

Project Title :

**Educational Organization Using Service
Now**

Team ID : NM2025TMID18977

Team Size : 5

Team Leader : Anjali B

Team member : Franklilna P

Team member : Kaviyarasi P

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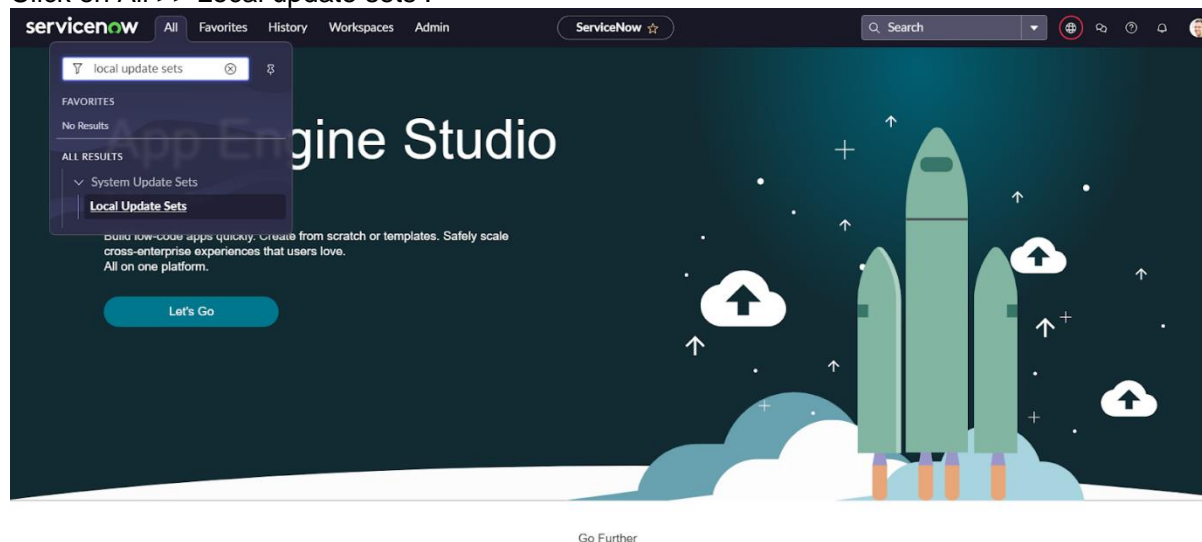
Team member : Devi E

Setting up ServiceNow Instance

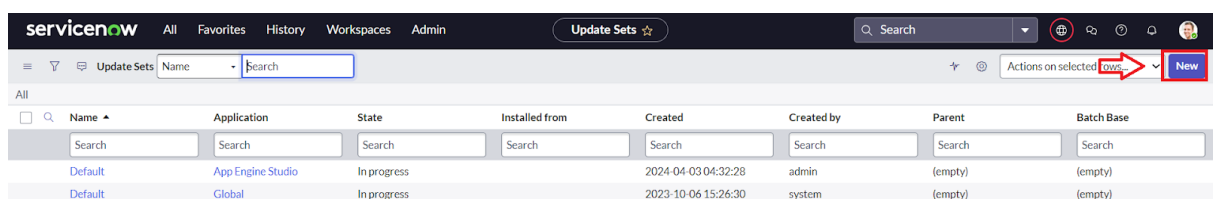
1. Sign up for a developer account on the ServiceNow Developer site "https://developer.servicenow.com".
2. Once logged in, navigate to the "Personal Developer Instance" section.
3. Click on "Request Instance" to create a new ServiceNow instance.
4. Fill out the required information and submit the request.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



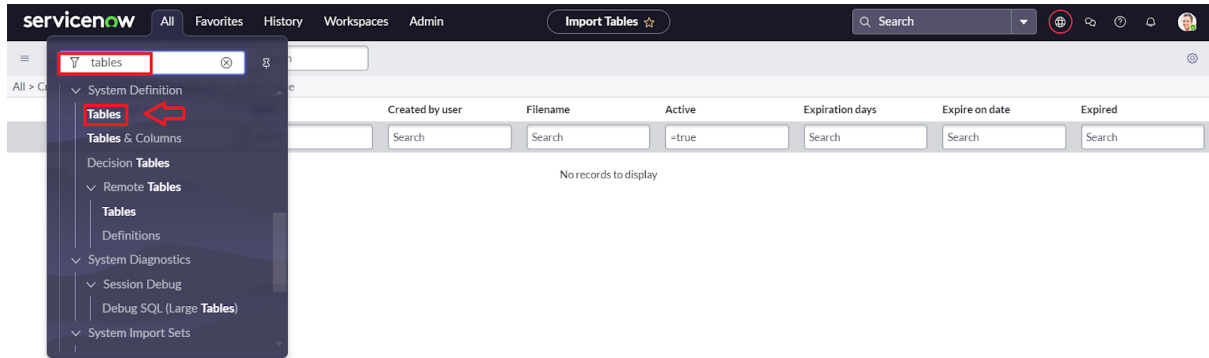
2. Click on new



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

Creating Salesforce Table.

