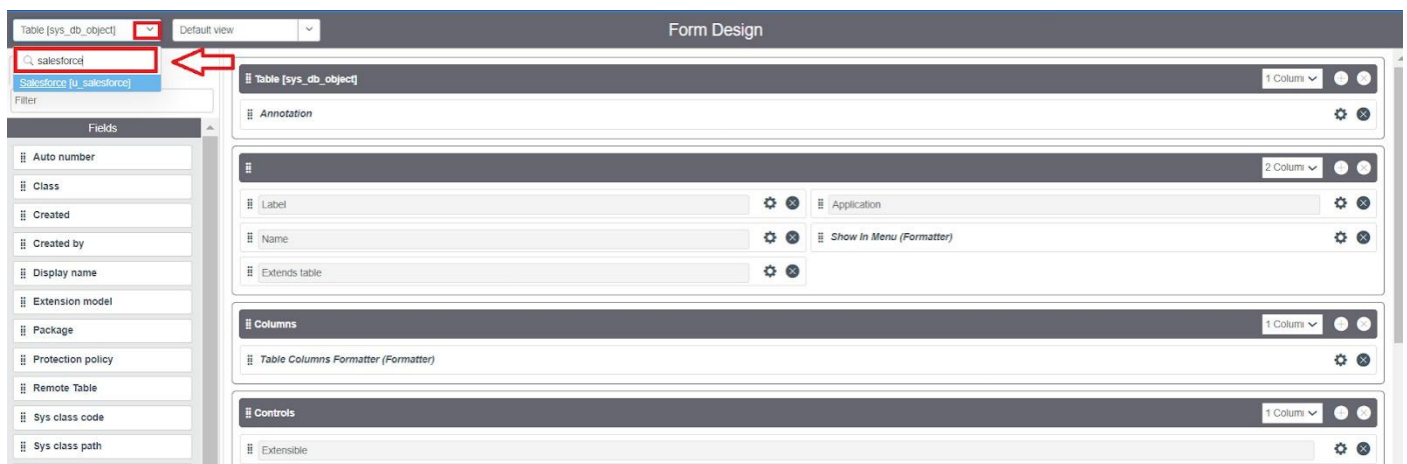
Step 3: Right Click on top Toggle >> Configure >> Form Design



The screenshot shows the ServiceNow interface for configuring the 'Salesforce' table. A right-click context menu is open, and the 'Form Design' option is highlighted. A red arrow points to this option. The background shows the 'Table Columns' section with a list of dictionary entries.

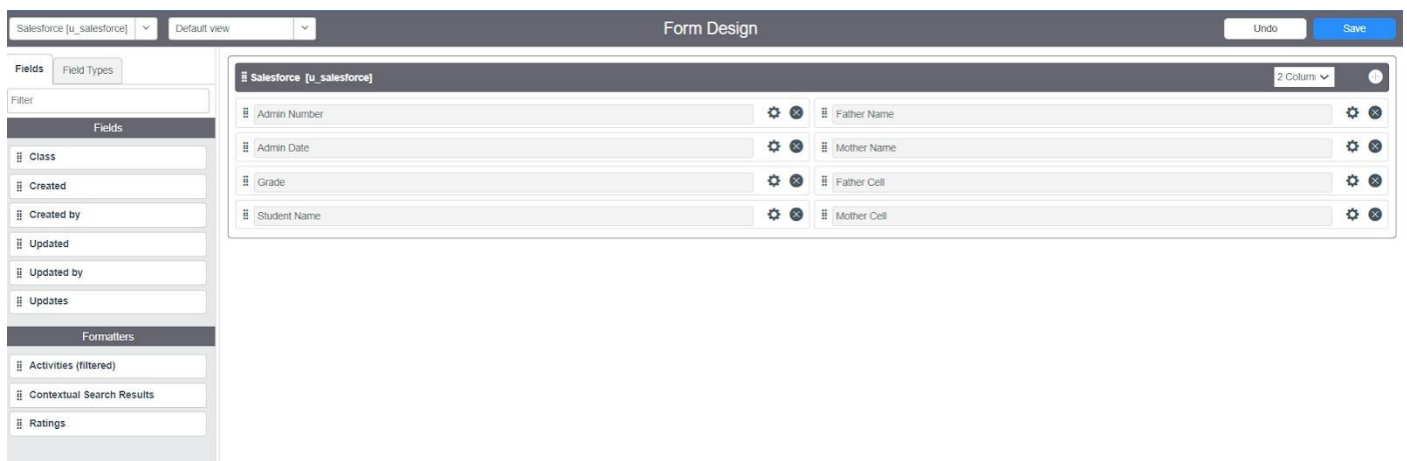
Column label	Type	Reference	Max length	Default	Display
Class	System Class Name	(empty)	80	javascript:nextObj.NumberPadded();	false
Created by	String	(empty)	40		false
Created	Date/Time	(empty)	40		false
Sys ID	Sys ID (GUID)	(empty)	32		false
Updates	Integer	(empty)	40		false
Updated by	String	(empty)	40		false
Updated	Date/Time	(empty)	40		false
Admin Date	Date	(empty)	40		false
Admin Number	String	(empty)	40	javascript:nextObj.NumberPadded();	true

