

LATHA MATHAVAN ENGINEERING COLLEGE

Madurai-625301



Subject Name : ServiceNow Administrator(NM1051)
(Under Naan Mudhalvan Scheme)

Project Title: Educational Organisation Using Service Now

TEAM ID: NM2025TMID01102

TEAM MEMBERS:

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Objective: To develop a ServiceNow solution that streamline student services, automates administrative workflows, and provides dashboards for academic and operational insights.

Skills: ServiceNow app development, Flow Designer, reporting & dashboards, JavaScript, database design, and workflow automation.

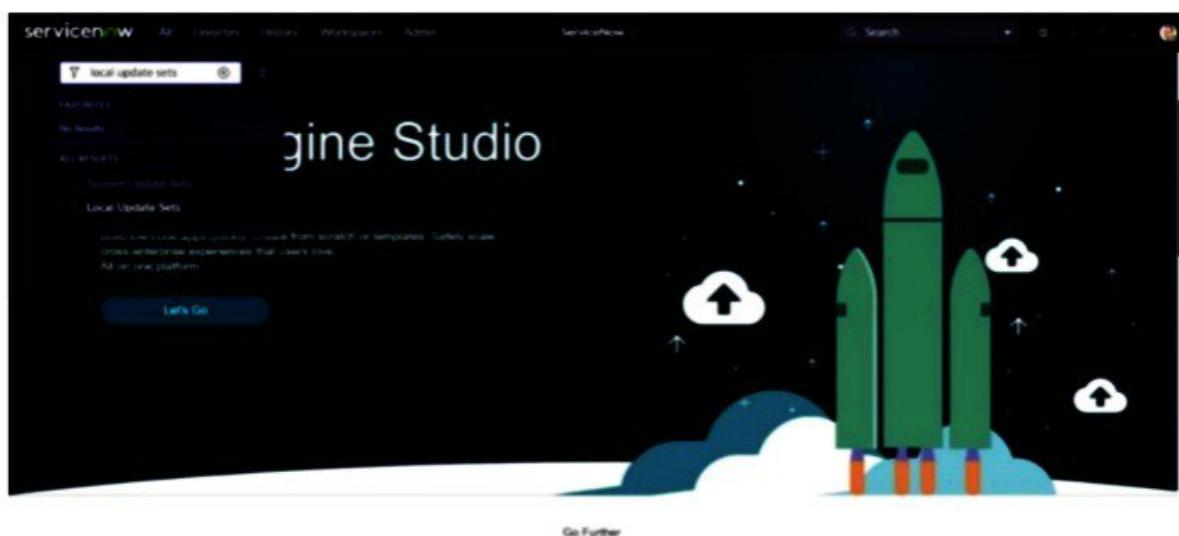
TASK INITIATION

Milestone 1 :Users

Activity 1: Create Users

Creating a Update Set

1. Click on All >> Local update sets .



2. Click on new

A screenshot of the ServiceNow Update Sets list view. The top navigation bar includes "servicenow", "All", "Favorites", "History", "Workspaces", "Admin", "Update Sets", and a search bar. Below the navigation is a toolbar with "Actions on selected" and a red arrow icon. The main area is a table with columns: Name, Application, State, Installed From, Created, Created By, Parent, and Batch-Base. There are two rows: "Default" (Application: App-Engine Studio, State: In-progress) and "Default" (Application: Global, State: In-progress).

Name	Application	State	Installed From	Created	Created By	Parent	Batch-Base
Default	App-Engine Studio	In-progress	Search	2024-04-03 04:32:25	admin	Empty	Empty
Default	Global	In-progress	Search	2023-10-06 15:26:00	system	Empty	Empty

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

A screenshot of the "Create New Update Set" form. The form has fields for Name (set to "New Update Set"), Application (set to "Global"), State (set to "In-progress"), Parent (empty), Release date (empty), and Description (empty). At the bottom, there are two buttons: "Submit" and "Submit and Make Current".

Creating Salesforce Table.

- All >> Tables.

The screenshot shows the ServiceNow 'Tables' page. On the left, there's a sidebar with a tree view of system definitions, including 'Tables & Columns', 'Decision Tables', 'Remote Tables', 'Tables', 'Definitions', and 'System Diagnostics'. The main area has a search bar at the top with several filter fields: 'Created by user', 'Filename', 'Active', 'Expiration days', 'Expire on date', and 'Expired'. Below the filters is a table with one row: 'No records to display'.