- All >> Tables.



- Click on new

A screenshot of the ServiceNow 'Tables' list view. The top navigation bar is the same as the previous image. Below the navigation bar, there is a search bar and a 'New' button. The table has columns: 'Label', 'Name', 'Extends table', 'Extensible', and 'Updated'. The table contains several rows of data, including 'Adaptive Authentication Event', 'Agent Assist Recommendation', 'MID Server File', 'Record Producer Configuration', 'Search Actions', 'AI Search ACL Overrides', and 'AI Search Active Table Ingestion Tracker'. The 'New' button is highlighted with a red box.

Label	Name	Extends table	Extensible	Updated
Search	Search	Search	Search	Search
Adaptive Authentication Event	adaptive_auth_event	(empty)	false	2024-03-29 07:44:59
Agent Assist Recommendation	agent_assist_recommendation	Application File	false	2023-10-06 15:44:09
MID Server File	agent_file	(empty)	false	2023-10-06 15:29:08
Record Producer Configuration	aisa_rp_config	Application File	false	2023-10-06 15:47:19
Search Actions	aisa_ui_action	Application File	false	2023-10-06 15:47:19
AI Search ACL Overrides	ais_acl_overrides	Application File	false	2023-10-06 15:15:20
AI Search Active Table Ingestion Tracker	ais_active_table_ingestion_tracker	(empty)	false	2023-10-06 15:15:18

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

A screenshot of the ServiceNow 'Table - New Record' form. The top navigation bar is the same as the previous images. Below the navigation bar, there is a search bar and a 'Submit' button. The form has a yellow banner at the top with a message: 'ServiceNow recommends creating custom tables in scoped applications. To learn more about creating scoped applications, click here.' Below the banner, there is a blue box with text: 'A table is a collection of records in the database. Each record corresponds to a row in a table, and each field on a record corresponds to a column on that table. Applications use tables and records to manage data and processes. More info'. The form has several fields: 'Label' (with a red asterisk), 'Name' (with a red asterisk), 'Extends table' (with a search icon), 'Application' (dropdown menu, currently set to 'Global'), 'Create module' (checkbox, checked), 'Create mobile module' (checkbox, checked), 'Add module to menu' (dropdown menu, currently set to '-- Create new --'), and 'New menu name' (text field). The 'Submit' button is highlighted with a red box.

- 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 .

Columns

* Controls

Application Access

Table Columns

for text

Search

Dictionary Entries

	Column label	Type	Reference	Max length
<div></div>	<div></div>	<div><div></div><div></div></div>		

Submit

Cancel

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:getNextObj[NumberPadded[]];
Father Cell	String	(empty)	40	false
Father Name	String	(empty)	40	false
Grade	Choice	(empty)	40	false
Mother Cell	String	(empty)	40	false
Mother Name	String	(empty)	40	false
Student Name	String	(empty)	40	false


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

The screenshot shows the 'Table Salesforce' interface in the 'Columns' tab. A red arrow points to the 'Save' button in the context menu. The table lists dictionary entries for 'Table Columns' with columns: Column label, Type, Reference, Max length, and Display. The entries include Class, Created by, Created, Sys ID, Updates, Updated by, and Updated.

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

- Click on controls >> Enable Extensible.