Step 4: In drop down select Salesforce(u_salesforce).



The screenshot shows the 'Form Design' page for the 'Salesforce [u_salesforce]' table. The dropdown menu at the top left is open, and 'Salesforce [u_salesforce]' is selected. A red arrow points to the dropdown menu. The main area shows the form design for the 'Salesforce [u_salesforce]' table, with fields like 'Label', 'Name', and 'Extends table' visible.

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



The screenshot shows the 'Form Design' page for the 'Salesforce [u_salesforce]' table. The dropdown menu at the top left is open, and 'Salesforce [u_salesforce]' is selected. A red arrow points to the dropdown menu. The main area shows the form design for the 'Salesforce [u_salesforce]' table, with fields like 'Admin Number', 'Admin Date', 'Grade', 'Student Name', 'Father Name', 'Mother Name', 'Father Cell', and 'Mother Cell' visible.

Step 6: Save

Sub Module 2: Creating Form Design for Admission Table

Step 1: Follow the same steps as Activity 1, Configure the fields as below and save.

The screenshot shows the 'Form Design' interface for the 'Admission' table. The sidebar on the left contains 'Fields' and 'Formatters' sections. The main area displays a form layout with the following sections and fields:

- Admission by admission** (1 Col):
 - Process Flow (Formater)
- Admission Details** (2 Col):
 - Admission Number
 - Admission Date
 - Purpose of join
 - Grade
 - Student Name
 - Fee
 - Father Name
 - Father Cell
 - Mother Name
 - Mother Cell
 - Admission Status
- Comments** (1 Col):
 - Comments
- School Details** (2 Col):
 - School Area
 - School
- Address** (2 Col):
 - Phone No
 - Mandal
 - City
 - District

Sub Module 3: Creating Form Design for Student progress Table

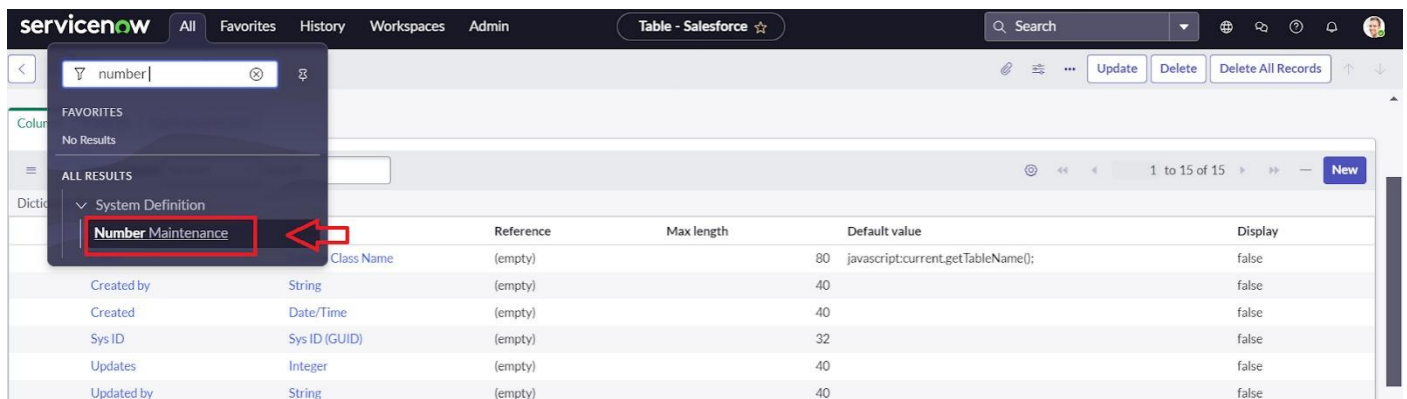
Step 1: Follow the same steps as Activity1, Configure the fields as below and save.

