

4. PROJECT DESIGN:

Proposed Solution:

Project team shall fill the following information in the proposed solution template

S.no	Parameter	Description
1	Problem statement (Problem to be solved)	The educational organization faces significant challenges with its current IT service management system, including inefficient manual processes, lack of automation, and limited visibility into IT operations.
2	Idea /Solution description	The proposed solution involves implementing ServiceNow in the educational organization to streamline IT service management, enhance user experience, and improve asset management.
3	Novelty/Customer	The project brings novelty to the educational organization by leveraging ServiceNow's cutting-edge technology to transform IT service management. Its uniqueness lies in providing a tailored solution that caters to the specific needs of the educational sector, enhancing student, faculty, and staff experiences.
4	Social impact/Customer satisfaction	The implementation of ServiceNow in the educational organization is expected to have a significant social impact by enhancing the overall experience of students,

		faculty, and staff. By providing efficient and timely IT support, the organization can improve customer satisfaction, reduce frustration, and increase productivity.
5	Business model(Revenue Model)	The business model for the educational organization using ServiceNow involves cost savings and efficiency gains through streamlined IT operations.
6	Scalability of the solution	The ServiceNow solution for the educational organization is designed to be highly scalable, allowing it to adapt to growing demands and evolving needs.

Educational organization using service now

Project description:

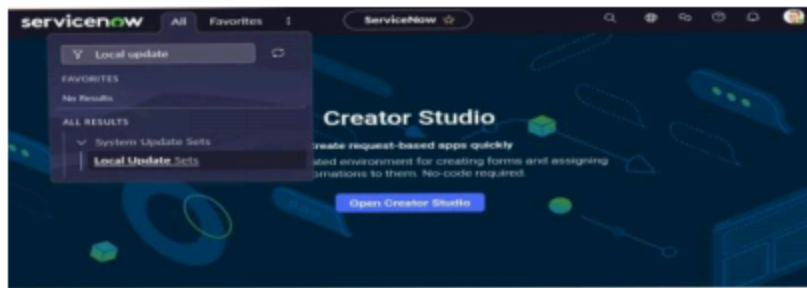
The Educational management system comprehensive platform designed to streamline administrative tasks within educational Institutions. It facilitates efficient management of student and teacher data, simplifies the admission process, and provides tools for monitoring student progress.

Milestone-1 : Setting up service now 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.

Milestone -2 : 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 table has columns: Name, Application, State, Installed from, Created, Created by, Parent, and Batch Base. There are four rows of data, all with a state of 'In progress'.

Name	Application	State	Installed from	Created	Created by	Parent	Batch Base
Default	Pipeline	In progress		2025-06-12 20:55:25	system	(empty)	(empty)
Default	Security Center	In progress		2025-04-02 10:41:58	system	(empty)	(empty)
Default	Global	In progress		2025-04-02 08:59:00	system	(empty)	(empty)
Default	Now Assist Troubleshooting	In progress		2025-04-02 10:41:08	admin	(empty)	(empty)

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

A screenshot of the ServiceNow 'Update Set - Create' form. The form fields are: Name (Educational organization), Application (Global), State (In progress), Parent (empty), Release date (empty), and Description (empty). There are 'Submit' and 'Submit and Make Current' buttons at the bottom.

Update Set - Create

Name: Educational organization Application: Global

State: In progress

Parent:

Release date:

Description:

Submit Submit and Make Current

Milestone-3 : Creating a table

Activity -1 : Creating a Salesforce Table

- All >> tables

- Click on new

The screenshot shows the Arctonow database interface. The main window displays a list of tables with the following columns: Name, External table, Externalize, and Updated. The table 'Account-Authentications-Entitlementment' is selected and highlighted in blue. The table details show it is a 'SchemaType' table, not externalized, and was updated on 2025-04-02 09:47:53. The table structure is as follows:

Table	Name	External table	Externalize	Updated
Account-Authentications-Entitlementment	account_authentications_entitlementment	SchemaType	False	2025-04-02 09:47:53
Adaptive-Authentications-Event	adaptive_auth_event	SchemaType	False	2025-04-02 09:22:59
Agent-Recent-Recommendations	agent_recent_recommendations	ApplicationFile	False	2025-04-02 09:24:40
API-Services-File	api_services_file	SchemaType	False	2025-04-02 09:25:18
Search-Providers-Configuration	search_providers_config	ApplicationFile	False	2025-04-02 09:25:18
Search-Actions	search_actions	ApplicationFile	False	2025-04-02 09:25:18
AI-Search-ACL-Content	ai_search_acl_content	ApplicationFile	False	2025-04-02 09:29:42
AI-Search-Actions-Table-Ingestion-Tracker	ai_search_actions_table_ingestion_tracker	SchemaType	False	2025-04-02 09:38:39
AI-Search-Async-Genius-Result	ai_search_genius_result	SchemaType	False	2025-04-02 09:38:44
AI-Search-Async-Request	ai_search_request	SchemaType	False	2025-04-02 09:38:45
AI-Search-Index-Index	ai_search_index	ApplicationFile	False	2025-04-02 09:39:40
AI-Search-Configuration-Attributes	ai_search_configuration_attributes	SchemaType	False	2025-04-02 09:39:39
AI-Search-Connections	ai_search_connections	SchemaType	False	2025-04-02 09:39:44
AI-Search-Country-To-Search-Language	ai_search_country_to_search_language	ApplicationFile	False	2025-04-02 09:39:45
Custom-Interface	ai_custom_interface	ApplicationFile	False	2025-04-02 09:39:42
AI-Search-Feedback-Source	ai_feedback_source	ApplicationFile	False	2025-04-02 09:39:44
AI-Search-Feedback-Source-Attributes	ai_feedback_source_attributes	ApplicationFile	False	2025-04-02 09:39:39

The sidebar on the left shows 'Tables' and 'Recent Tables' sections. The 'Recent Tables' section lists the same tables as the main window, with 'Account-Authentications-Entitlementment' at the top.

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

The screenshot shows the ServiceNow 'Table - New Record' page. The form includes the following fields and options:

- Label:** ServiceSource
- Name:** u_serviceSource
- Search table:** (empty field with a magnifying glass icon)
- Application:** Global (dropdown menu)
- Create module:** ☒ (checkbox)
- Create module module:** ☒ (checkbox)
- Add module to menu:** Create New (dropdown menu)
- New record name:** ServiceSource (text field)
- Remove Table:** ☐ (checkbox)

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



Column label	Type	Reference	Max length	Default value	Display
Admin date	Date	[YYYY]	40		True
Admin Number	String	[YYYY]	40	40 (press get next or Next Padded)	True
Father cell	String	[YYYY]	40		True
Father Name	String	[YYYY]	40		True
Grade	String	[YYYY]	40		True
Mother Cell	String	[YYYY]	40		True
Mother Name	String	[YYYY]	40		True
Student Name	String	[YYYY]	40		True

- 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 .

Access Controls

Choices (3) | Attributes | Labels (1)

Y

Value

Search

Actions on selected rows...

Filter

Choices

Label

Value *

Language

Sequence

Inactive

Updated

Subson

Subson

en

1

Subson

2025-06-24 00:19:07

Teacher

Teacher

en

3

Subson

2025-06-24 00:19:49

Cooking

Cooking

en

2

Subson

2025-06-24 00:19:39

1 to 3 of 3

- Create choice for School as:

Access Controls

Choices (3)

Attributes

Labels (1)

Y

Value

Search

Actions on selected rows...

Filter

Choices

Label

Value *

Language

Sequence

Inactive

Updated

Subson

Subson

en

1

Subson

2025-06-24 00:19:07

Teacher

Teacher

en

3

Subson

2025-06-24 00:19:49

Cooking

Cooking

en

2

Subson

2025-06-24 00:19:39

- Create choice for School Area a

Access Controls

Choices (2)

Attributes

Labels (1)

Value

Search

Actions on selected rows...

