

M.A.M COLLEGE OF ENGINEERING

PROJECT NAME: Educational Organisation Using ServiceNow

TEAM MEMBERS:

1.NAVEEN.S

2.SURESH KUMAR.R

3.SHARUKESH.M

4.HARISH.V

Educational Organisation Using ServiceNow

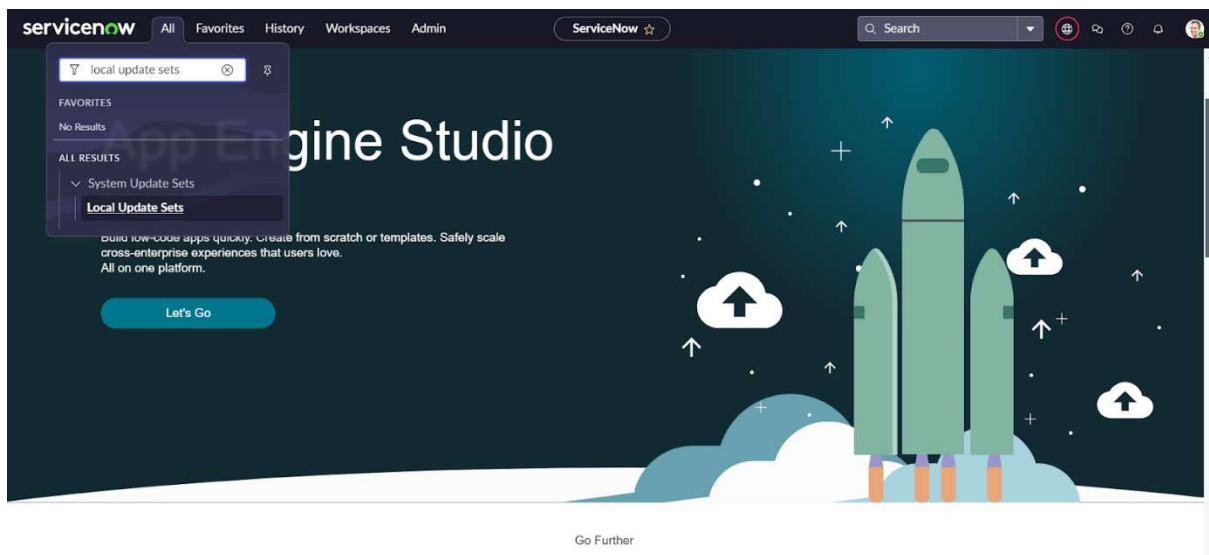
The Educational Management System is a comprehensive platform designed to streamline administrative tasks within educational institutions. It facilitates efficient management of student and teacher data, simplifies the admission process, and provides tools for monitoring student progress.

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.

Update Set - Create New Update Set

* Name: Application:

State:

Parent:

Release date:

Description:

Creating Salesforce Table.

All >> Tables.

Click on new

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

Create columns as given below, Double Click on Column label and Enter the Column labels and click on the tick mark >> Give Type as given .

X

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

Click on controls >> Enable Extensible.

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

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

Creating Admission Table

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

servicenow All Favorites History Workspaces Admin Table - New Record

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

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

* Label Admission
 * Name u_admission
 Extends table Salesforce

Application Global
 Create module ☒
 Create mobile module ☒
 Add module to menu Salesforce

Columns Controls Application Access

Table Columns for text Search

Dictionary Entries

Column label	Type	Reference	Max length	Default value	Display

Submit Cancel

Table Admission

Columns Controls Application Access

Table Columns for text Search 1 to 29 of 29 New

Dictionary Entries

Column label	Type	Reference	Max length	Default value	Display
Sys ID	Sys ID (GUID)	(empty)	32		false
Admin Status	Choice	(empty)	40		false
Admission Number	Reference	Salesforce	32		false
Area	String	(empty)	40		false
City	String	(empty)	40		false
Comments	String (Full UTF-8)	(empty)	255		false
District	String	(empty)	40		false
Fee	Price	(empty)	20		false
House No	String	(empty)	40		false
Mandal	String	(empty)	40		false
Pincode	Choice	(empty)	40		false
Purpose of join	Choice	(empty)	40		false
School	Choice	(empty)	40		false
School Area	Choice	(empty)	40		false
Class	System Class Name	(empty)	80	javascript:current.getTableNamed();	false

- Create choice for Admin Status as:

Dictionary Entry Admin Status

Create Choice List Delete Column Update

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

Access Controls Choices (7) Attributes Labels (1) Dictionary Overrides

Label Search

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

Insert a new row...