Columns **Controls** Application Access

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 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** Search

Table New record Submit Cancel

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 Update Delete Delete All Records

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.getTable();	false

- Create choice for Admin Status as:

Dictionary Entry Admin Status Create Choice List Delete Column Update

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

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

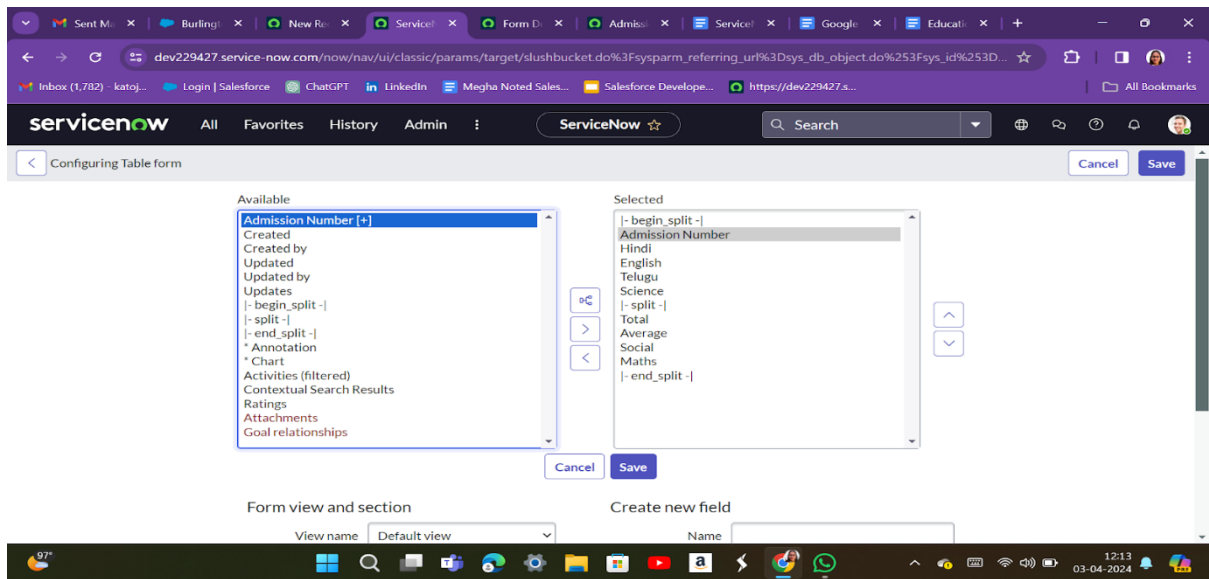
Label Search Actions on selected rows... New

Choices

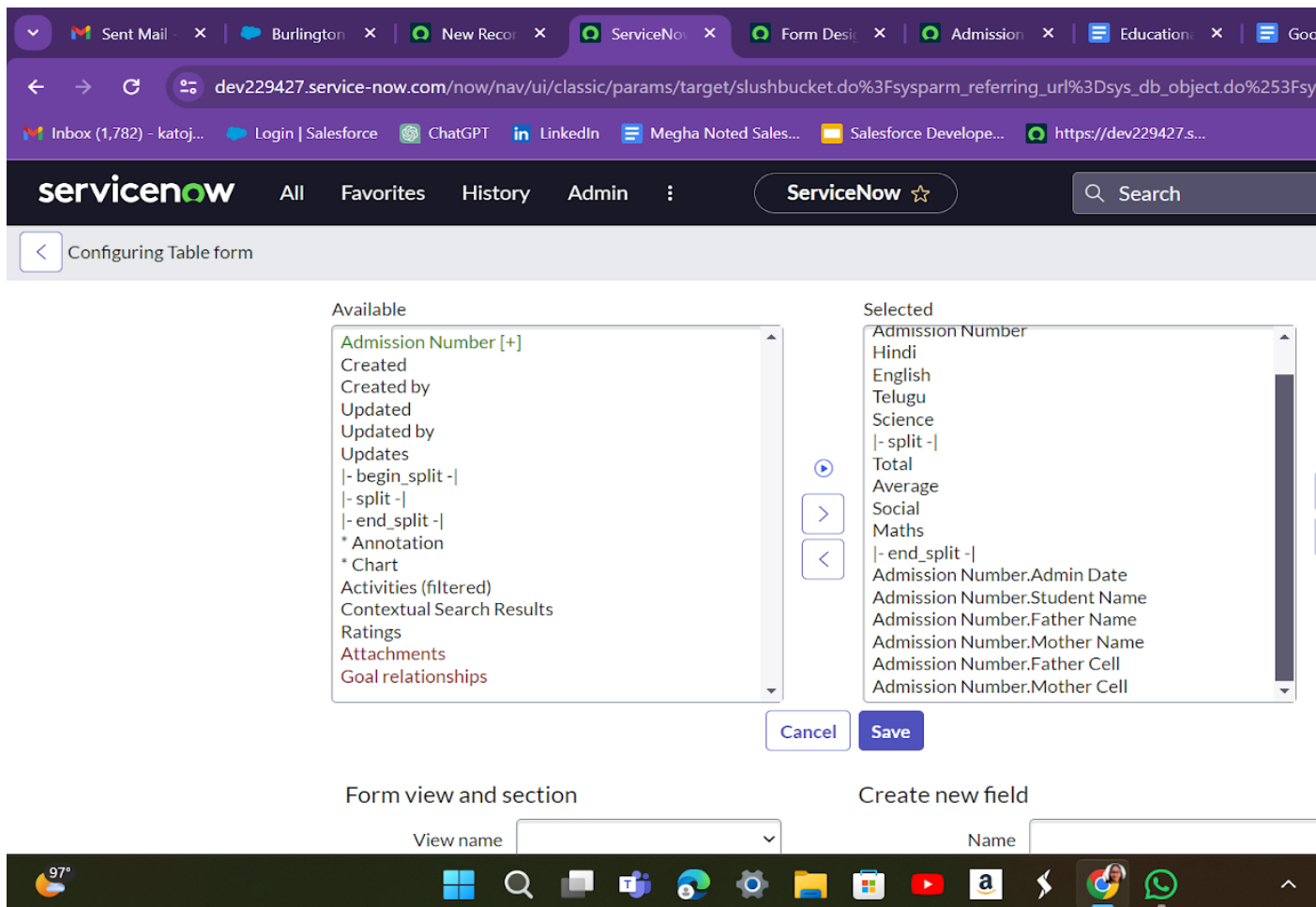
Label	Value	Language	Sequence	Inactive	Updated
509358	509358	en	1	false	2024-04-02 21:15:19
500079	500079	en	2	false	2024-04-02 21:15:46
500081	500081	en	3	false	2024-04-02 21:16:05

