

Project Title : Educational Organization using ServiceNow

Team Id: NM2025TMID18994

Team Members:

Team Leader: Freddy Stephen S

Team Member 1 : Lokesh N

Team Member 2 : Anand Kumar S

Team Member 3 : Karthikeyan S

Team Member 4 : Akthar Hussain

Problem Statement : Student management

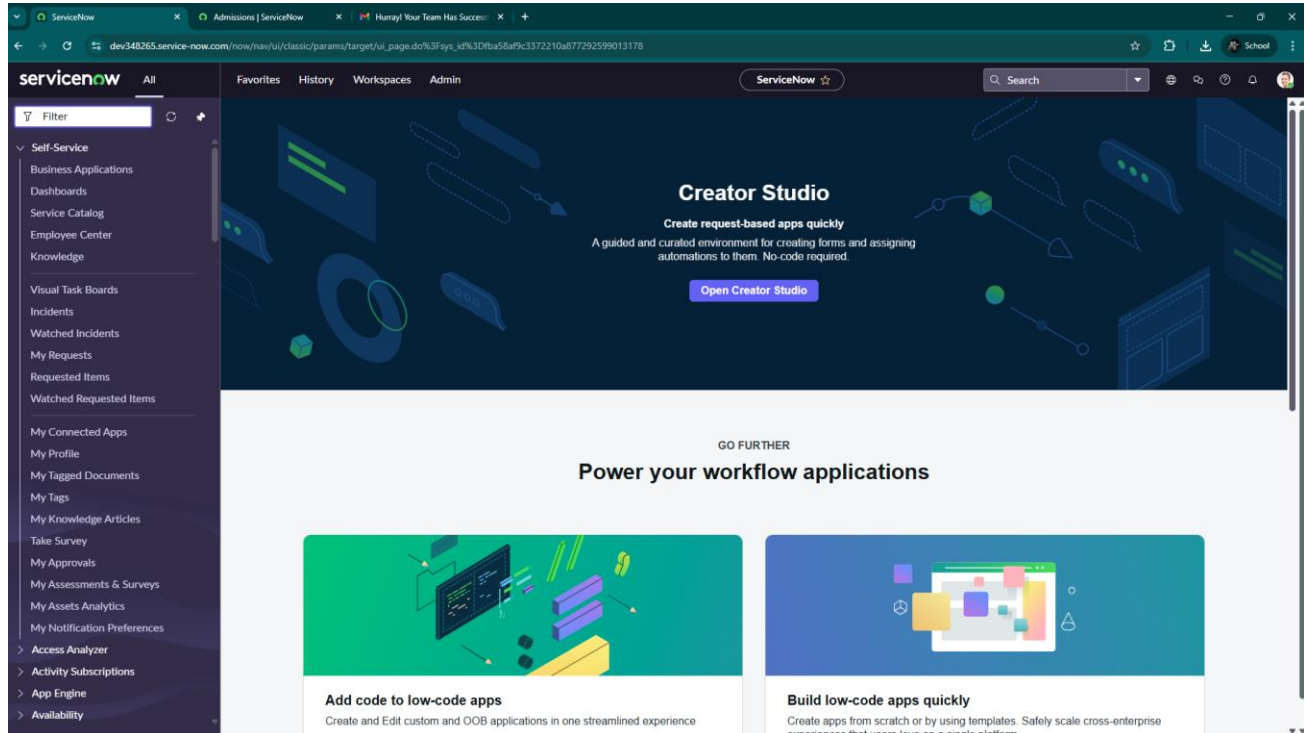
Objective : To Create Educational Organization

Skills : ServiceNow

INTRODUCTION :

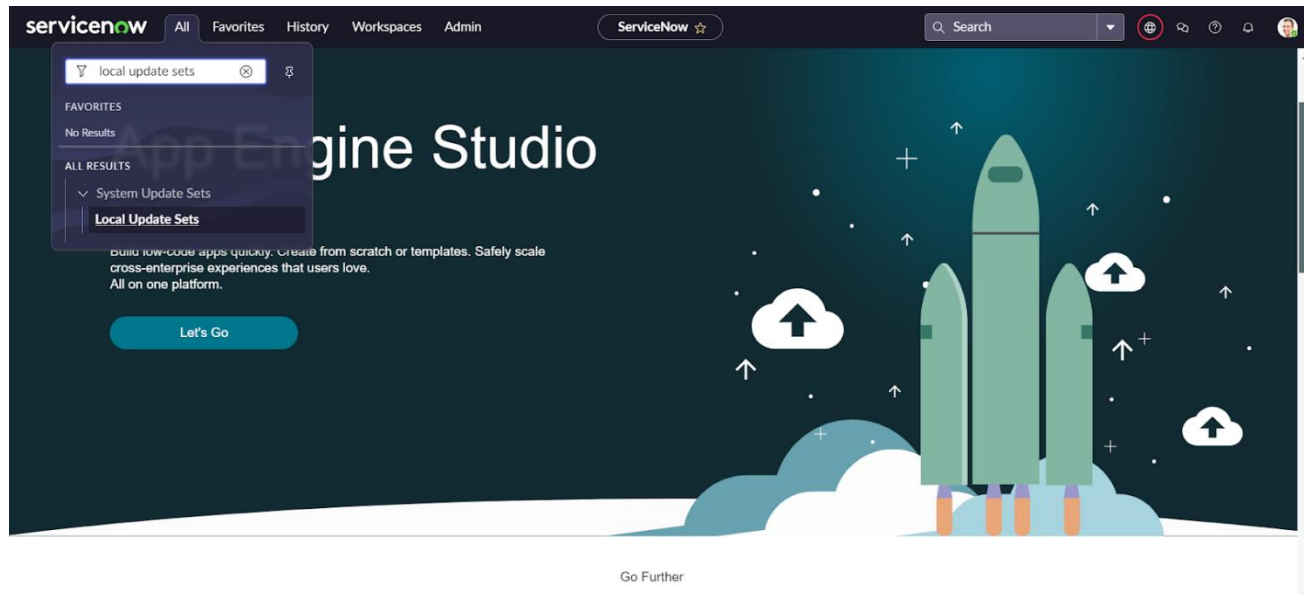
The Educational Management System is a comprehensive platform designed to streamline administrative tasks within educational institutions. It facilitates efficient management of student and teacher data, simplifies the admission process, and provides tools for monitoring student progress.