- Click on new

The screenshot shows the 'Tables' list view. It displays a table with columns: 'Label', 'Name', 'Extends table', 'Extensible', and 'Updated'. The table contains several rows, each representing a different table definition. One row is highlighted with a blue border.

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	ApplicationFile	False	2023-10-06 15:44:09
MD Server File	agent_file	(empty)	False	2023-10-06 15:29:08
Record Producer Configuration	alias_rp_config	ApplicationFile	False	2023-10-06 15:47:19
Search Actions	alias_of_action	ApplicationFile	False	2023-10-06 15:47:19
AI Search ACI Overrides	ai_ac_overrides	ApplicationFile	False	2023-10-06 15:19:20
AI Search Active Table Ingestion Tracker	ai_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.

The screenshot shows the 'Table - New record' creation form. It includes fields for 'Label' (with a placeholder 'Salesforce'), 'Name' (auto-generated as 'salesforce'), 'Extends table' (empty), 'Application' (set to 'Global'), and other configuration options like 'Create module', 'Create mobile module', 'Add module to menu', and 'New menu 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 .

servicenow All Favorites History Workspaces Admin Table - New Record ...

New record

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

* Label	<input type="text"/>
* Name	<input type="text"/>
Extends table	<input type="text"/> <input type="button" value="Q"/>

Crea
Ad

Columns Controls Application Access

Table Columns for text Search

Dictionary Entries

Column label	Type	Reference	Max length
<input type="text"/>			

Submit Cancel X

Table Reference

This record is in the Global application, but Educational Organization is the current application. To edit this record click here.

Admin Date	Date	(empty)	40	False
Admin Number	String	(empty)	40	True
Father Cell	String	(empty)	40	False
Father Name	String	(empty)	40	False
Grade	Choice	(empty)	40	False
Mother Cell	String	(empty)	40	False
Mother Name	String	(empty)	40	False
Student Name	String	(empty)	40	False

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

Table Reference

Columns Controls Application Access

Table Columns for test Search

Dictionary Entries

Column label	Type	Reference	Max length	De
Class	System Class Name	(empty)	80	
Created by	String	(empty)	40	
Created	Date/Time	(empty)	40	
Sys ID	Sys ID (GUID)	(empty)	32	
Updated by	Integer	(empty)	40	
Updated	String	(empty)	40	
Updated	Date/Time	(empty)	40	

Save

Analysis Access

- Show Field Properties
- Move to Application...
- Show Latest Update
- Create Child Table
- Show Dictionary Record
- Configure
- Export
- View
- Create Favorite
- Copy URL
- Copy XML
- Show XML
- History
- Reload Form

- Click on controls >> Enable Extensible.

The screenshot shows the ServiceNow Table Administration interface. At the top, there are tabs for 'Table' and 'New Record'. Below the tabs, there are several input fields and checkboxes:

- Label:** Administrator
- Name:** cs_administrator
- Extends table:** **Salesforce** (highlighted with a red box)
- Application:** Global
- Create module:**
- Create mobile module:**
- Add module to menu:** **Salesforce** (highlighted with a red box)

Below these settings, there are three tabs: 'Columns', 'Controls', and 'Application Access'. The 'Columns' tab is selected, showing a table with columns for 'Column Label', 'Type', 'Reference', 'Max length', 'Default value', and 'Display'. A single row is visible:

Column Label	Type	Reference	Max length	Default value	Display
Admin ID	String	(empty)	32		false

At the bottom of the 'Columns' section are 'Submit' and 'Cancel' buttons.

Below the 'Columns' section is another table titled 'Table Columns' with the same columns. One row is highlighted in blue, corresponding to the 'School' column from the 'Administrator' table above:

Column Label	Type	Reference	Max length	Default value	Display
School	Choice	(empty)	40		false

- Create choice for Admin Status as:

The screenshot shows the ServiceNow Dictionary Entry interface for the 'Admin Status' choice list. At the top, there are tabs for 'Create Choice List', 'Delete Column', and 'Update'. Below the tabs, there are sections for 'Related Links' (with links to 'Main Table', 'Run Print Scan', and 'Advanced view') and 'Access Controls' (with tabs for 'Choices', 'Attributes', 'Labels', and 'Dictionary Overrides').