Insert a new row...

- Create choice for Purpose of Join as:

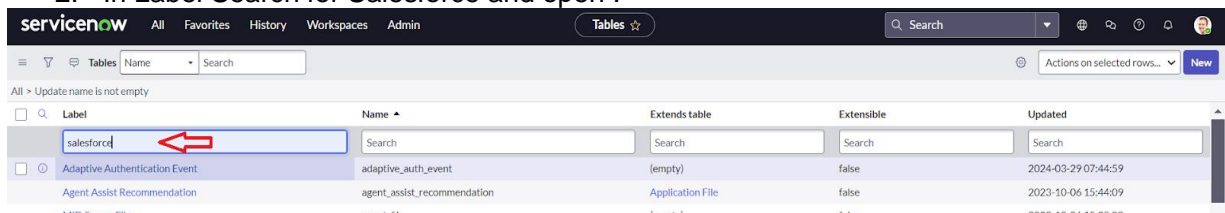


- Select below Admission Number fields in Available side and send it to selected side as below >> save.



Creating Form Design for Salesforce Table

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



Label	Name	Extends table	Extensible	Updated
salesforce	Search	Search	Search	Search
Adaptive Authentication Event	adaptive_auth_event	(empty)	false	2024-03-29 07:44:59
Agent Assist Recommendation	agent_assist_recommendation	Application File	false	2023-10-06 15:44:09