Setting up ServiceNow Instance : (Milestone 1)

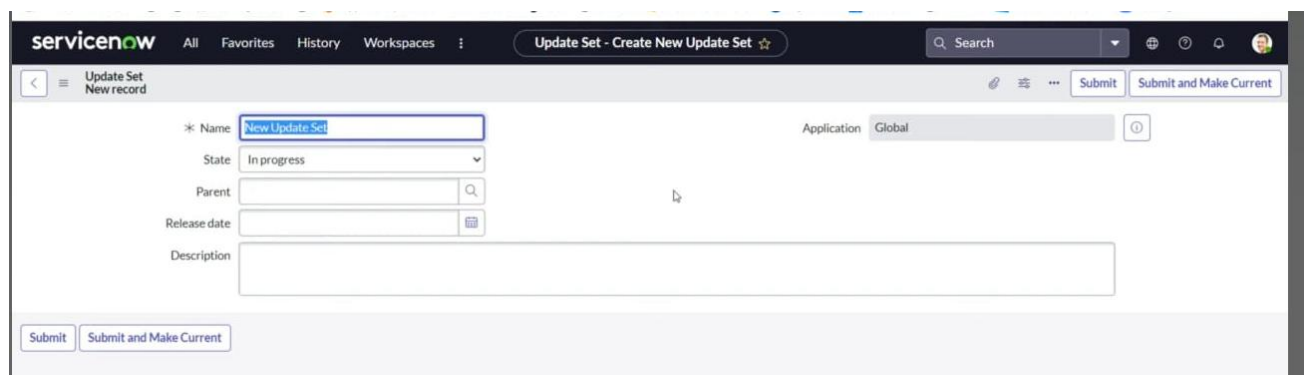


1. Sign up for a developer account on the ServiceNow Developer site “<https://developer.servicenow.com>”.
2. Once logged in, navigate to the "Personal Developer Instance" section.
3. Click on "Request Instance" to create a new ServiceNow instance.
4. Fill out the required information and submit the request.
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 : (Milestone 2)



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



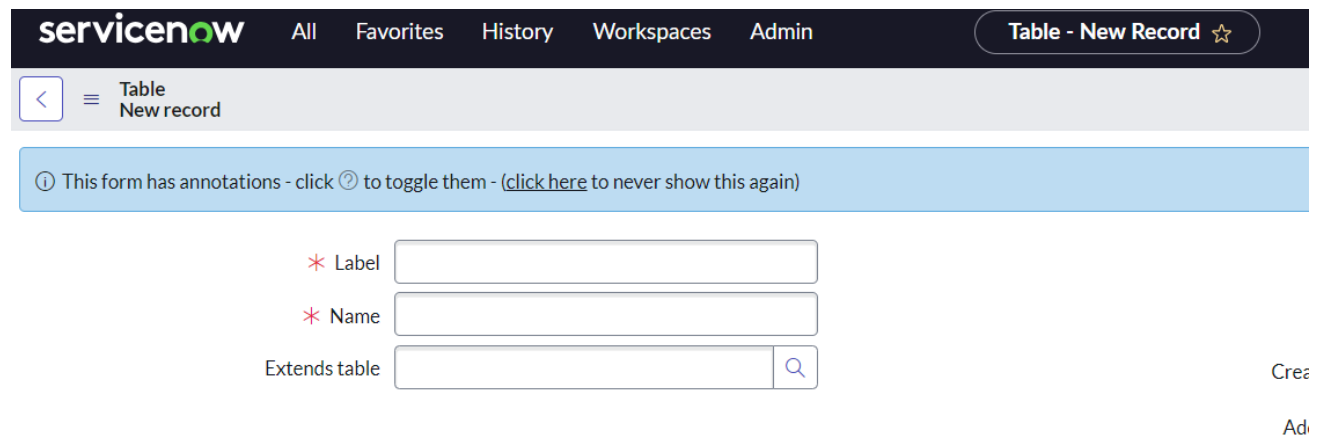
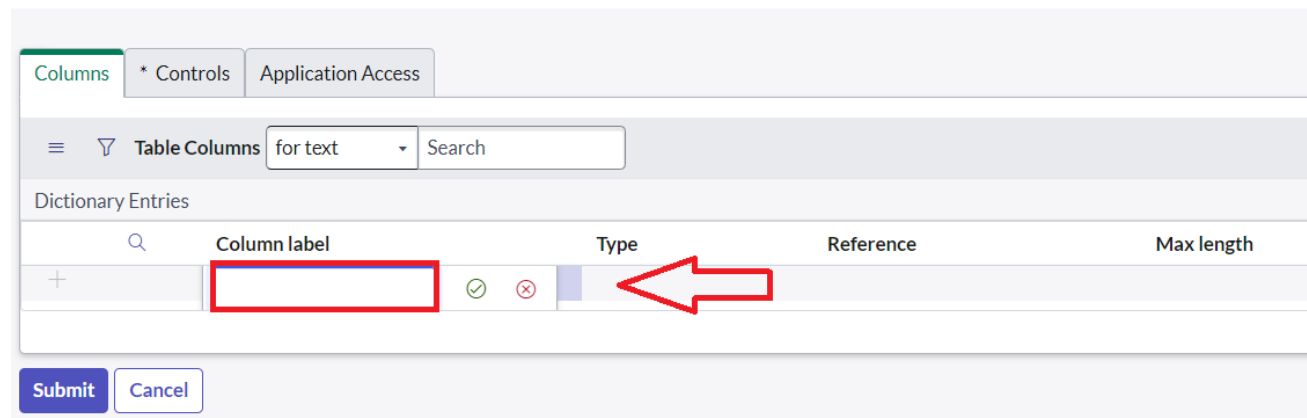
The screenshot shows the 'Update Set - Create New Update Set' form in ServiceNow. The form includes the following fields and options:

- Name:** New Update Set
- State:** In progress
- Parent:** (Searchable field)
- Release date:** (Calendar icon)
- Description:** (Text area)
- Application:** Global
- Buttons:** Submit, Submit and Make Current

Creating a Table : (Milestone 3)

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 .
- 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 .

servicenow All Favorites History Workspaces Admin Dictionary Entry - Grade

Dictionary Entry Grade

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

Label Search

Actions on selected rows... New

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...

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

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
Sys ID	Sys ID (GUID)	(empty)	32	(empty)	false
Admin Status	Choice	(empty)	40	(empty)	false
Admission Number	Reference	Salesforce	32	(empty)	false
Area	String	(empty)	40	(empty)	false
City	String	(empty)	40	(empty)	false
Comments	String (Full UTF-8)	(empty)	255	(empty)	false
District	String	(empty)	40	(empty)	false
Fee	Price	(empty)	20	(empty)	false
House No	String	(empty)	40	(empty)	false
Mandal	String	(empty)	40	(empty)	false
Pincode	Choice	(empty)	40	(empty)	false
Purpose of job	Choice	(empty)	40	(empty)	false
School	Choice	(empty)	40	(empty)	false
School Area	Choice	(empty)	40	(empty)	false
Class	System Class Name	(empty)	80	javascript:current.getTabletName();	false

- Create choice for Admin Status as:

Dictionary Entry
Admin Status

Create Choice List Delete Column Update

Related Links
Show Table
Run Point Scan
Advanced view

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

Label Search

Actions on selected rows... New

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

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

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

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

Insert a new row...

- Create choice for School as:

Access Controls Choices (2) Attributes Labels (1) Dictionary Overrides

Label Search

Actions on selected rows... New

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

Label	Value	Language	Sequence	Inactive	Updated
Near Market	Near Market	en	1	false	2024-04-02 21:20:53
Near Bus Stand	Near Bus Stand	en	2	false	2024-04-02 21:21:24

Insert a new row...