The 'Choices' tab is selected, showing a table with columns for 'Label', 'Value', 'Language', 'Sequence', 'Inactive', and 'Updated'. The data in the table is as follows:

Label	Value	Language	Sequence	Inactive	Updated
New	New	en	1	false	2024-04-02 21:10:25
In progress	In progress	en	2	false	2024-04-02 21:11:03
Active	Active	en	3	false	2024-04-02 21:11:24
Rejected	Rejected	en	4	false	2024-04-02 21:12:00
Closed	Closed	en	5	false	2024-04-02 21:13:00
Required	Required	en	6	false	2024-04-02 21:13:08
Canceled	Canceled	en	7	false	2024-04-02 21:13:27

At the bottom left is a link 'Insert a new row...'. At the bottom right are buttons for 'Create Choice List', 'Delete Column', 'Update', and a refresh icon.

- Create choice for Pincode as:

- 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.

Choices	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
	LKG	LKG	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 02:12:50
	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

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

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

- Create choice for Purpose of Join as:

Choices						
	Label	Value	Language	Sequence	Inactive	Updated
	Future	Future	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 21:17:33

- Create choice for School as:

Choices						
	Label	Value	Language	Sequence	Inactive	Updated
	Shruti	Shruti	en	1	false	2024-04-02 21:19:34
	Namitha	Namitha	en	2	false	2024-04-02 21:19:35

- Create choice for School Area as:

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

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	Salonfire	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

Configuring Table form for Student Progress Table

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

Table student progress

Telugu	Total	
String	String	(empty)
40	40	

Insert a new row...

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
- Updated
- : 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
- Maths
- Total
- Average
- Social

Form view and section

Create new field

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

This screenshot shows the ServiceNow interface with a context menu open over a record. The menu has a 'Configure' section with 'Form Design' highlighted by a red arrow. Other options in the menu include 'Analytic Access', 'Share this Record', 'Move to Application', 'Move Label Update', 'Create Child Table', 'Move Univeristy Record', 'Expert', 'View', 'Create Favorite', 'Copy URL', 'Copy Record', 'Share URL', 'History', and 'Recent Items'.

4. In drop down select Salesforce(u_salesforce).

This screenshot shows the 'Form Design' editor. On the left is a sidebar with various fields like 'Auto number', 'Class', 'Created', etc. The main area shows a form with fields for 'Name' and 'Father Name'. A red arrow points to the 'Default view' dropdown menu at the top, which is set to 'Salesforce (u_salesforce)'.

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

This screenshot shows the 'Form Design' editor with fields moved to the left panel. The fields listed are Admin Number, Admin Date, Grade, Student Name, Father Name, Mother Name, Father Cell, and Mother Cell. The sidebar on the left shows categories like 'Fields', 'Form Types', 'Filter', 'Fields', 'Class', 'Created', etc.

6. Save.

Creating Form Design for Admission Table

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

Creating Form Design for Student progress Table

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

Student Progress in India - Default view

Form Design

Fields

Fields

Address Number

Address Number (Name)

Address Number (Student Name)

Address Number Father Name

Address Number Mother Name

Address Number Father Cell

Address Number Mother Cell

Student Progress

Total

Percentage

Result

Marks

Science

Creating Number Maintenance for Admin Number

- All >> Number Maintenance >> New

The screenshot shows the ServiceNow interface for creating a new number field. The search bar at the top has 'number' typed into it. The main area displays a table of existing number fields, with one row highlighted. A red box highlights the 'Number' column header, and a red arrow points from the 'Number' input field in the new record form below to this header. The new record form is titled 'Number SAL' and contains fields for Table (Salesforce), Profile (SAL), Number (1,000), Application (Global), and Number of digits (3). Buttons for Update and Delete are visible at the bottom.