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

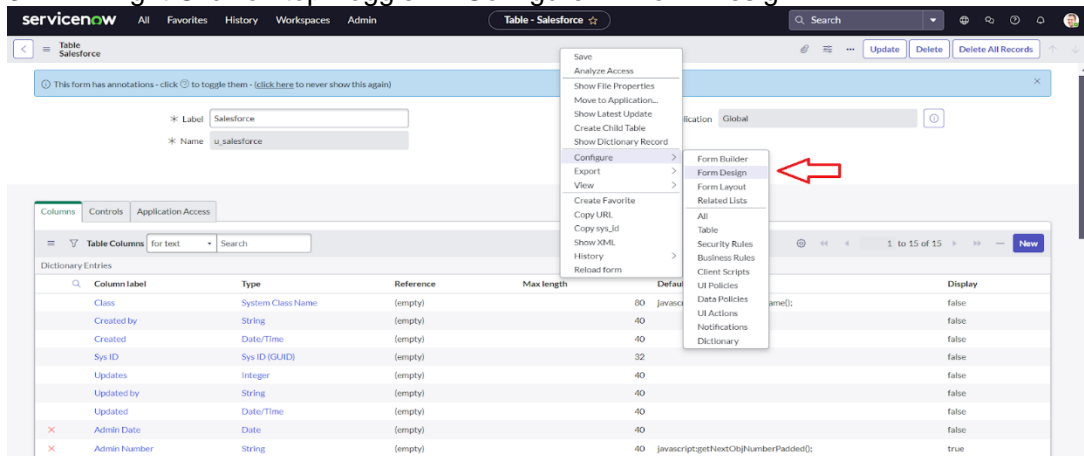
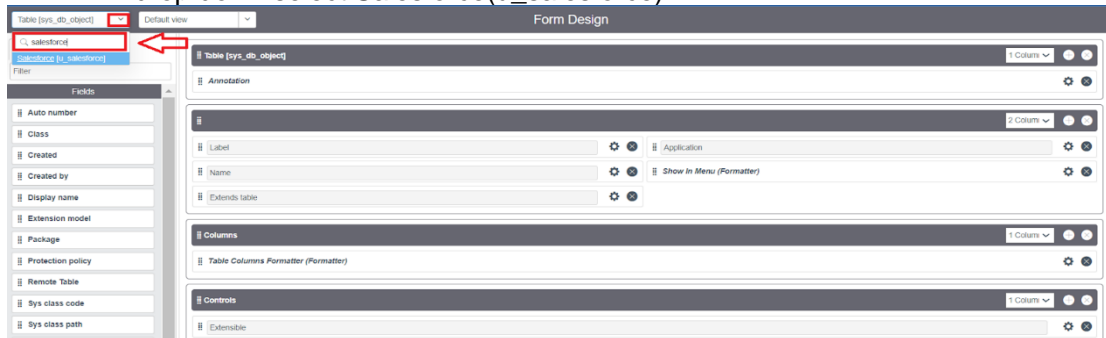


Table Columns

Column label	Type	Reference	Max length	Default	Display
Class	System Class Name	(empty)	80	java...	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:getNextObjNumberPadded();	true

4. In drop down select Salesforce(u_salesforce).



Form Design

Table [sys_db_object] | Annotation

Label | Application

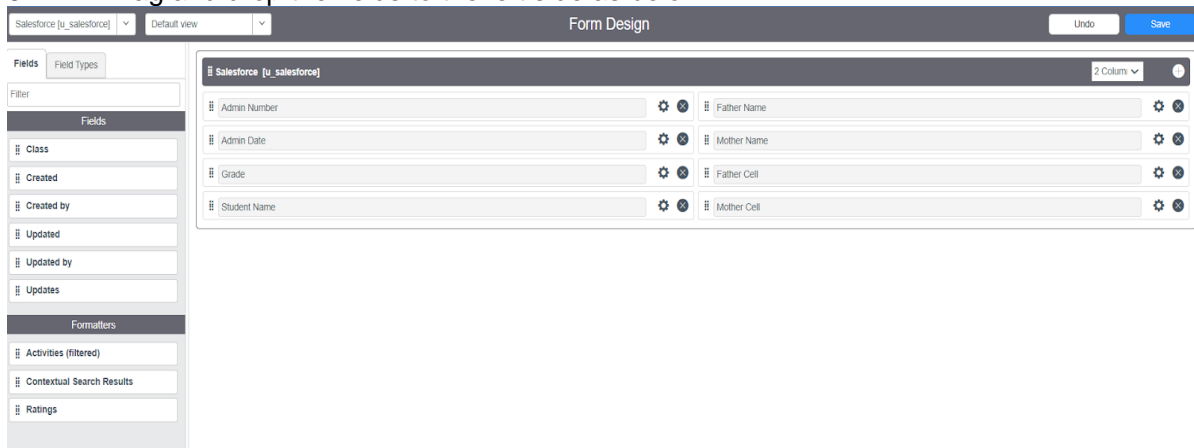
Name | Show in Menu (Formatter)

Extends table

Columns | Table Columns Formatter (Formatter)

Controls | Extensible

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



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

Fields | Field Types

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

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 [u_admission]' table. The sidebar on the left contains a 'Fields' section with a filter and a list of fields: Admin Number, Class, Created, Created by, Updated, Updated by, and Updates. Below this is a 'Formatters' section with 'Activities (Filtered)', 'Contextual Search Results', and 'Ratings'. The main form area is divided into sections: 'Admission [u_admission]' (1 Column), 'Process Flow (Formatter)' (2 Columns), 'School Details' (2 Columns), and 'Address' (2 Columns). The 'Admission [u_admission]' section contains fields for Admission Number, Admission Date, Grade, Fee, Father Cell, Mother Cell, and Admin Status. The 'Process Flow (Formatter)' section contains a 'Comments' field. The 'School Details' section contains 'School Area' and 'School' fields. The 'Address' section contains 'Pincode', 'Area', 'Mandal', 'City', and 'District' fields.