Creating Student Progress Table

- Create a Student Progress Table with Columns given.
- Select Add module to menu >> Salesforce.
- Create Fields as shown:

×	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...				

Form Layout : (Milestone 4)

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

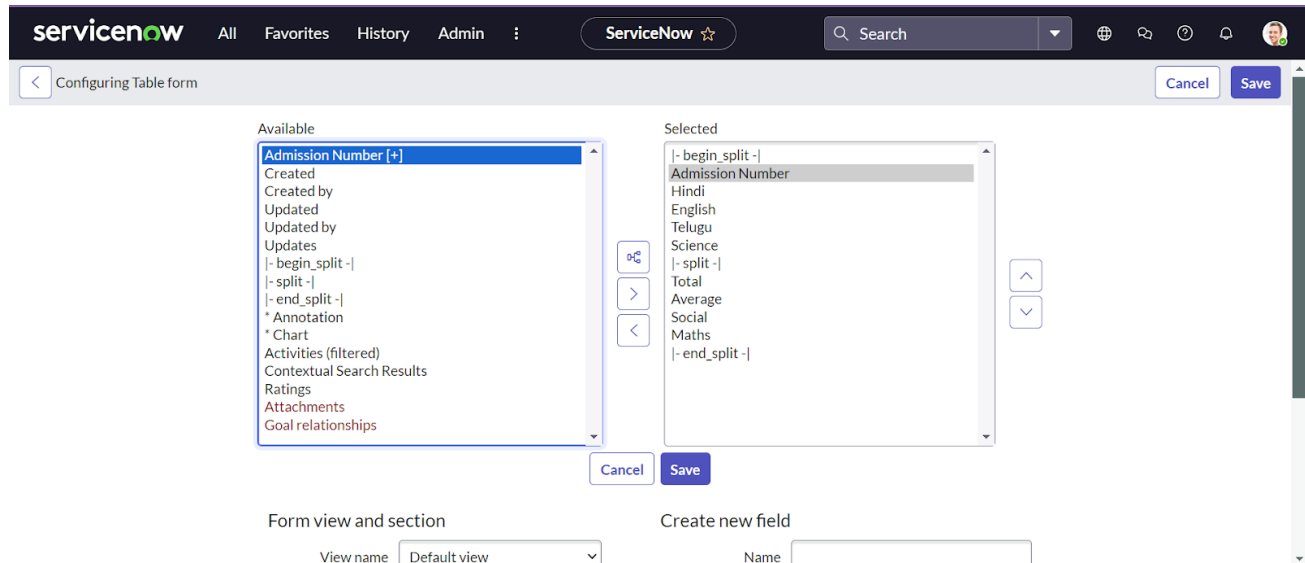
Delete

Delete All Records

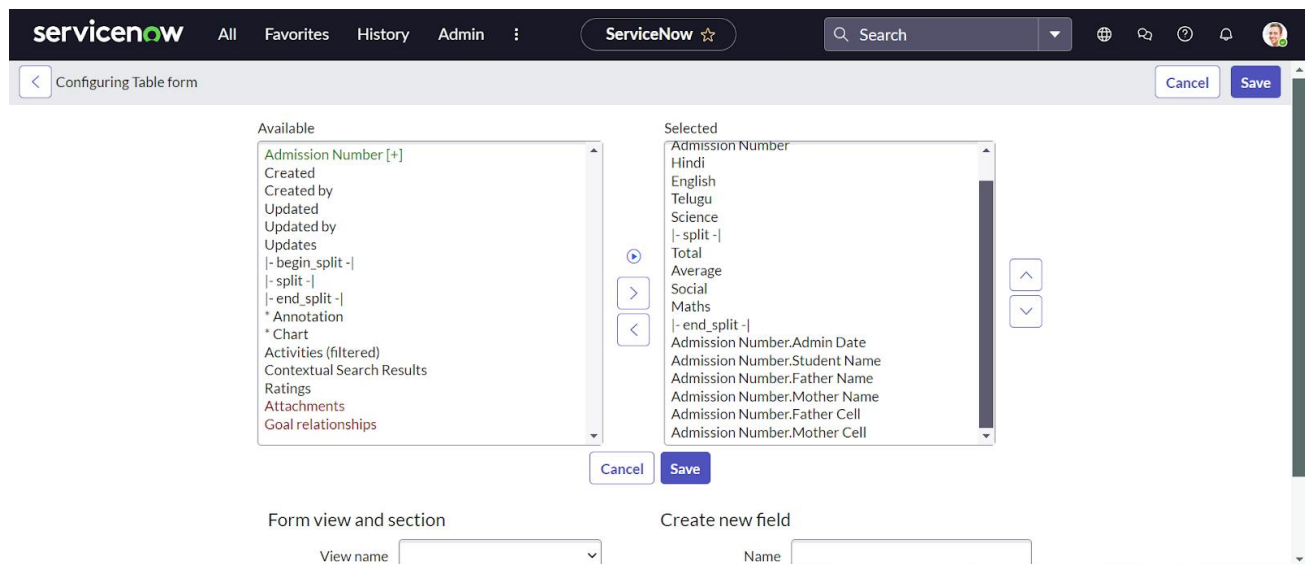
Related Links

[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 [+].



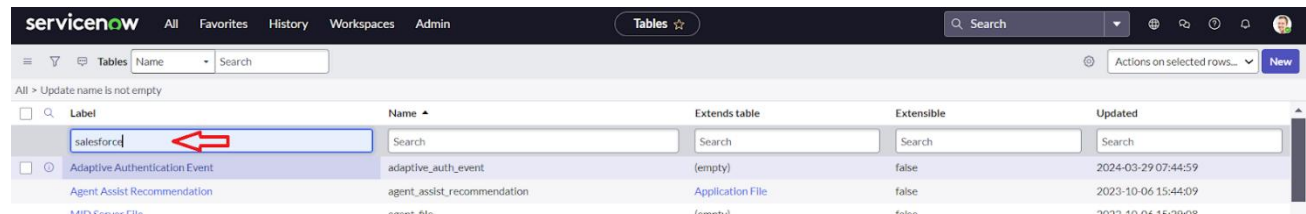
Select below Admission Number fields in Available side and send it to selected side as below >> save.