- Create choice for Pincode as:

Access Controls

Choices (3)

Attributes

Labels (1)

Dictionary Overrides

≡

▽

Label

Search

⊗

—

Actions on selected rows...

New

Choices

<input type="checkbox"/>	<input type="checkbox"/>	Label	Value	Language	Sequence	Inactive	Updated
<input type="checkbox"/>	<input type="radio"/>	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
+ Insert a new row...							

- Create choice for Purpose of Join as:

Access Controls

Choices (3)

Attributes

Labels (1)

Dictionary Overrides

≡

▽

Label

Search

⊗

—

Actions on selected rows...

New

Choices

□

🔍

Label

Tuition

Coaching

Teacher

Insert a new row...

Value

Tuition

Coaching

Teacher

Language

en

en

en

Sequence

1

2

3

Inactive

false

false

false

Updated

2024-04-02 21:17:09

2024-04-02 21:17:31

2024-04-02 21:17:53

- Create choice for School as:

Access Controls

Choices (2)

Attributes

Labels (1)

Dictionary Overrides

≡

▼

Label

Search

⊗

—

Actions on selected rows...

New

Choices

□

🔍

Label

Value

Language

Sequence

Inactive

Updated

Stanley

Stanley

en

1

false

2024-04-02 21:19:14

Naresh It

Naresh It

en

2

false

2024-04-02 21:19:35

+

Insert a new row...

- Create choice for School Area as:

Access Controls

Choices (2)

Attributes

Labels (1)

Dictionary Overrides

≡

▽

Label

Search

⊗

—

Actions on selected rows...

New

Choices

<div><div><div></div><div>🔍</div></div></div>	Label	Value	Language	Sequence	Inactive	Updated
	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
<div>+</div>	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:

×	Admission Number	Reference	Salesforce	32	false
×	English	String	(empty)	40	false
×	Hindi	String	(empty)	40	false
×	Maths	String	(empty)	40	false
×	Percentage	String	(empty)	40	false
×	Result	String	(empty)	40	false
×	Science	String	(empty)	40	false
×	Social	String	(empty)	40	false
×	Telugu	String	(empty)	40	false
×	Total	String	(empty)	40	false
Insert a new row...					

Configuring Table form for Student Progress Table

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

<	Table student progress		
×	Telugu	String	(empty) 40
×	Total	String	(empty) 40
+	Insert a new row...		

Update Delete Delete All Records

Related Links

[Design Form](#)
[Layout Form](#)
[Layout List](#)
[Show Form](#)
[Show List](#)
[Show Schema Map](#)
[Add to Service Catalog](#)
[Run Point Scan](#)
[Explore REST API](#)

- Click on Admission Number [+].