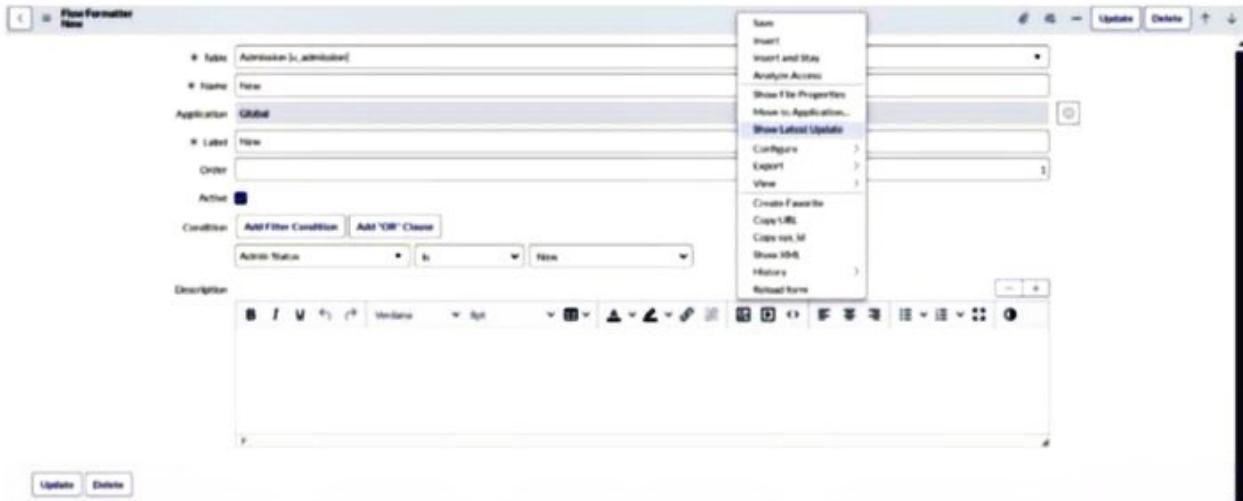
- Fill the details >> Submit.

This screenshot shows the details of the 'Number SAL' record. It includes the table, profile, number value, application, and number of digits. Below the record details, there are two forms: 'Daily Expenses [u_daily_expenses]' and 'Comments'. Both forms have a '2 Column' layout and contain fields for Number, Date, Family Member Name, Expense, and Comments, each with a radio button for editability.

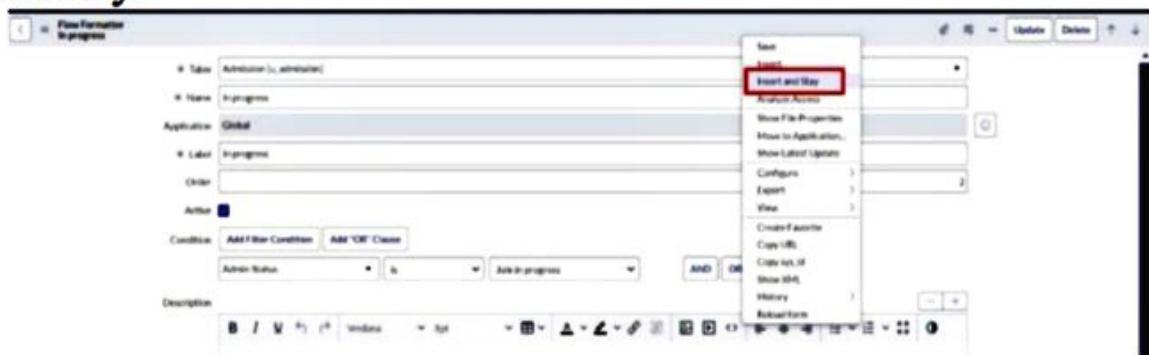
Creating Process Flow for Admission Table □

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.