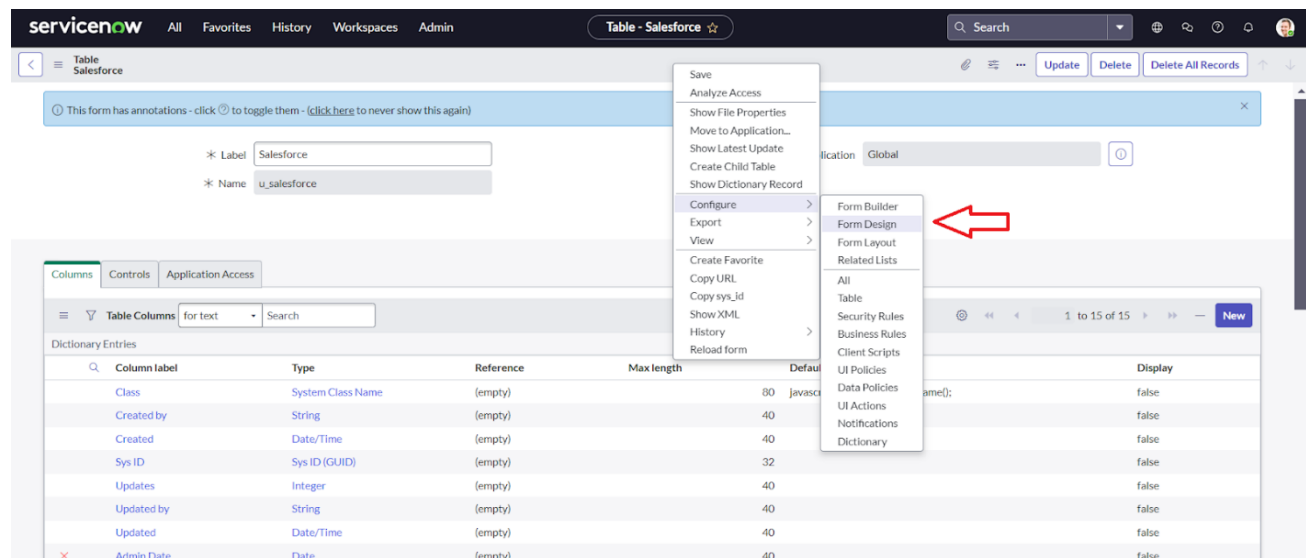
Form Design : (Milestone 5)

Creating Form Design for Salesforce Table

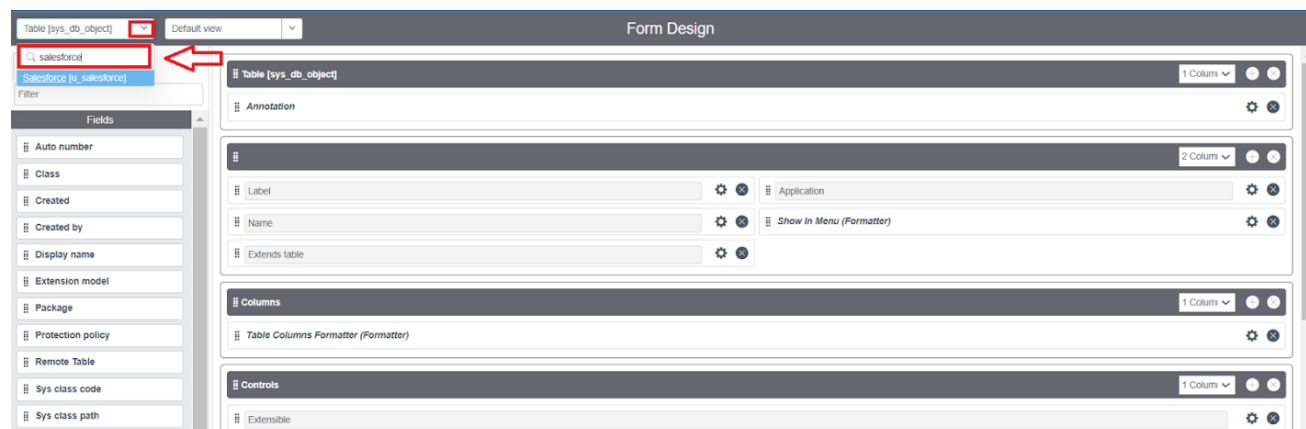
1. All >> System Definition >> Tables .
2. In Label Search for Salesforce and open .



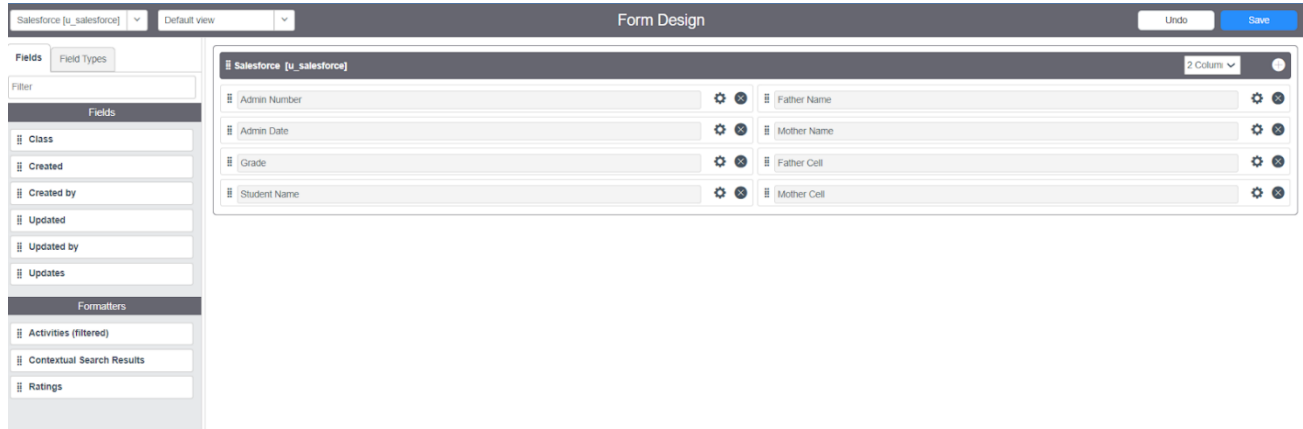
3. Right Click on top Toggle >> Configure >> Form Design.