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

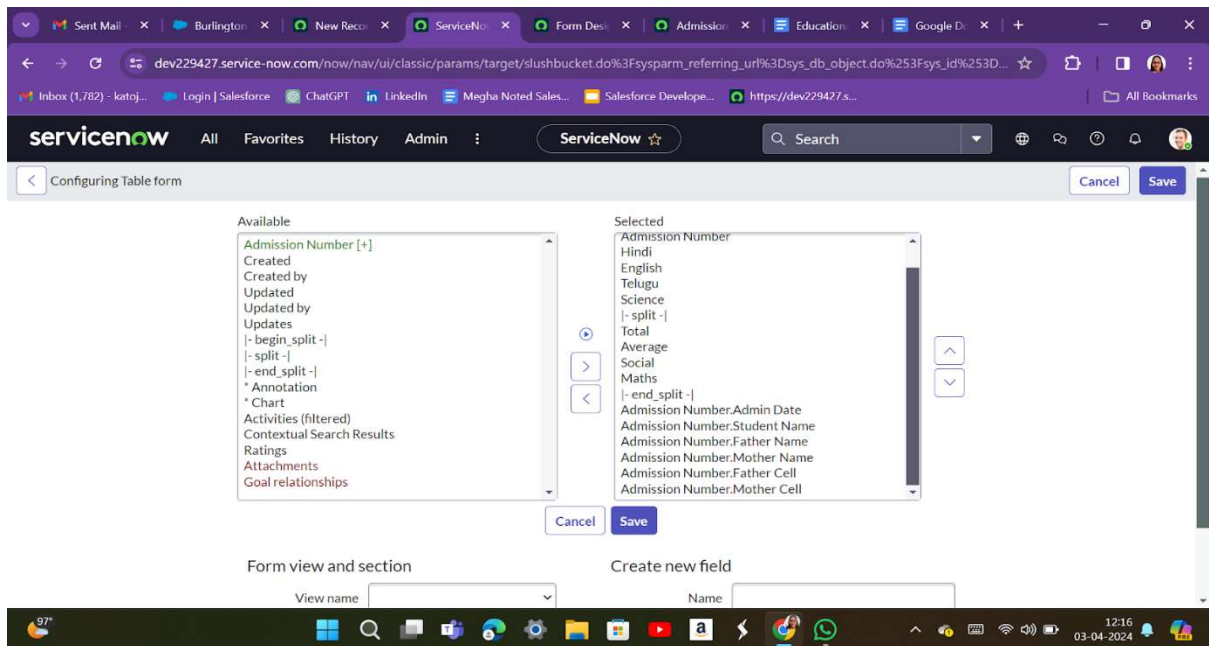
Form view and section

View name Default view

Create new field

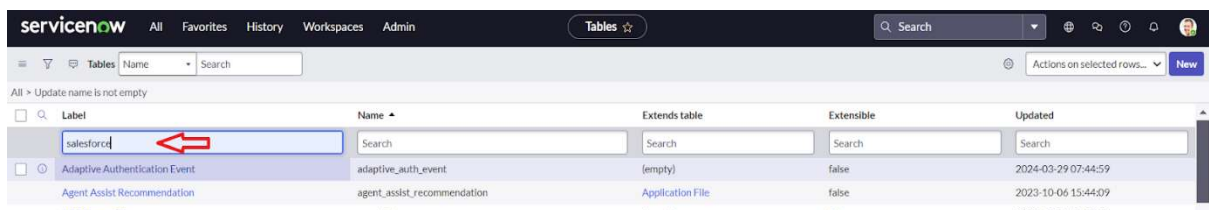
Name

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

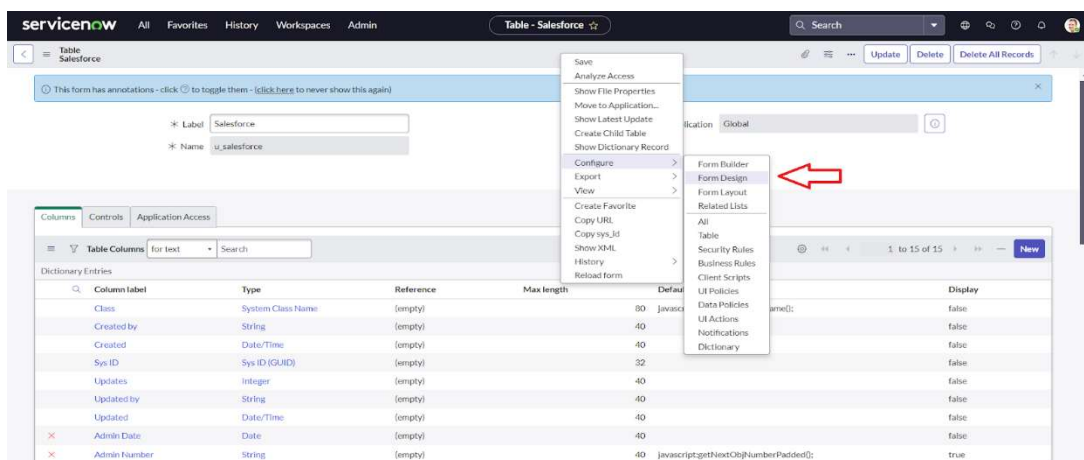


Creating Form Design for Salesforce Table

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



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



4. In drop down select Salesforce(u_salesforce).

The screenshot shows the 'Form Design' interface. On the left, there is a 'Fields' list with various system fields. The main workspace shows a table structure with columns for 'Label', 'Name', 'Extends label', 'Application', 'Show in Menu (Formatter)', 'Columns', 'Table Columns Formatter (Formatter)', and 'Controls', 'Extensible'. A red arrow points to the 'Salesforce' field in the left sidebar.

