

# **EDUCATIONAL ORGANIZATION USING SERVICENOW**

**Team Id: NIM2025TMID13998**

**Team Members: 4**

**Team Leader: SANJAY V**

**Team Member 1 : PREETHI S**

**Team Member 2 : TAMILARASI V**

**Team Member 3: CHRISTY DAFNI V**

## **Problem Statement:**

**In educational organizations, managing students, faculty, and administrative staff often becomes challenging due to large volumes of users and different levels of access requirements. Without a structured system, role assignment, group management, and secure access become inefficient and error-prone.**

## **Objective:**

**To implement ServiceNow for user, group, and role management in an educational organization, ensuring secure access, smooth collaboration between staff and students, and automated workflows for academic and administrative tasks.**

## **Skills:**

**ServiceNow Administration**

**User, Group, and Role Management**

**Access Control Lists (ACLs) in ServiceNow**

**Workflow Automation (Flow Designer)**

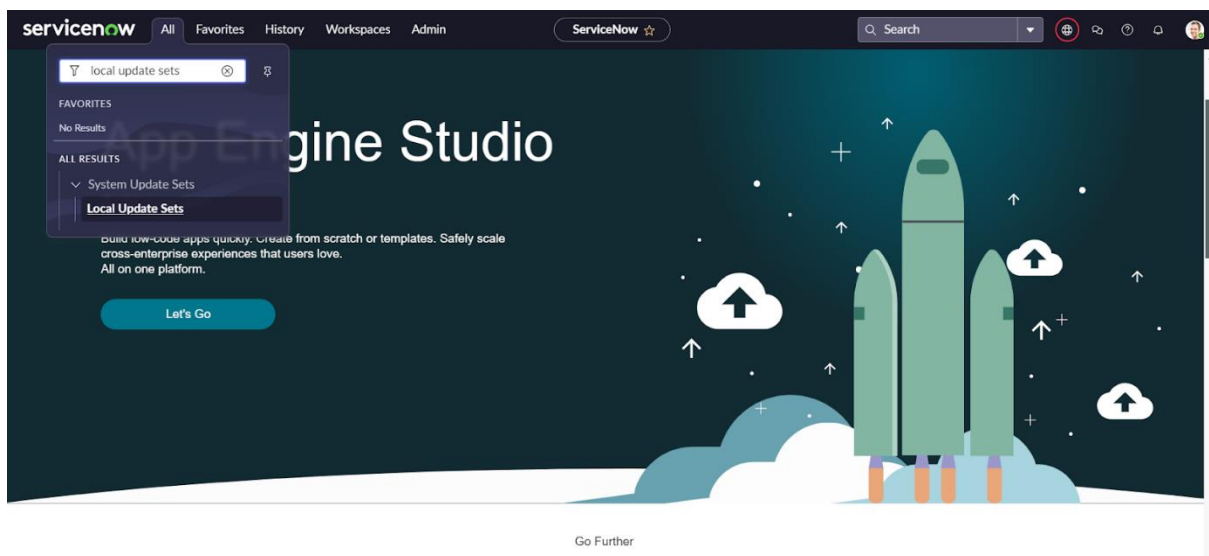
# IT Service Management (ITSM) in Education Context

## Milestone 1 :

### Creating a Update Set

#### 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 In progress

Parent

Release date

Description

Submit Submit and Make Current

## Milestone 2 :

### Creating a Table

#### Activity1: Creating Salesforce Table.

- All >> Tables.

servicenow All Favorites History Workspaces Admin Import Tables

tables

Tables

Tables & Columns

Decision Tables

Remote Tables

Tables

Definitions

System Diagnostics

Session Debug

Debug SQL (Large Tables)