4. In drop down select Salesforce(u_salesforce).



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



Salesforce [u_salesforce] | Default view | Form Design | Undo | Save

Fields | Field Types

Filter

Fields

- Class
- Created
- Created by
- Updated
- Updated by
- Updates

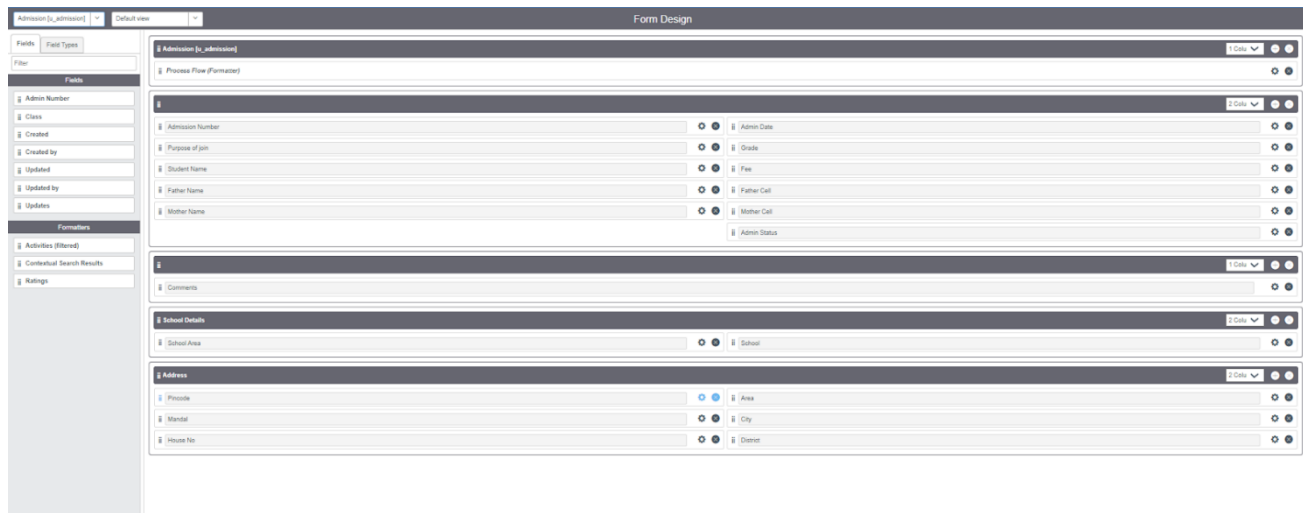
Formatters

- Activities (filtered)
- Contextual Search Results
- Ratings

Salesforce [u_salesforce]		2 Columns
Admin Number	Father Name	
Admin Date	Mother Name	
Grade	Father Cell	
Student Name	Mother Cell	

Creating Form Design for Admission Table

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



Admission [u_admission] | Default view | Form Design | Undo | Save

Fields | Field Types

Filter

Fields

- Admin Number
- Class
- Created
- Created by
- Updated
- Updated by
- Updates

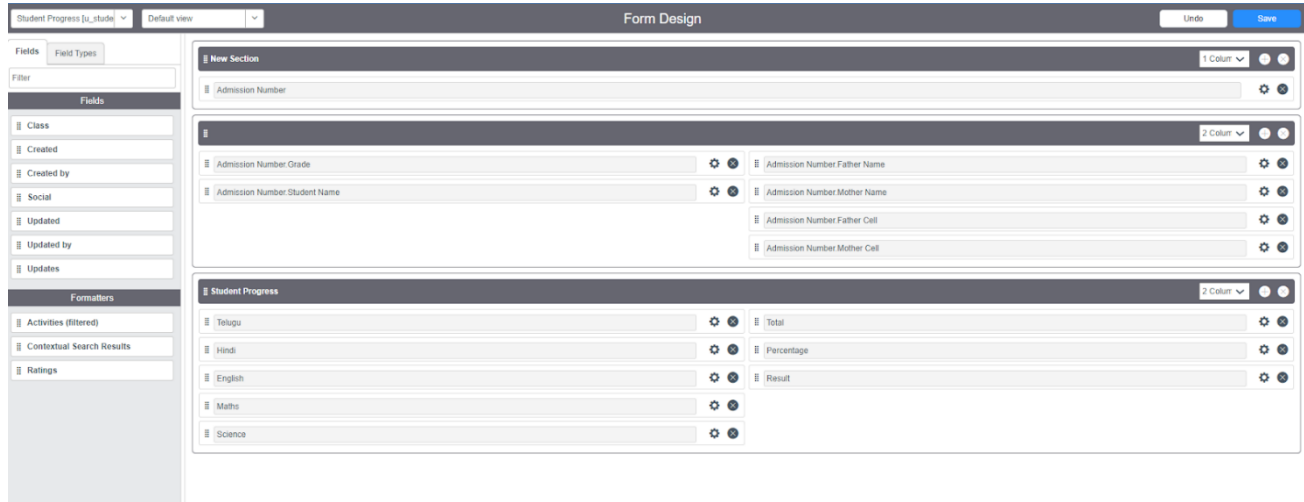
Formatters

- Activities (filtered)
- Contextual Search Results
- Ratings

Admission [u_admission]		1 Column
Process Flow (Formatter)		
1		2 Columns
Admission Number	Admin Date	
Purpose of join	Grade	
Student Name	Fee	
Father Name	Father Cell	
Mother Name	Mother Cell	
Admin Status		
2		1 Column
Comments		
3		2 Columns
School Area	School	
4		2 Columns
Province	Area	
Street	City	
House No	Electron	

Creating Form Design for Student progress Table

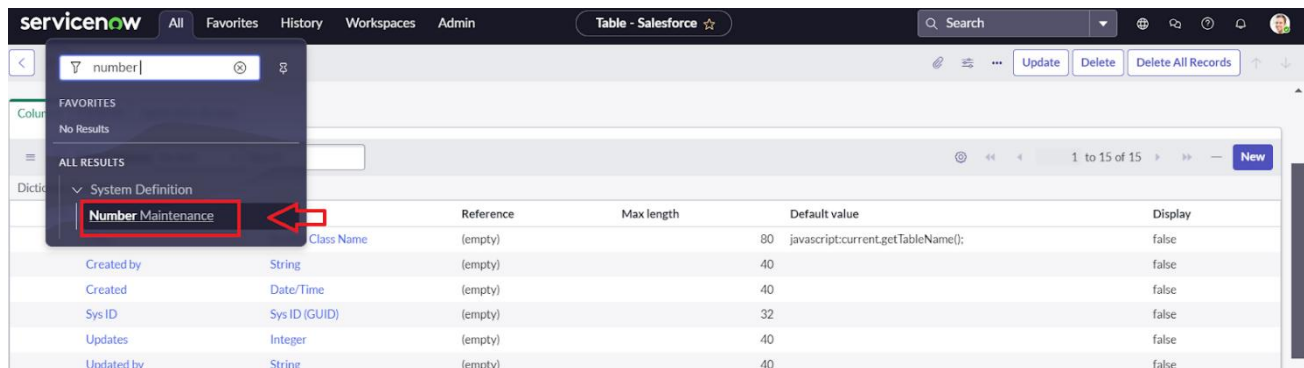
Follow the same steps as Activity1, Configure the fields as below and Save.



Number Maintenance : (Milestone 6)

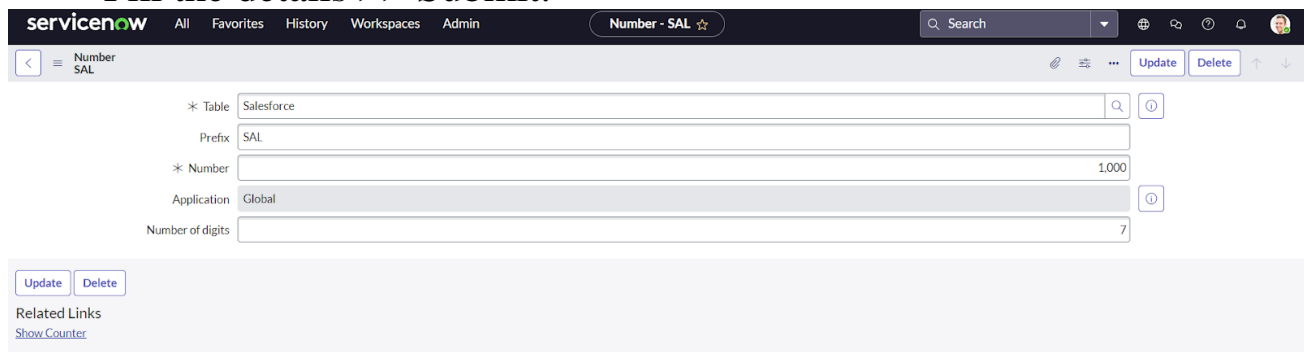
Creating Number Maintenance for Admin Number

- All >> Number Maintenance >> New



	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.