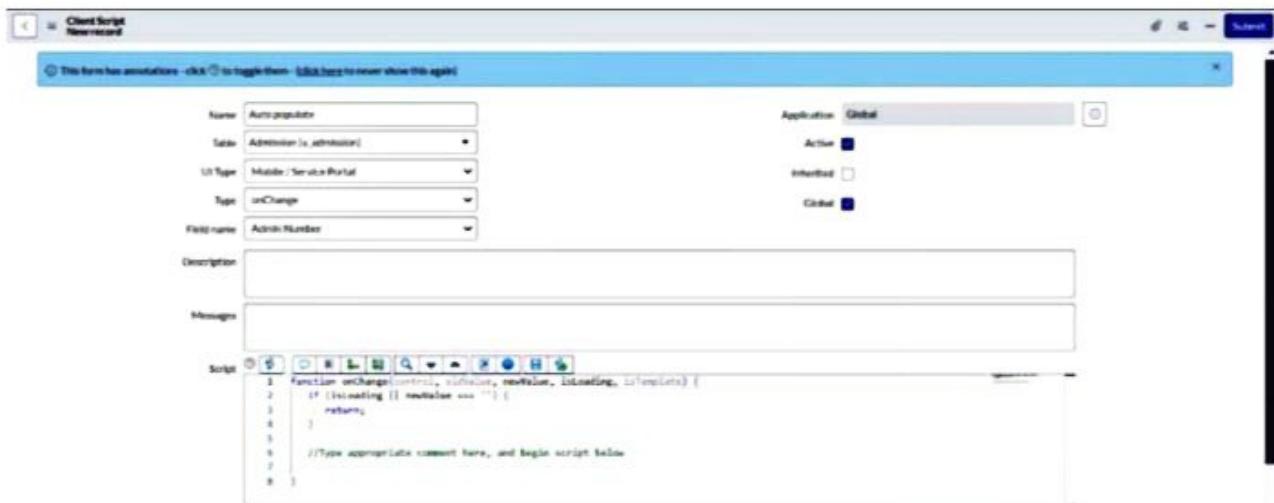
- Replace the Name and Label in order and click on Insert on stay.

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.



3.

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

5. function onChange(control, oldValue, newValue,
isLoading, isTemplate) {

6. if (isLoading || newValue === "") {

7. return;

8. }

9. //Type appropriate comment here, and begin script
below

10. var a =

 g_form.getReference('u_admission_number');

11. g_form.setValue('u_admin_date',a.u_admin_date);

12. g_form.setValue('u_grade',a.u_grade);

13. g_form.setValue('u_student_name',a.u_student_na
me);

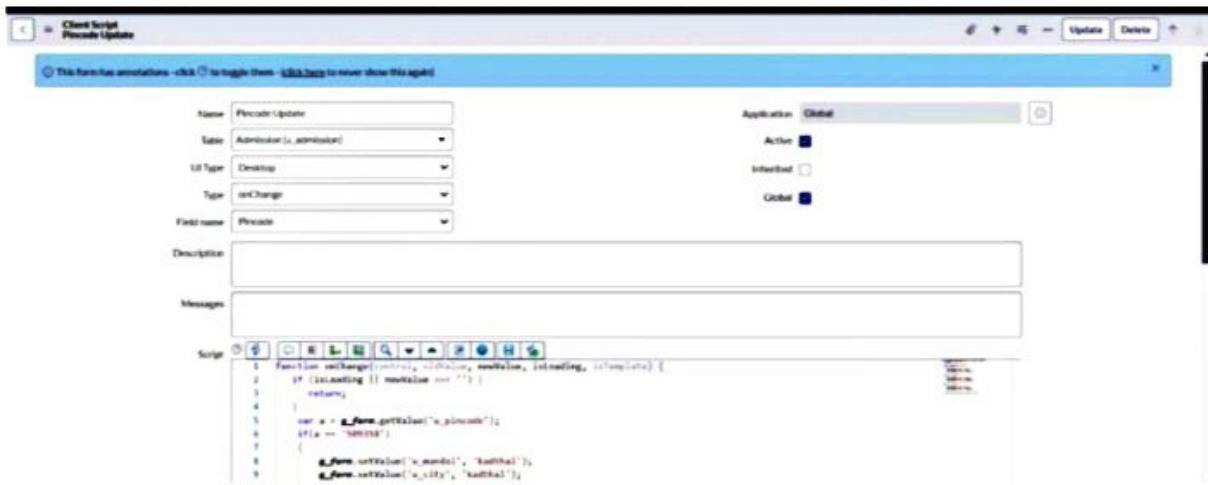
14. g_form.setValue('u_father_name',a.u_father_name
);

15. g_form.setValue('u_mother_name',a.u_mother_na
me);

```
16.    g_form.setValue('u_father_cell',a.u_father_cell);
17.    g_form.setValue('u_mother_cell',a.u_mother_cell)
18.    ;
19.    g_form.setDisabled('u_admin_date',a.u_admin_da
te);
20.    g_form.setDisabled('u_grade',a.u_grade);
21.    g_form.setDisabled('u_student_name',a.u_studen
t_name);
22.    g_form.setDisabled('u_father_name',a.u_father_n
ame);
23.    g_form.setDisabled('u_mother_name',a.u_mother_n
ame);
24.    g_form.setDisabled('u_father_cell',a.u_father_cell
);
25.    }
26.    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');
```

```
}
```