System Import Sets

Created by user Filename Active Expiration days Expire on date Expired

No records to display

- Click on new

servicenow All Favorites History Workspaces Admin Tables

Tables Name Search

Actions on selected rows... New

All > Update name is not empty

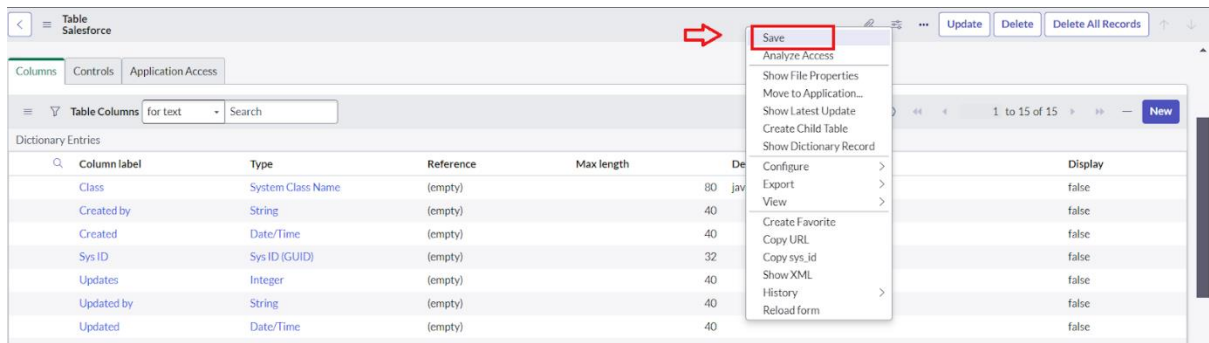
Label	Name	Extends table	Extensible	Updated
Adaptive Authentication Event	adaptive_auth_event	(empty)	false	2024-03-29 07:44:59
Agent Assist Recommendation	agent_assist_recommendation	Application File	false	2023-10-06 15:44:09
MID Server File	agent_file	(empty)	false	2023-10-06 15:29:08
Record Producer 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.

- 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 .

Column label	Type	Reference	Max length
Admin Date	Date	(empty)	40
Admin Number	String	(empty)	40
Father Cell	String	(empty)	40
Father Name	String	(empty)	40
Grade	Choice	(empty)	40
Mother Cell	String	(empty)	40
Mother Name	String	(empty)	40
Student Name	String	(empty)	40

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



- Click on controls >> Enable Extensible.

Controls

Extensible ☒

Live feed ☐

Prefix

Number

Number of digits

Create access controls ☒

\* User role

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

Choice List Specification

Calculated Value

Default Value

Use dynamic default ☒

Dynamic default value

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

servicenow

Dictionary Entry - Grade

Access Controls

Choices (13)

Attributes

Labels (1)

Dictionary Overrides

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

Insert a new row...

## Activity2: Creating Admission Table

- Create an Admission Table with Columns given.
- Select Extends Table >> Salesforce and also Select Add module to menu >> Salesforce.
- Create Fields as shown

ServiceNow interface for creating a new table record. The form includes fields for Label (Admission), Name (u\_admission), Application (Global), Create module (checked), Create mobile module (checked), and Add module to menu (Salesforce). The Extends table is set to Salesforce. Below the form is a section for defining columns, with a search bar and a table of 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.getTable();	false

Table Admission - Columns tab. The table lists dictionary entries for the Admission table. The entries include Sys ID, Admin Status, Admission Number, Area, City, Comments, District, Fee, House No, Mandal, Pincode, Purpose of join, School, School Area, and Class. The 'School' entry is highlighted.

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

- Create choice for Admin Status as:

Dictionary Entry Admin Status

Related Links: [Show Table](#), [Run Point Scan](#), [Advanced view](#)

Access Controls: **Choices (7)** | Attributes | Labels (1) | Dictionary Overrides

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	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	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

- Create choice for School as:

Access Controls: **Choices (2)** | Attributes | Labels (1) | Dictionary Overrides

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

- Create choice for School Area as:

Access Controls: **Choices (2)** | Attributes | Labels (1) | Dictionary Overrides