Number - SAL

* Table: Salesforce

Prefix: SAL

* Number: 1,000

Application: Global

Number of digits: 7

Update Delete

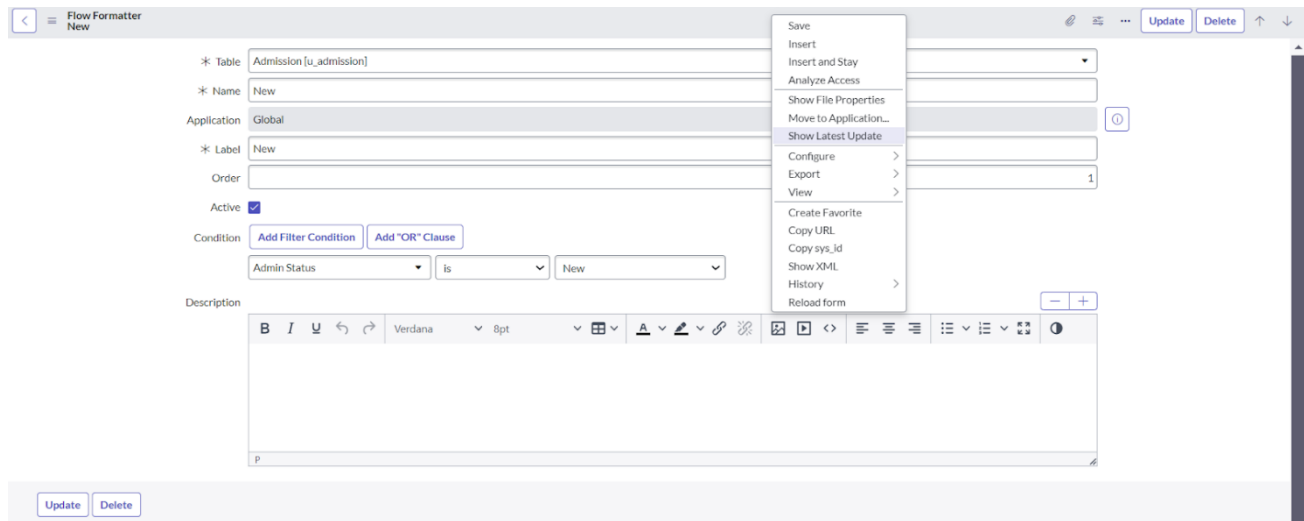
Related Links

Show Counter

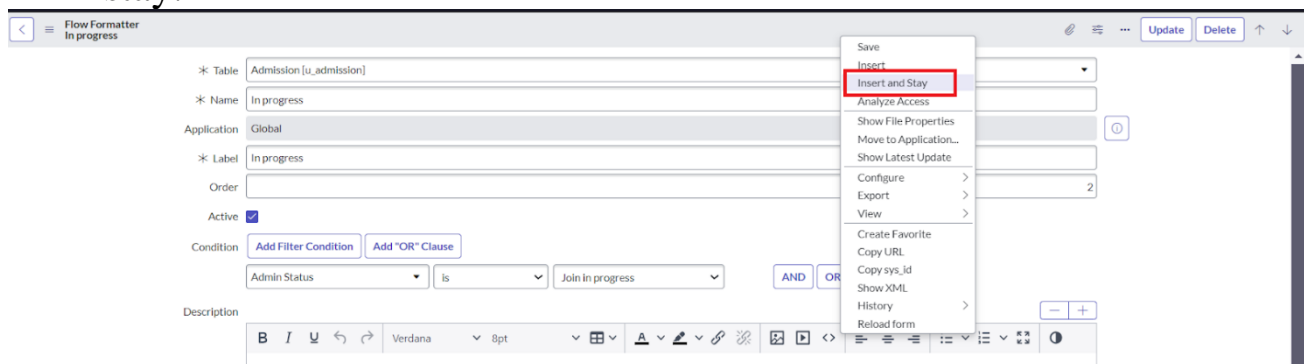
Process Flow : (Milestone 7)

Creating Process Flow for Admission Table

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



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

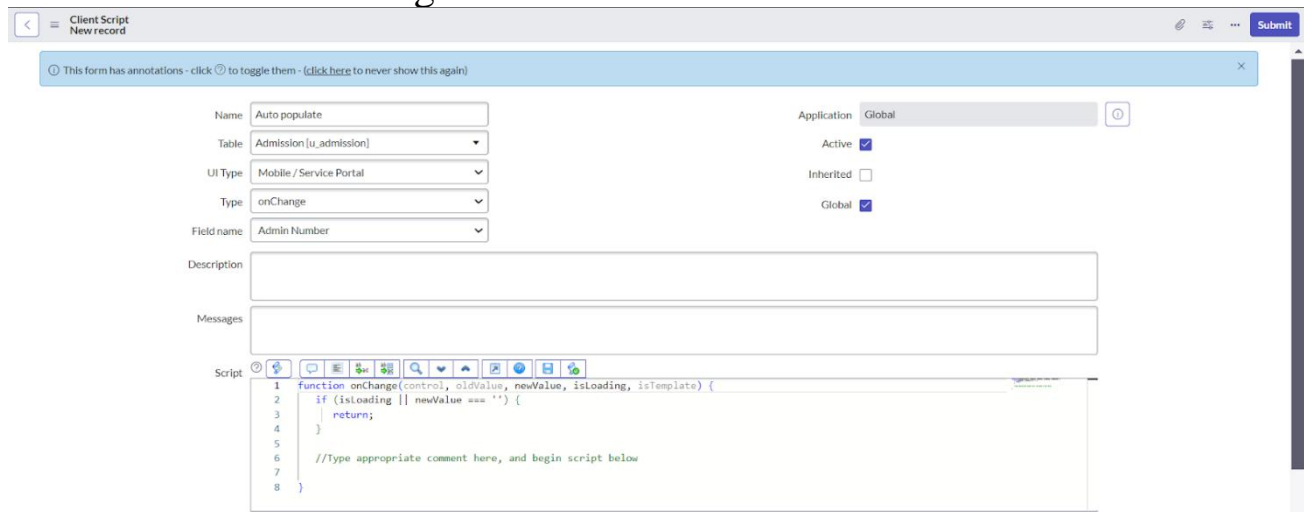


- Replace the Name and Label in order and click on Insert on stay.
 Joined >> Rejected >> Rejoined >> Closed >> Cancelled.
- Order should be New >> InProgress >> Joined >> Rejected >> Rejoined >> Closed >> Cancelled.