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

The screenshot shows the 'Form Design' interface for the 'Salesforce' table. The left sidebar shows a list of fields including 'Class', 'Created', 'Created by', 'Updated', 'Updated by', 'Updates', 'Activities (filtered)', 'Contextual Search Results', and 'Ratings'. The main workspace shows a table structure with columns for 'Admin Number', 'Admin Date', 'Grade', 'Student Name', 'Father Name', 'Mother Name', 'Father Cell', and 'Mother Cell'.

6. 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' table. The left sidebar shows a list of fields including 'Admin Number', 'Class', 'Created', 'Created by', 'Updated', 'Updated by', 'Updates', 'Activities (filtered)', 'Contextual Search Results', and 'Ratings'. The main workspace shows a table structure with columns for 'Admission Number', 'Admission Date', 'Purpose of join', 'Student Name', 'Fee', 'Father Name', 'Mother Name', 'Admission Status', 'Comments', 'School Area', 'School', 'Address', 'Phone', 'Mentor', 'City', and 'House No'.

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 'Student Progress (u_stud)'. The interface includes a sidebar with 'Fields' and 'Formatters' sections. The main area displays a form layout with three sections:

- New Section:** Contains a single field 'Admission Number'.
- Section 2:** Contains six fields arranged in two columns: 'Admission Number Grade', 'Admission Number Father Name', 'Admission Number Student Name', 'Admission Number Mother Name', 'Admission Number Father Cell', and 'Admission Number Mother Cell'.
- Student Progress:** Contains six fields arranged in two columns: 'Telugu', 'Total', 'Hindi', 'Percentage', 'English', 'Result', 'Maths', and 'Science'.

Creating Number Maintenance for Admin Number

- All >> Number Maintenance >> New

The screenshot shows the 'servicenow' interface for 'Table - Salesforce'. A search bar contains the text 'number'. A dropdown menu is open, showing 'System Definition' and 'Number Maintenance' (highlighted with a red box). Below the dropdown, a table lists various fields and their properties:

	Class Name	Reference	Max length	Default value	Display
Created by	String	(empty)	40	javascript:current.getTableName();	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

- Fill the details >> Submit.

The screenshot shows the 'servicenow' interface for 'Number - SAL'. The form contains the following fields:

- Table:** Salesforce
- Prefix:** SAL
- Number:** 1,000
- Application:** Global
- Number of digits:** 7

Buttons for 'Update' and 'Delete' are visible at the bottom left. Below the form, there are links for 'Related Links' and 'Show Counter'.

Creating Process Flow for Admission Table

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

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

- Replace the Name and Label in order and click on Insert on stay.

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

- Order should be New >> InProgress >> Joined >> Rejected >> Rejoined >> Closed >> Cancelled.

Creating “Auto populate” Client Scripts for Admission Table

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

- Write the Code as below, Enable Isolate script and Save.

```
function onChange(control, oldValue, newValue, isLoading, isTemplate) {
    if (isLoading || newValue === '') {
        return;
    }
}
```