The screenshot shows the 'Form Design' interface for the 'Student Progress' table. The sidebar on the left contains 'Fields' and 'Formatters' sections. The main area displays a form layout with the following sections and fields:

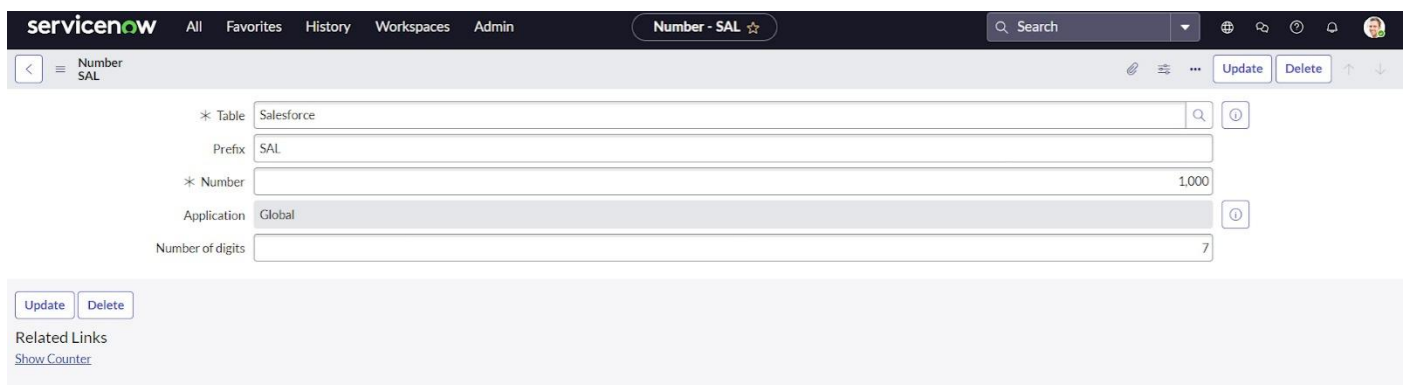
- New Section** (1 Col):
 - Admission Number
- Student Progress** (2 Col):
 - Admission Number Grade
 - Admission Number Father Name
 - Admission Number Mother Name
 - Admission Number Father Cell
 - Admission Number Mother Cell
 - Telugu
 - Hindi
 - English
 - Maths
 - Science
 - Total
 - Percentage
 - Result