Client Script (Milestone 8)

Creating “Auto populate” Client Scripts for Admission Table

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



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
6   //Type appropriate comment here, and begin script below
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

```

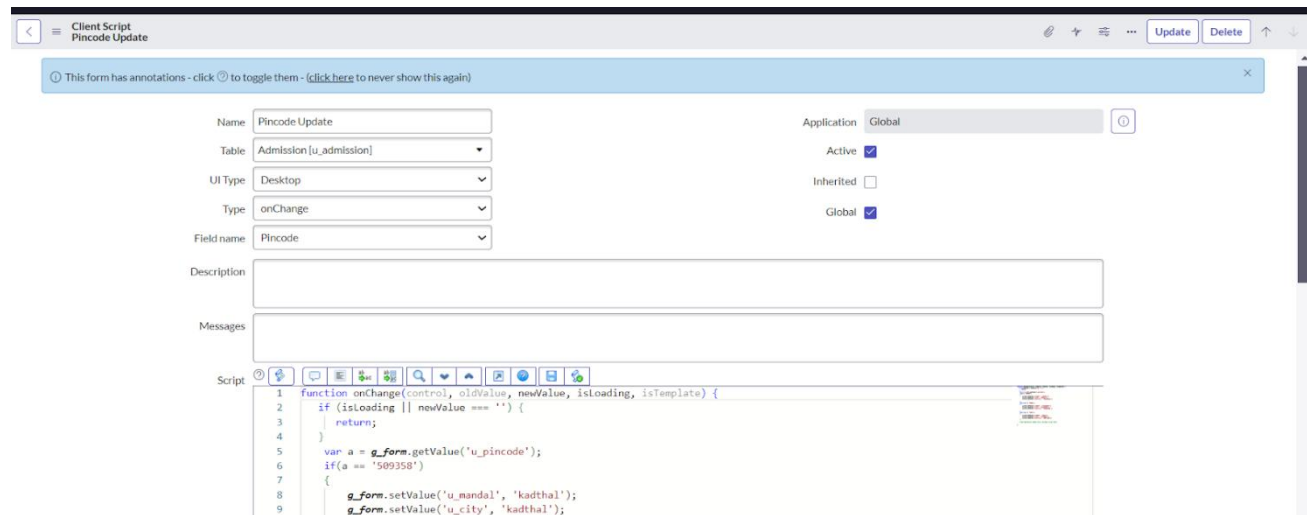
var a = g_form.getReference('u_admission_number');
g_form.setValue('u_admin_date',a.u_admin_date);
g_form.setValue('u_grade',a.u_grade);
g_form.setValue('u_student_name',a.u_student_name);
g_form.setValue('u_father_name',a.u_father_name);
g_form.setValue('u_mother_name',a.u_mother_name);
g_form.setValue('u_father_cell',a.u_father_cell);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

Creating “Pincode Update” Client Scripts for Admission Table

- Fill the Details as given.



The screenshot shows the 'Client Script' configuration window for 'Pincode Update'. The form includes the following fields:

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

```

- 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

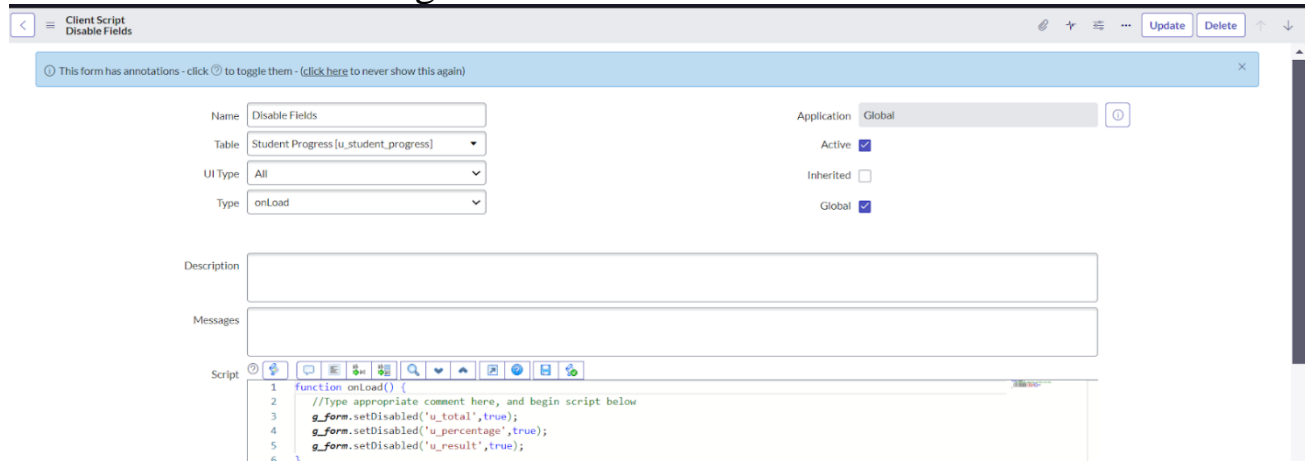
```

}

```

Creating “Disable Fields” Client Scripts for Student progress Table

- Fill the Details as given.



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

Name	Disable Fields	Application	Global ⓘ
Table	Student Progress [u_student_progress]	Active	<input checked="" type="checkbox"/>
UI Type	All	Inherited	<input type="checkbox"/>
Type	onLoad	Global	<input checked="" type="checkbox"/>

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.

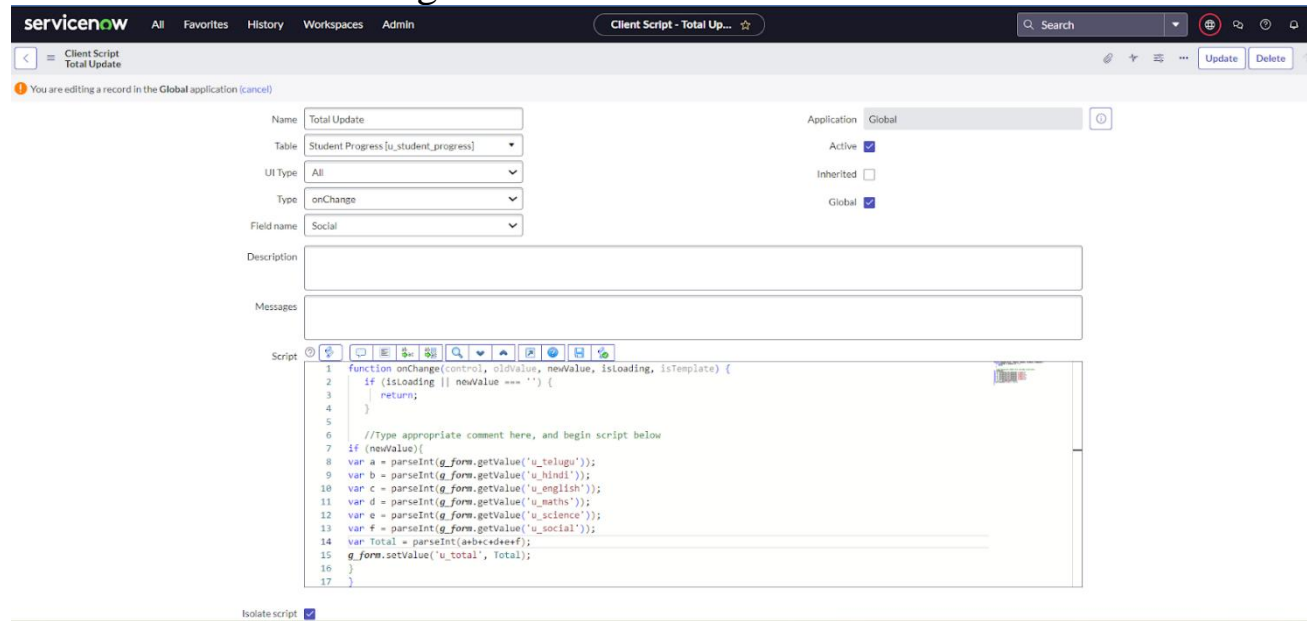
```

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);
}

```

Creating "Total Update" Client Scripts for Student progress Table

- Fill the Details as given.