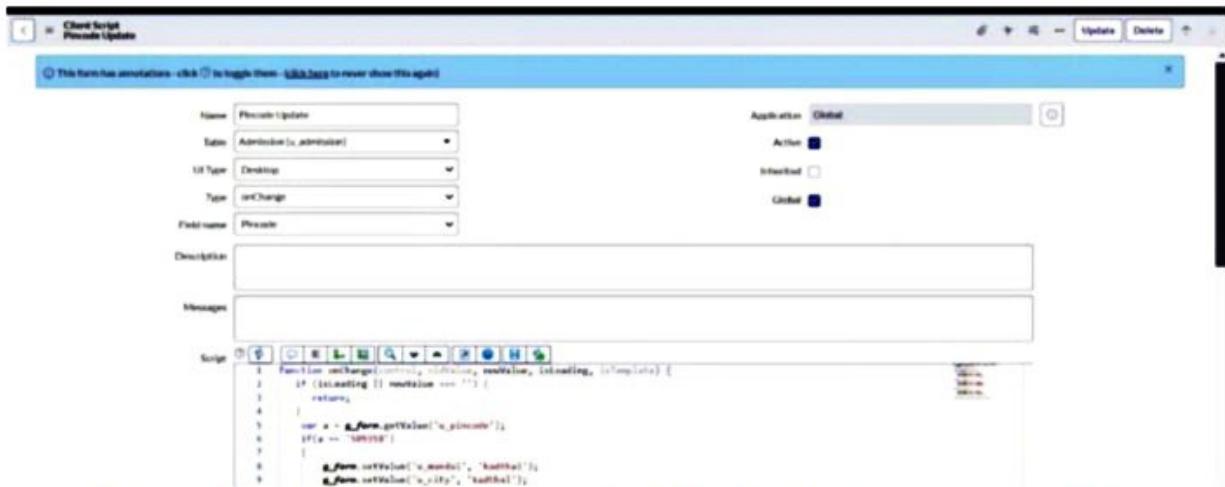
```
    else if(a == '500081')
```

```
{
```

```
16.    g_form.setValue('u_father_cell',a.u_father_cell);
17.    g_form.setValue('u_mother_cell',a.u_mother_cell)
18.    ;
19.    g_form.setDisabled('u_admin_date',a.u_admin_da
te);
20.    g_form.setDisabled('u_grade',a.u_grade);
21.    g_form.setDisabled('u_student_name',a.u_studen
t_name);
22.    g_form.setDisabled('u_father_name',a.u_father_n
ame);
23.    g_form.setDisabled('u_mother_name',a.u_mother_n
ame);
24.    g_form.setDisabled('u_father_cell',a.u_father_cell
);
25.    }
26.    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',
```