▪ Module 5: Number Maintenance

Step 1: All >> Number Maintenance >> New



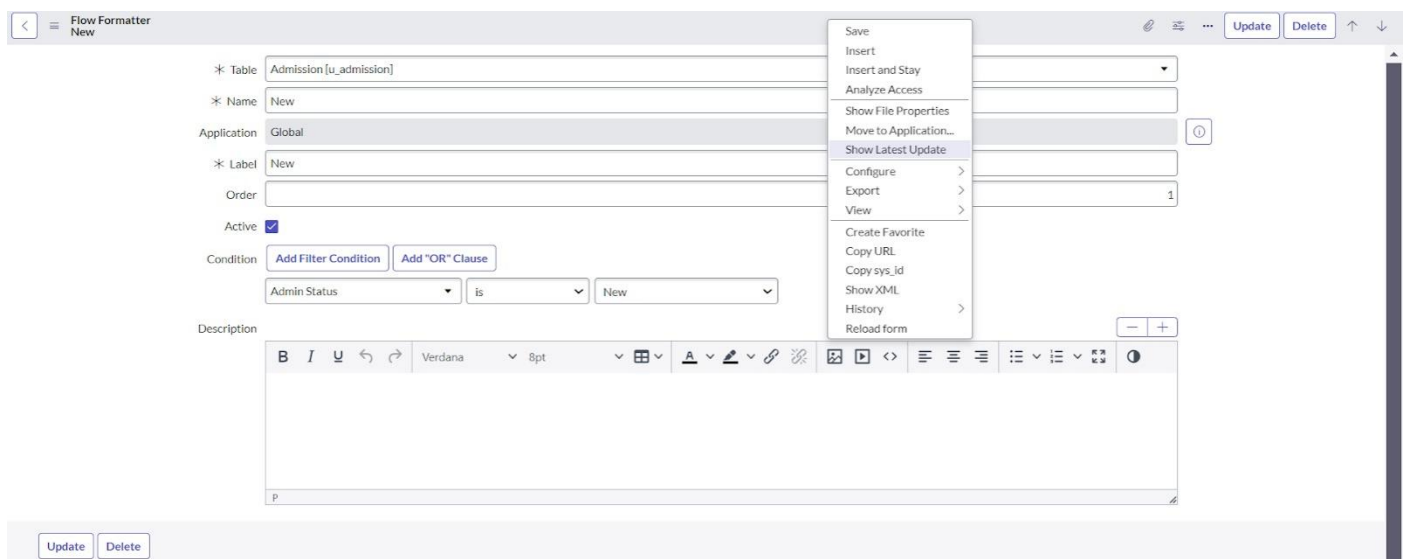
Step 2: Fill the details >> Submit.



▪ Module 6: Process Flow

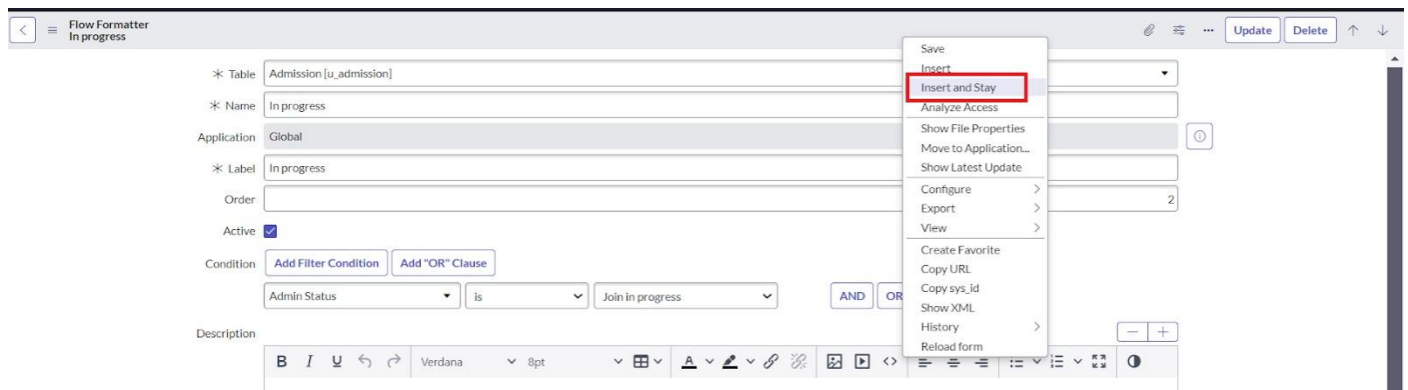
Step 1: All >> Process Flow>> New.

Step 2: Fill the Details as given Below



Step 3: Right Click on toggle and click on the save.

Step 4: Replace the Name and Label as below and click on Insert on stay.



Step 5: Replace the Name and Label in order and click on Insert on stay.

(Joined >> Rejected >> Rejoined >> Closed >> Cancelled.)

Step 6: Order should be New >> InProgress >> Joined >> Rejected >> Rejoined >> Closed >> Cancelled.

▪ Module 7: Client Script

Sub Module 1: Creating “Auto populate” Client Scripts for Admission Table

Step 1: All >> Client Scripts >> New.

Step 2: Fill the Details as given.

Step 3: Write the Code as below, Enable Isolate script and save.