The screenshot shows the 'Client Script - Total Up...' configuration page in ServiceNow. The form includes the following fields:

- Name:** Total Update
- Table:** Student Progress [u_student_progress]
- UI Type:** All
- Type:** onChange
- Field name:** Social
- Application:** Global
- Active:** ☒
- Inherited:** ☐
- Global:** ☒
- Description:** (Empty text area)
- Messages:** (Empty text area)
- Script:**

```

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 }

```
- Isolate script:** ☒

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

```

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

```

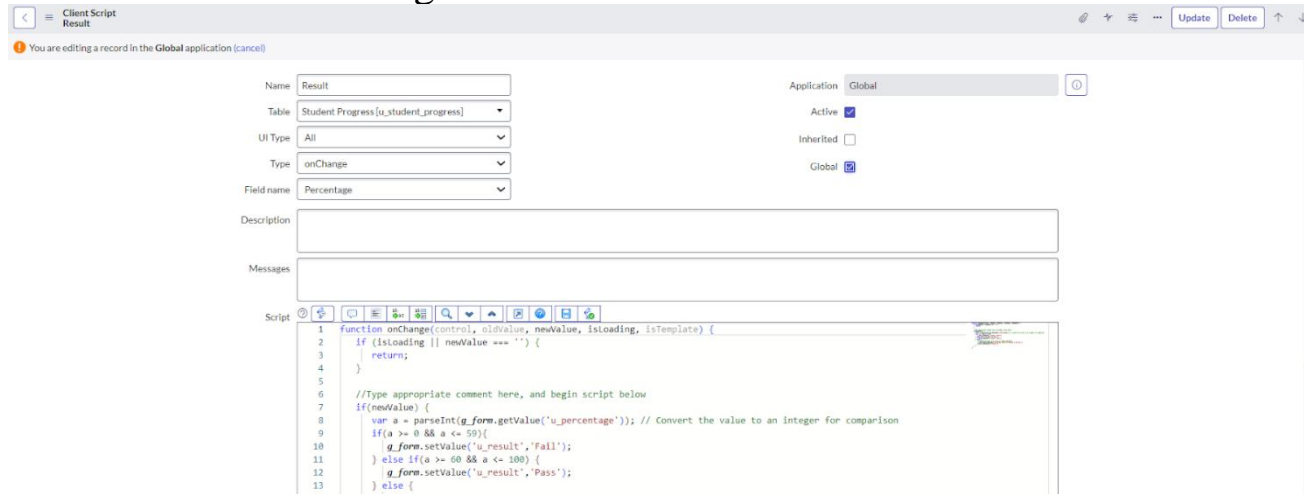
```

  //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);
  }
}

```


Creating "Result" Client Scripts for Student progress Table

- Fill the Details as given.



The screenshot shows the 'Client Script Result' editor. The 'Name' field 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'. 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 {

```

- 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');

```

```

    }

```

```

}

```

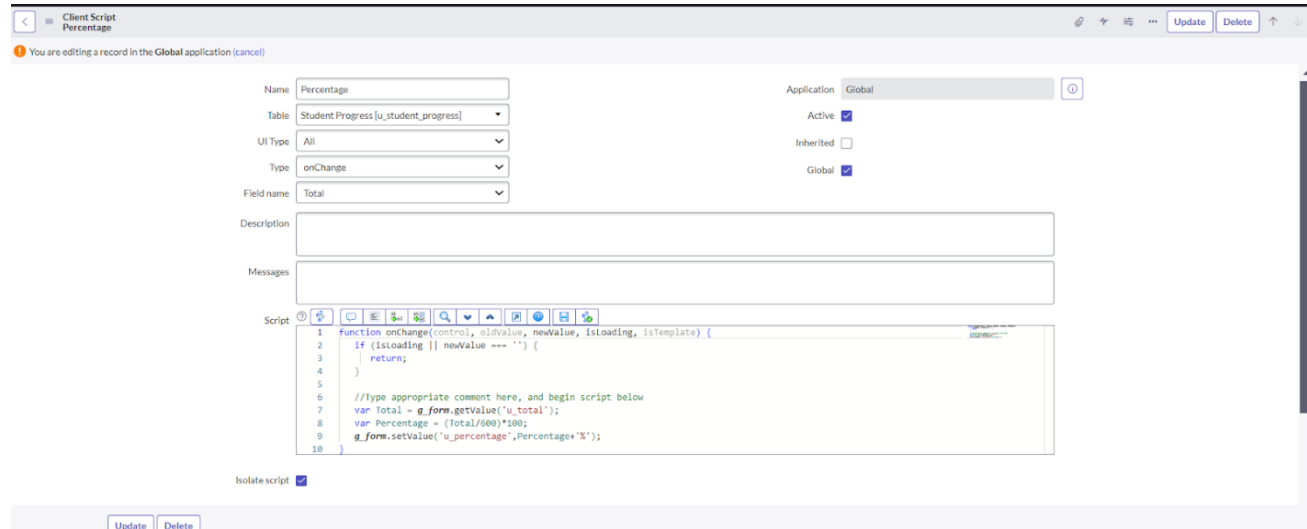
```

}

```

Creating "Percentage" Client Scripts for Student progress Table

- Fill the Details as given.



The screenshot shows the 'Client Script' configuration window for a script named 'Percentage'. The 'Table' is set to 'Student Progress [u_student_progress]' and the 'Field name' is 'Total'. The 'Type' is 'onChange'. The 'Application' is 'Global'. The 'Active' checkbox is checked, and the 'Global' checkbox is also checked. 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   var Total = g_form.getValue('u_total');
8   var Percentage = (Total/600)*100;
9   g_form.setValue('u_percentage',Percentage+'%');
10 }
  
```

At the bottom, the 'Isolate script' checkbox is checked. There are 'Update' and 'Delete' buttons at the top right and bottom left of the window.

- 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

Now we can see Our entire project results in All >> Salesforce

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

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

Conlusion :

Now we have Succesfully created an Educational Organisation using ServiceNow by following the instrctions given by the Service Now Team.
Thank you