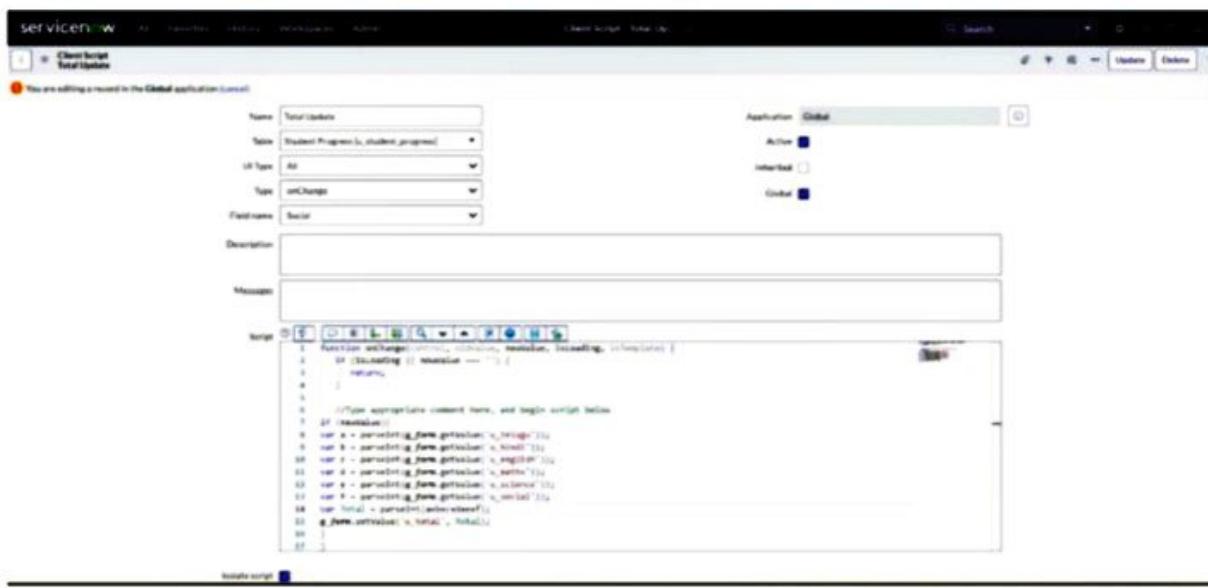
```
'Hyderabad');
```

```
}
```

//Type appropriate comment here, and begin script below

```
}
```

Creating “Disable Fields” Client Scripts for Student progress Table



- Write the Code as below, Enable Isolate script and Save.
function onChange(control, oldValue, newValue, isLoading, isTemplate) {

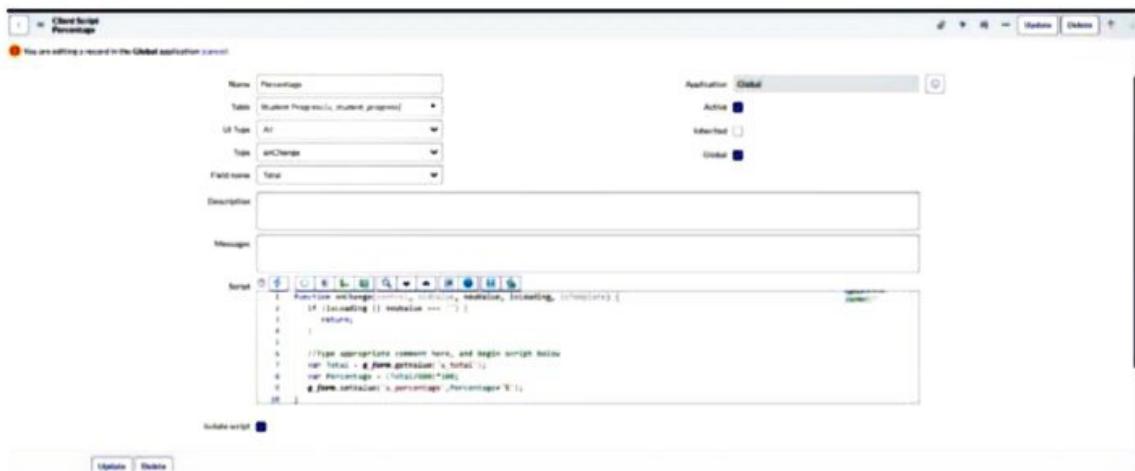
```
if (isLoading || newValue === "") {
    return;
}
```

```
//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'));
    g_form.setvalue('u_total', a+b+c+d);
}
```

```
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.



- 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+'%');  
}
```

Conclusion : Whether for business or personal use, servicenow proves to be powerful tool for structured expense management.

Result:

**Update Set**
New record

Submit

Submit and Make Current

* Name Educational Organisation

Application Global



State In progress



Parent



Release date



Description

Submit**Submit and Make Current**

servicenow All Favorites Salesforce - Create ...

salesfo

FAVORITES
No Results

ALL RESULTS
Salesforce
Admissions
Salesforces
Student Progress

Salesforce New record

Admin Number	Father Name
SAL0001002	
Admin Date	Mother Name
Grade	Father Cell
-- None --	
Student Name	Mother Cell

Submit

The screenshot displays a ServiceNow application window titled "Salesforce - Create ...". On the left, there's a sidebar with a search bar containing "salesfo" and a navigation tree under "Salesforce" which includes "Admissions", "Salesforces", and "Student Progress". The main area is a "Salesforce New record" form with the following fields and values:

- Admin Number: SAL0001002
- Admin Date: (empty)
- Grade: -- None --
- Student Name: (empty)
- Father Name: (empty)
- Mother Name: (empty)
- Father Cell: (empty)
- Mother Cell: (empty)

A "Submit" button is located at the bottom of the form.



< = Student Progress
New record

...

Maths

Hindi

Science

Social

English

Total

Result

Telugu

Percentage

Admission
Number