New

Choices

<div><div></div><div></div></div>	Label	Value *	Language	Sequence	Inactive	Updated
<div><div></div><div></div></div>	New Member	New Member	en		1 false	2025-06-24 02:09:50
<div><div></div><div></div></div>	New Blue Stand	New Blue Stand	en		2 false	2025-06-24 02:09:24
<div>1 to 2 of 2</div>						

Activity -3 : Creating Student Progress Table

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

- Create Fields as shown:

Table Student Progress			
	Created by	String	(empty)
X	Social	String	(empty)
X	Hindi	String	(empty)
X	Science	String	(empty)
X	Percentage	String	(empty)
X	Telugu	String	(empty)
	Updated by	String	(empty)
X	Maths	String	(empty)
	Sys ID	Sys ID (GUID)	(empty)

Milestone - 4Configuring Table form for Student Progress Table

- In the Student Progress Table Page , Click on Layout form .
- Click on Admission Number [+].

The screenshot shows the ServiceNow configuration interface for the 'Student Progress' table layout. The top navigation bar includes 'Favorites', 'History', 'Workspaces', 'Admin', and a 'ServiceNow' logo. A search bar is also present. The main area is divided into two columns: 'Available' and 'Selected'. The 'Available' column lists various fields, including 'Admission Number [+]', 'Created', 'Created by', 'Updated', 'Updated by', 'Updates', '[- begin_split -]', '[- split -]', '[- end_split -]', '* Annotation', '* Chart', 'Activities (filtered)', 'Contextual Search Results', 'Ratings', and 'Attachments'. The 'Selected' column lists fields that have been moved to the layout, including '[- begin_split -]', 'Telugu', 'Result', 'Total', 'Social', '[- split -]', 'Hindi', 'Science', 'Percentage', 'Maths', '[- end_split -]', and 'Admission Number'. Below these columns are 'Cancel' and 'Save' buttons. At the bottom, there is a 'Form view and section' section with a 'View name' dropdown set to 'Default view' and a 'Section' dropdown set to 'Student Progress'. To the right of this is a 'Create new field' section with fields for 'Name', 'Type' (set to 'String'), and 'Field length' (set to 'Small (40)'), followed by an 'Add' button.

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

Milestone – 5 : FORM DESIGN

Activity – 1: Creating Form Design for Salesforce Table

- All >> System Definition >> Tables
- In Label Search for Salesforce and open

Label	Name	Extends table	Extensible	Updated
Search	Search	Search	Search	Search
salesforce	saml2_assertion_attribute	Application File	false	2025-06-25 00:08:56
SAML2 Assertion Keystore	saml2_assertion_keystore	(empty)	false	2025-04-02 08:36:23
SAML2 Assertion Producer	saml2_assertion_producer	Application File	false	2025-04-02 08:36:24
Client Access	samp_client_access	(empty)	false	2025-04-02 08:44:50
Oracle Options	samp_oracle_options	(empty)	false	2025-04-02 08:49:03
Custom Software Product Lifecycle	sam_custom_sw_product_lifecycle	Software Product Lifecycle	false	2025-04-02 08:42:23
Software Product Lifecycle	sam_sw_product_lifecycle	(empty)	true	2025-04-02 08:42:23
BaseLines	sa_baselines	(empty)	false	2025-04-02 09:22:35
Business Service User preferences	sa_business_service_user_prefs	(empty)	false	2025-04-02 09:22:44
Contextual color and icon	sa_contextual_colors_and_icons	(empty)	false	2025-04-02 08:42:34
Menu Action	sa_context_menu	Application File	false	2025-04-02 09:22:34

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

servicenow All Favorites | **Table - salesforce** [Search] [Update] [Delete All Records]

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. [Table Info](#)

* Label: Application: [Add]

* Name: Remote Table:

Extends table: [Add]

Table Columns Type: [Search] 1 to 20 of 22 [New]