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

### Activity3: 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...				

### Milestone3: Form Layout

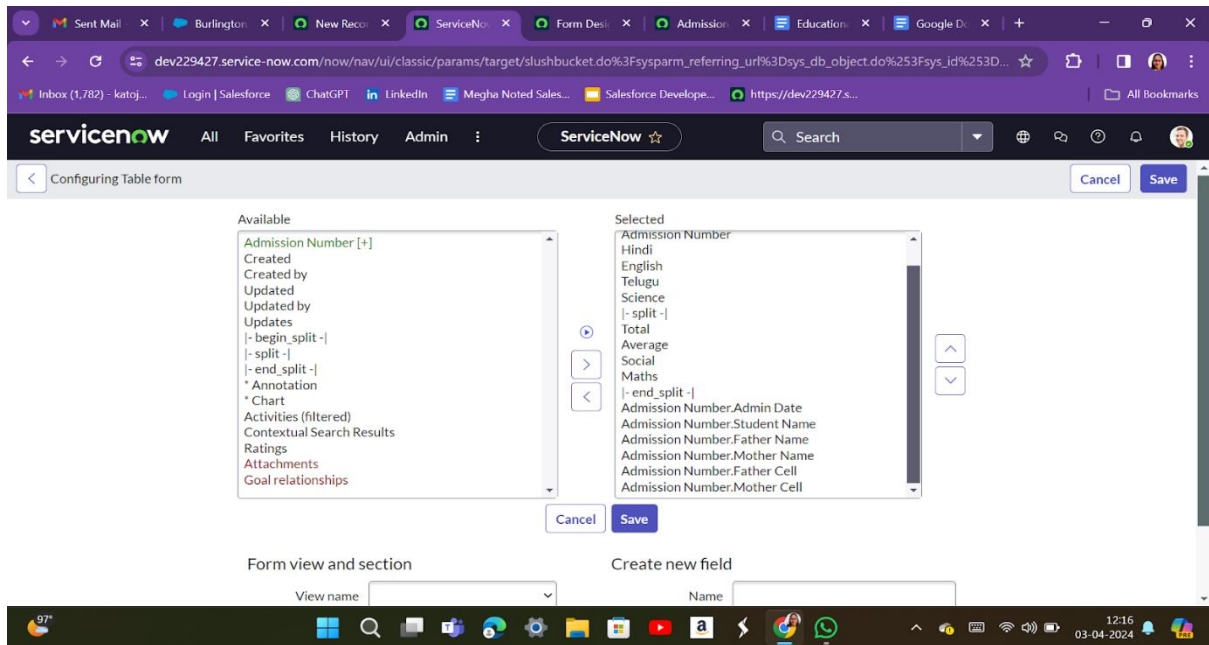
#### Activity1: Configuring Table form for Student Progress Table

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

- Click on Admission Number [+].



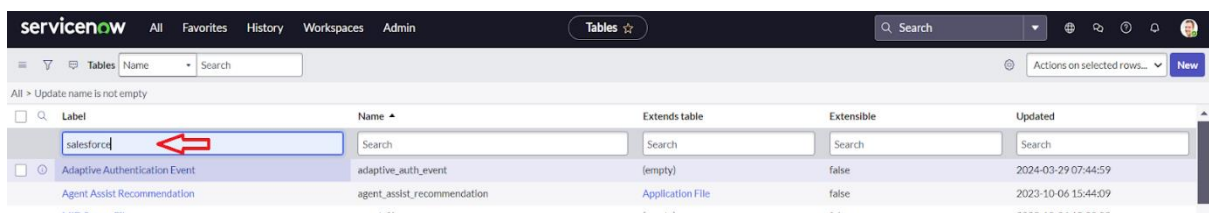
- Select below Admission Number fields in Available side and send it to selected side as below >> save.