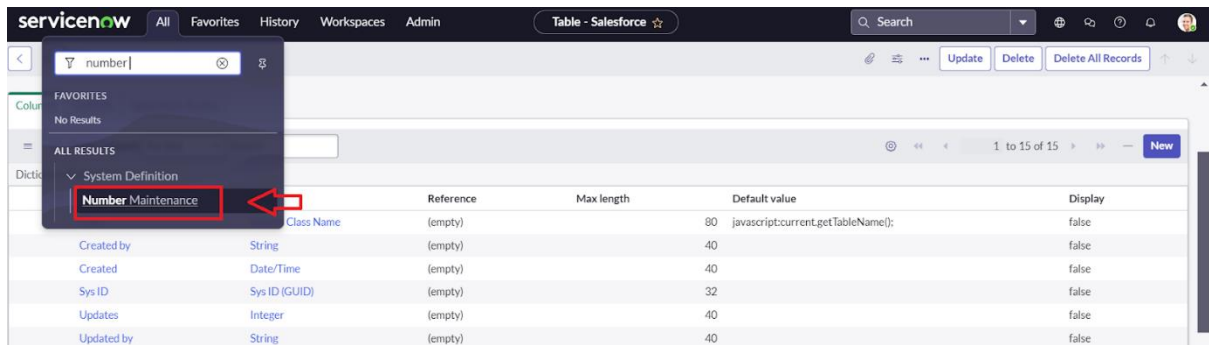
Creating Form Design for Student progress Table

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

The screenshot shows the 'Form Design' interface for the 'Student Progress [u_stude]' table. The sidebar on the left contains a 'Fields' section with a filter and a list of fields: Class, Created, Created by, Social, Updated, Updated by, and Updates. Below this is a 'Formatters' section with 'Activities (Filtered)', 'Contextual Search Results', and 'Ratings'. The main form area is divided into sections: 'New Section' (1 Column) and 'Student Progress' (2 Columns). The 'New Section' section contains an 'Admission Number' field. The 'Student Progress' section contains fields for 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, and Result.

Creating Number Maintenance for Admin Number

- All >> Number Maintenance >> New



- Fill the details >> Submit.

ServiceNow interface showing the 'Number - SAL' form. The form fields are: Table (Salesforce), Prefix (SAL), Number (1,000), Application (Global), and Number of digits (7). The 'Update' and 'Delete' buttons are visible at the bottom.

Creating Process Flow for Admission Table

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

ServiceNow interface showing the 'Flow Formatter' form. The form fields are: Table (Admission [u_admission]), Name (New), Application (Global), Label (New), Order (1), Active (checked), Condition (Admin Status is New), and Description (empty). The 'Update' and 'Delete' buttons are visible at the bottom.

- 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 “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' and is associated with the 'Global' application. A blue banner at the top states: 'This form has annotations - click ⓘ to toggle them - (click here to never show this again)'. The configuration details are as follows:

- Name:** Disable Fields
- Table:** Student Progress [u_student_progress]
- UI Type:** All
- Type:** onLoad
- Application:** Global ⓘ
- Active:** ☒
- Inherited:** ☐
- Global:** ☒

Below the configuration fields are empty text areas for 'Description' and 'Messages'. At the bottom, the 'Script' editor shows the following code:

```
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 ServiceNow interface for configuring a Client Script. The breadcrumb trail is "Client Script - Total Up...". The page title is "Client Script - Total Update". A notification bar states: "You are editing a record in the Global application (cancel)".

The configuration fields are as follows:

- Name: Total Update
- Table: Student Progress [u_student_progress]
- UI Type: All
- Type: onChange
- Field name: Social
- Application: Global
- Active: ☒
- Inherited: ☐
- Global: ☒

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  
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 }
```

At the bottom, there is a checkbox labeled "Isolate script" which is currently unchecked.

- 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' 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 'Global', 'Active' 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
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.

Client Script
Percentage

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

Name: Percentage

Table: Student Progress [u_student_progress]

UI Type: All

Type: onChange

Field name: Total

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     var Total = g_form.getValue('u_total');
8     var Percentage = (Total/600)*100;
9     g_form.setValue('u_percentage',Percentage+'%');
10 }

```

Isolate script: ☒

Update Delete

- 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

Salesforce  
New record

Admin Number: SAL0001078

Admin Date:

Grade: -- None --

Student Name:

Father Name:

Mother Name:

Mother Cell:

Father Cell:

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