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 }

```

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.

Sub Module 2: Creating “Pin code Update” Client Scripts for Admission Table

Step 1: Fill the Details as given.

The screenshot shows the 'Client Script' configuration window for a script named 'Pincode Update'. The configuration details are as follows:

- Name:** Pincode Update
- Table:** Admission [u_admission]
- UI Type:** Desktop
- Type:** onChange
- Field name:** Pincode
- Application:** Global
- Active:** ☒
- Inherited:** ☐
- Global:** ☒
- Description:** (Empty text box)
- Messages:** (Empty text box)
- Script:**

```

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 == '509358')
7   {
8     g_form.setValue('u_mandal', 'kadthal');
9     g_form.setValue('u_city', 'kadthal');

```

Step 2: 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  
}
```

Sub Module 3: Creating “Disable Fields” Client Scripts for Student progress Table

Step 1: Fill the Details as given.

Step 2: 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);

}

Sub Module 4: Creating “Total Update” Client Scripts for Student progress Table

Step 1: Fill the Details as given.

Step 2: Write the Code as below, Enable Isolate script and save.

servicenow All Favorites History Workspaces Admin Client Script - Total Up...

Client Script
Total Update

You are editing a record in the Global application (cancel)

Name	Total Update	Application	Global
Table	Student Progress [u_student_progress]	Active	<input checked="" type="checkbox"/>
UI Type	All	Inherited	<input type="checkbox"/>
Type	onChange	Global	<input checked="" type="checkbox"/>
Field name	Social		
Description			
Messages			
Script	<pre>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 }</pre>		

Isolate script ☒

```
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);  
    }  
}
```

Sub Module 5: Creating “Result” Client Scripts for Student progress Table

Step 1: Fill the Details as given.

The screenshot shows the 'Client Script' configuration window for the 'Result' field. The 'Name' is 'Result', 'Table' is 'Student Progress [u_student_progress]', 'UI Type' is 'All', 'Type' is 'onChange', and 'Field name' is 'Percentage'. The 'Application' is set to 'Global', 'Active' is checked, 'Inherited' is unchecked, and 'Global' is checked. The 'Description' and 'Messages' fields are empty. The 'Script' area contains the following code:

```
1 function onChange(control, oldValue, newValue, isLoading, isTemplate) {  
2   if (isLoading || newValue === '') {  
3     return;  
4   }  
5  
6   //Type appropriate comment here, and begin script below  
7   if(newValue) {  
8     var a = parseInt(g_form.getValue('u_percentage')); // Convert the value to an integer for comparison  
9     if(a >= 0 && a <= 59){  
10      g_form.setValue('u_result','Fail');  
11    } else if(a >= 60 && a <= 100) {  
12      g_form.setValue('u_result','Pass');  
13    } else {
```

Step 2: 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');

}

}

}

```

Sub Module 6: Creating “Percentage” Client Scripts for Student progress Table

Step 1: Fill the Details as given.

The screenshot shows the Salesforce Client Script configuration interface. The script is named 'Percentage' and is associated with the 'Student Progress [u_student_progress]' table. The UI Type is set to 'All', the Type is 'onChange', and the Field name is 'Total'. The Application is set to 'Global'. The 'Active' checkbox is checked, and the 'Global' checkbox is also checked. The 'Isolate script' checkbox is checked. 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)*100;
    g_form.setValue('u_percentage', Percentage+'%');
}

```

Step 2: 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+'%');

}



Outcome:

<SalesforceNew record

Admin NumberSAL0001078

Admin Date

Grade-- None --

Student Name

Father Name

Mother Name

Mother Cell

Father Cell

Submit

<AdmissionNew record

NewIn progressJoinedRejectedRejoinedClosedCancelled

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 DetailsAddress

School Area-- None --

School-- None --

Submit

<New SectionNew 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

Conclusion:

The project “Educational Organisation Using ServiceNow” successfully demonstrates how digital automation can simplify and improve the management of educational institutions. By using ServiceNow, we were able to centralize student data, automate workflows, and create an efficient platform for admissions, student progress tracking, and communication between staff and students. This solution reduces manual effort, saves time, and ensures accuracy in handling institutional processes. Overall, the project highlights the importance of using modern IT service management tools to build a smarter and more reliable educational system.