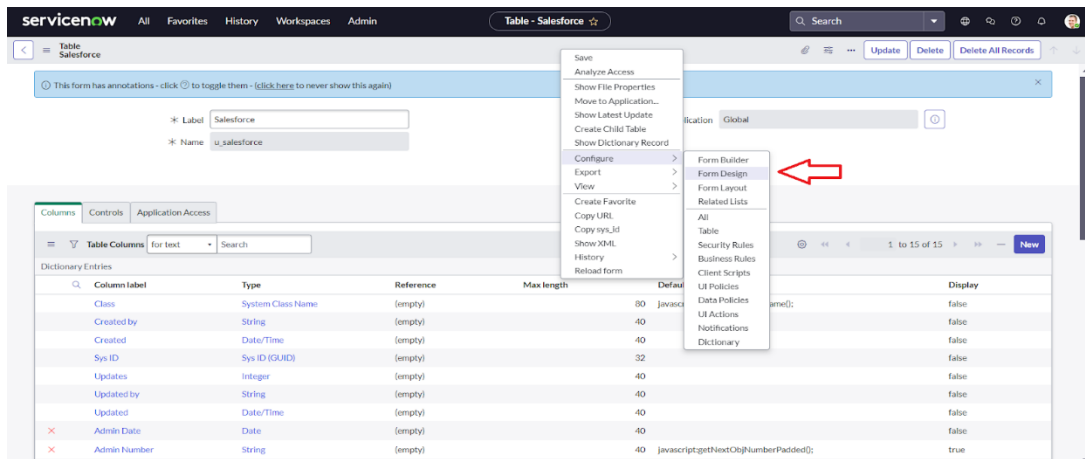
## Milestone4:Form Design

### Activity1: Creating Form Design for Salesforce Table

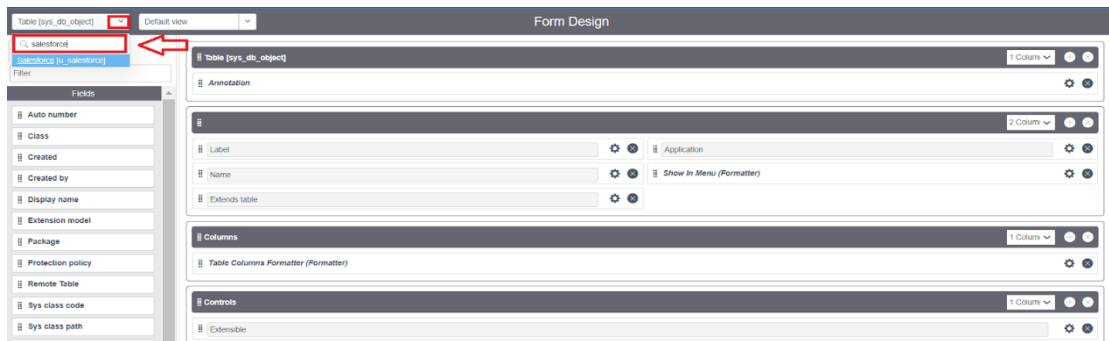
1. All >> System Definition >> Tables .
2. In Label Search for Salesforce and open .



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



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



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



6. Save.

## Activity2: Creating Form Design for Admission Table

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

### Activity3: Creating Form Design for Student progress Table

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

### Milestone5: Number Maintenance

#### Activity1: Creating Number Maintenance for Admin Number

- All >> Number Maintenance >> New

Class Name	Reference	Max length	Default value	Display
Created by	(empty)	40	javascript:current.getTableName();	false
Created	(empty)	40		false
Sys ID	Sys ID (GUID)	32		false
Updates	(empty)	40		false
Updated by	(empty)	40		false

- Fill the details >> Submit.

servicenow All Favorites History Workspaces Admin Number - SAL

Update Delete

\* Table Salesforce

Prefix SAL

\* Number 1000

Application Global

Number of digits 7

Update Delete

Related Links  
Show Counter

## Milestone6: Process Flow

### Activity1: Creating Process Flow for Admission Table

- All >> Process Flow>> New.
- Fill the Details as given Below

Flow Formatter New

Update Delete

\* Table Admission [u\_admission]

\* Name New

Application Global

\* Label New

Order

Active ☒

Condition Add Filter Condition Add "OR" Clause

Admin Status is New

Description

Save  
Insert  
Insert and Stay  
Analyze Access  
Show File Properties  
Move to Application...  
Show Latest Update  
Configure  
Export  
View  
Create Favorite  
Copy URL  
Copy sys\_id  
Show XML  
History  
Reload form

Update Delete

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

Flow Formatter In progress

Update Delete

\* Table Admission [u\_admission]

\* Name In progress

Application Global

\* Label In progress

Order

Active ☒

Condition Add Filter Condition Add "OR" Clause

Admin Status is Join in progress

Description

Save  
Insert  
Insert and Stay  
Analyze Access  
Show File Properties  
Move to Application...  
Show Latest Update  
Configure  
Export  
View  
Create Favorite  
Copy URL  
Copy sys\_id  
Show XML  
History  
Reload form

Update Delete

- 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.