//Type appropriate comment here, and begin script below

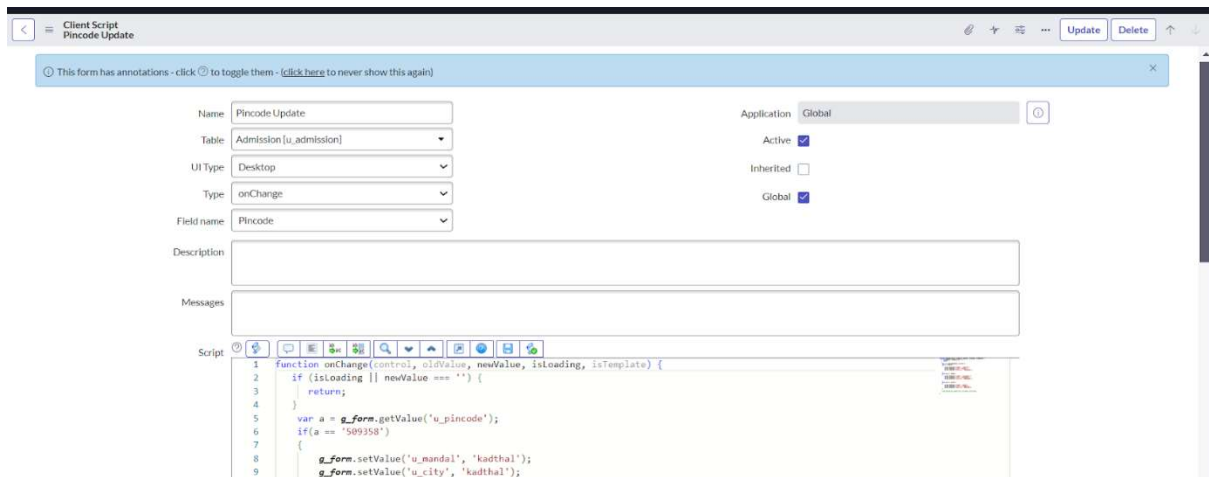
```
var a = g_form.getReference('u_admission_number');
g_form.setValue('u_admin_date',a.u_admin_date);
g_form.setValue('u_grade',a.u_grade);
g_form.setValue('u_student_name',a.u_student_name);
g_form.setValue('u_father_name',a.u_father_name);
g_form.setValue('u_mother_name',a.u_mother_name);
g_form.setValue('u_father_cell',a.u_father_cell);
g_form.setValue('u_mother_cell',a.u_mother_cell);
```

```
g_form.setDisabled('u_admin_date',a.u_admin_date);
g_form.setDisabled('u_grade',a.u_grade);
g_form.setDisabled('u_student_name',a.u_student_name);
g_form.setDisabled('u_father_name',a.u_father_name);
g_form.setDisabled('u_mother_name',a.u_mother_name);
g_form.setDisabled('u_father_cell',a.u_father_cell);
g_form.setDisabled('u_mother_cell',a.u_mother_cell);
}
```

Note: Make sure the Field names should be the same as you created .

Creating “Pincode Update” Client Scripts for Admission Table

- Fill the Details as given.



- Write the Code as below, Enable Isolate script and Save.

```
function onChange(control, oldValue, newValue, isLoading, isTemplate) {
    if (isLoading || newValue === '') {
        return;
    }
    var a = g_form.getValue('u_pincode');
    if(a == '509358')
    {
        g_form.setValue('u_mandal', 'kadthal');
        g_form.setValue('u_city', 'kadthal');
        g_form.setValue('u_district', 'RangaReddy');
    }
    else if(a == '500081')
    {
        g_form.setValue('u_mandal', 'karmanghat');
        g_form.setValue('u_city', 'karmanghat');
        g_form.setValue('u_district', 'RangaReddy');
    }
    else if(a == '500079')
```

```

{
g_form.setValue('u_mandal', 'Abids');
g_form.setValue('u_city', 'AsifNagar');
g_form.setValue('u_district', 'Hyderabad');
}

```

//Type appropriate comment here, and begin script below

```

}

```

Creating “Disable Fields” Client Scripts for Student progress Table

- Fill the Details as given.

The screenshot shows the Salesforce Client Script configuration interface. The title bar indicates the script is named 'Disable Fields'. A blue banner at the top states: 'This form has annotations - click ⓘ to toggle them - (click here to never show this again)'. The configuration fields are as follows:

- Name:** Disable Fields
- Table:** Student Progress [u_student_progress]
- UI Type:** All
- Type:** onLoad
- Application:** Global
- Active:** ☒
- Inherited:** ☐
- Global:** ☒
- Description:** (Empty text area)
- Messages:** (Empty text area)
- 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.