## Milestone7: Client Script

### Activity1: Creating “Auto populate” Client Scripts for Admission Table

- All >> Client Scripts >> New.
- Fill the Details as given.

The screenshot shows the 'Client Script New record' form. The 'Name' field is 'Auto populate', 'Table' is 'Admission [u\_admission]', 'UI Type' is 'Mobile / Service Portal', 'Type' is 'onChange', and 'Field name' is 'Admin Number'. The 'Application' is set to 'Global'. The 'Active' checkbox is checked, 'Inherited' is unchecked, and 'Global' is checked. The 'Script' area contains the following code:

```
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 }
```

- 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 .

## Activity2: Creating “Pincode Update” Client Scripts for Admission Table

- Fill the Details as given.

The screenshot shows the Salesforce Client Script configuration page 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:** ☒

The Description and Messages fields are empty. The Script editor 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 == '509358')
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

```

}

```

### Activity3: Creating “Disable Fields” Client Scripts for Student progress Table

- Fill the Details as given.

Client Script  
Disable Fields

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

Name:  Application:  ⓘ

Table:  Active: ☒

UI Type:  Inherited: ☐

Type:  Global: ☒

Description:

Messages:

Script

```

1 function onLoad() {
2     //Type appropriate comment here, and begin script below
3     g_form.setDisabled('u_total',true);
4     g_form.setDisabled('u_percentage',true);
5     g_form.setDisabled('u_result',true);
6 }

```

- 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);

}

#### Activity4: Creating “Total Update” Client Scripts for Student progress Table

- Fill the Details as given.

servicenow

Client Script  
Total Update

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

Name:  Application:  ⓘ

Table:  Active: ☒

UI Type:  Inherited: ☐

Type:  Global: ☒

Field name:

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

```

Isolate script ☒

- 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);

}

}

```

### Activity5: Creating “Result” Client Scripts for Student progress Table

- Fill the Details as given.

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

- Name:** Result
- Table:** Student Progress [u\_student\_progress]
- UI Type:** All
- Type:** onChange
- Field name:** Percentage
- Application:** Global
- Active:** ☒
- Inherited:** ☐
- Global:** ☒

The Script editor 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 <= 100) {
10             g_form.setValue('u_result', 'Pass');
11         } else if (a >= 60 && 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');
        }
    }
}
```

## Activity6: Creating “Percentage” Client Scripts for Student progress Table

- Fill the Details as given.

The screenshot shows the Salesforce Client Script editor interface. At the top, the record name is 'Percentage' and the application is 'Global'. The table is 'Student Progress [u\_student\_progress]' and the field name is 'Total'. The script is configured to run on the 'onChange' event. The script code is as follows:

```
1 function onChange(control, oldValue, newValue, isLoading, isTemplate) {
2   if (isLoading || newValue === '') {
3     return;
4   }
5   //Type appropriate comment here, and begin script below
7   var Total = g_form.getValue('u_total');
8   var Percentage = (Total/600)*100;
9   g_form.setValue('u_percentage',Percentage+'%');
10 }
```

The interface includes fields for Name, Table, UI Type, Type, Field name, Application, Active, Inherited, and Global. There are also buttons for Update and Delete 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+'%');
}
```

## Milestone8: 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

Submit

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

Implementing ServiceNow in an educational organization helps streamline administrative tasks, improve communication, and enhance overall efficiency. By automating processes such as student support, IT services, HR requests, and facility management, the institution can save time and reduce manual errors. ServiceNow also provides a centralized platform where students, faculty, and staff can easily access services, track requests, and resolve issues quickly. This not only increases transparency but also improves the user experience. Ultimately, adopting ServiceNow enables educational organizations to focus more on delivering quality education and innovation rather than being slowed down by operational challenges.