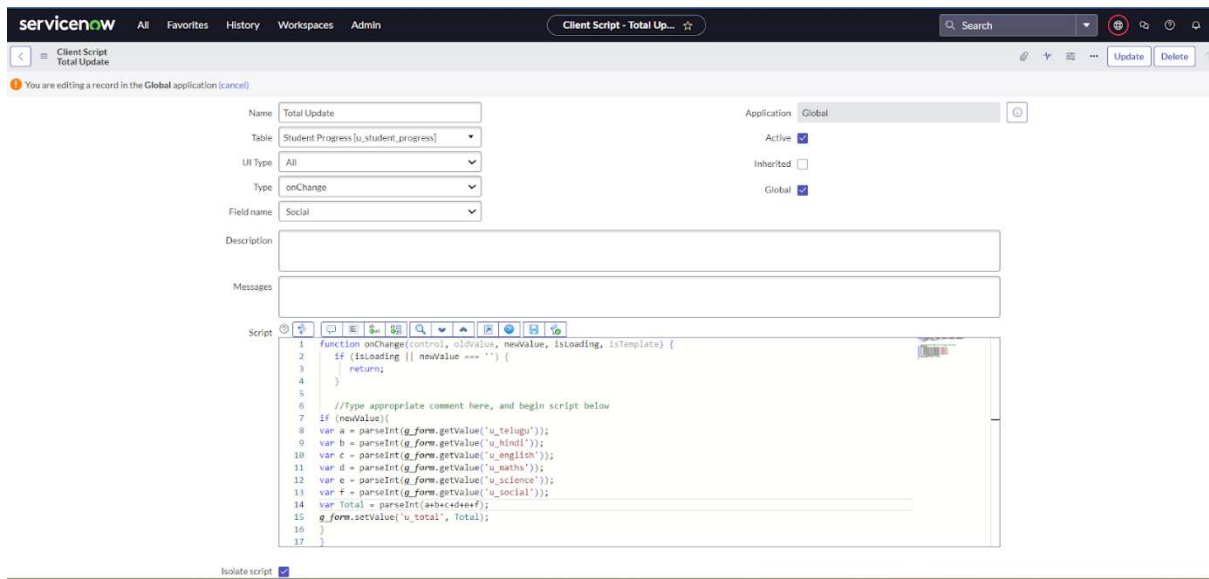
```

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);
}

```

Creating “Total Update” 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_telugu'));
  var b = parseInt(g_form.getValue('u_hindi'));
  var c = parseInt(g_form.getValue('u_english'));
  var d = parseInt(g_form.getValue('u_maths'));
  var e = parseInt(g_form.getValue('u_science'));
  var f = parseInt(g_form.getValue('u_social'));
  var Total = parseInt(a+b+c+d+e+f);
  g_form.setValue('u_total', Total);
}
}

```

Creating “Result” Client Scripts for Student progress Table

- Fill the Details as given.

The screenshot shows the 'Client Script' editor for a table named 'Student Progress'. The script is named 'Result' and is of type 'onChange' for the 'Percentage' field. 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 <= 59){
10      g_form.setValue('u_result', 'Fail');
11    } else if(a >= 60 && a <= 100) {
12      g_form.setValue('u_result', 'Pass');
13    } else {
14      // Handle the case if a is out of range (optional)
15      g_form.addErrorMessage('Percentage should be between 0 and 100.');
```

- 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.');
```

Creating “Percentage” Client Scripts for Student progress Table

- Fill the Details as given.

The screenshot shows the Salesforce Client Script editor. The 'Name' field is 'Percentage'. The 'Table' is 'Student Progress [u_student_progress]'. The 'UI Type' is 'All'. The 'Type' is 'onChange'. The 'Field name' is 'Total'. The 'Application' is 'Global'. The 'Active' checkbox is checked. The 'Inherited' checkbox is unchecked. The 'Global' checkbox is checked. The 'Description' field is empty. The 'Messages' field is empty. The 'Script' field 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   var Total = g_form.getValue('u_total');
8   var Percentage = (Total/600)*100;
9   g_form.setValue('u_percentage', Percentage+'%');
10 }
```

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

- Write the Code as below, Enable Isolate script and Save.

```
function onChange(control, oldValue, newValue, isLoading, isTemplate) {
  if (isLoading || newValue === '') {
    return;
  }
}
```

//Type appropriate comment here, and begin script below

```
var Total = g_form.getValue('u_total');
```

```
var Percentage = (Total/600)*100;
```

```
g_form.setValue('u_percentage', Percentage+'%');
```

```
}
```

Result

The screenshot shows the Salesforce form with the following fields:

- Admin Number: SAL0001078
- Admin Date: [Empty]
- Grade: -- None --
- Student Name: [Empty]
- Father Name: [Empty]
- Mother Name: [Empty]
- Mother Cell: [Empty]
- Father Cell: [Empty]

The 'Submit' button is at the bottom left.

Admission

New record

Submit

New

In progress

Joined

Rejected

Rejoined

Closed

Cancelled

Admission Number

Admin Date

Purpose of join

-- None --

Grade

-- None --

Student Name

Fee

\$

0.00

Father Name

Father Cell

Mother Name

Mother Cell

Comments

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

Total

Hindi

Percentage

English

Result

Maths

Science

Social

Submit