Column label	Type	Reference	Max length	Default value	Display
Type	Choice	(empty)	40	string	false
Admin Date	Date	(empty)	40		false
Updated	Date/Time	(empty)	40		false
Created	Date/Time	(empty)	40		false
Updates	Integer	(empty)	40		false
Application	Reference	Application	32	javascript:([typeof parent != 'object'])...	false
Package	Reference	Package	32		false
Assertion Producer	Reference	SAML2 Assertion Producer	32		false
Name	String	(empty)	255		false
Created by	String	(empty)	40		false

- In drop down select Salesforce(u_salesforce).
- Drag and drop the fields to the left side as below.

Table [sys_db_object] Default view

Search:

- salesforce [u_salesforce]
- salesforce [u_salesforce]
- salesforce [saml2_assertion_attribute]
- Auto number
- Class
- Created
- Created by
- Display name

Form Design

Save.

Activity -2 : Creating Form Design for Admission Table

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

Activity -3 : Creating Form Design for Student progress Table

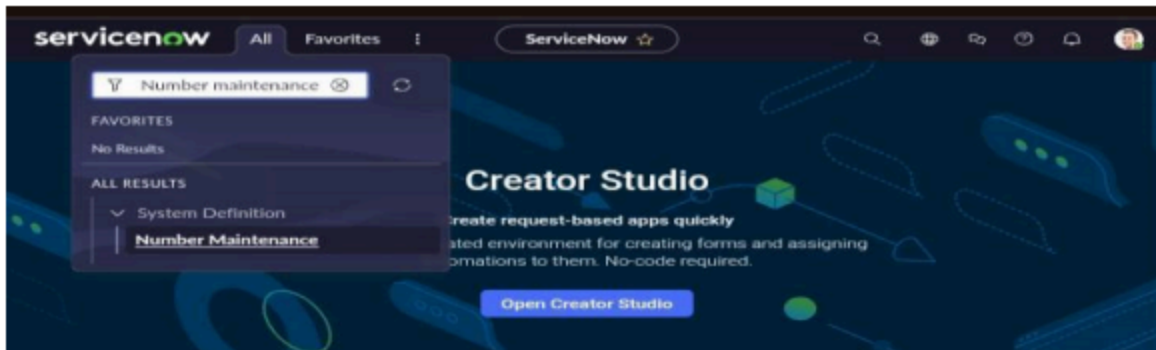
The screenshot shows the 'Form Design' interface for the 'Admission' table. The left sidebar contains a 'Fields' list with items like 'Admin Number', 'Class', 'Created', 'Created by', 'Sys ID', 'Updated', 'Updated by', and 'Updates'. Below this is a 'Formatters' section with 'Activities (filtered)', 'Contextual Search Results', 'Process Flow', and 'Ratings'. The main workspace is divided into sections: 'Admission [u_admission]' with fields like 'Class(u_class)', 'Father Name', 'Mother Name', 'Student Name', 'Purpose of join', 'Admission Number', 'Admn date', 'Fee', 'Mother Cell', 'Father Cell', 'Grade', and 'Admn Status'; 'Comments'; 'School Details' with 'School Area' and 'School'; and 'Adress' with 'Pincode', 'Area', 'Mandal', 'City', 'House No', and 'District'. Each field has a small icon to its right for configuration.

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

The screenshot shows the 'Form Design' interface for the 'Student Progress' table. The left sidebar is identical to the previous one. The main workspace contains sections: 'Student Progress [u_student_progress]' with a 'Drag content, drag it here' placeholder; 'New Section' with fields for 'Admission Number Grade', 'Admission Number Father Name', 'Admission Number Mother Name', 'Admission Number Father Cell', and 'Admission Number Mother Cell'; and a section with fields for 'Telugu', 'English', 'Hindi', 'Maths', 'Science', 'Social', 'Total', 'Percentage', and 'Result'. Each field has a small icon to its right for configuration.

Milestone -6 : Number maintenance

Creating Number Maintenance for Admin Number



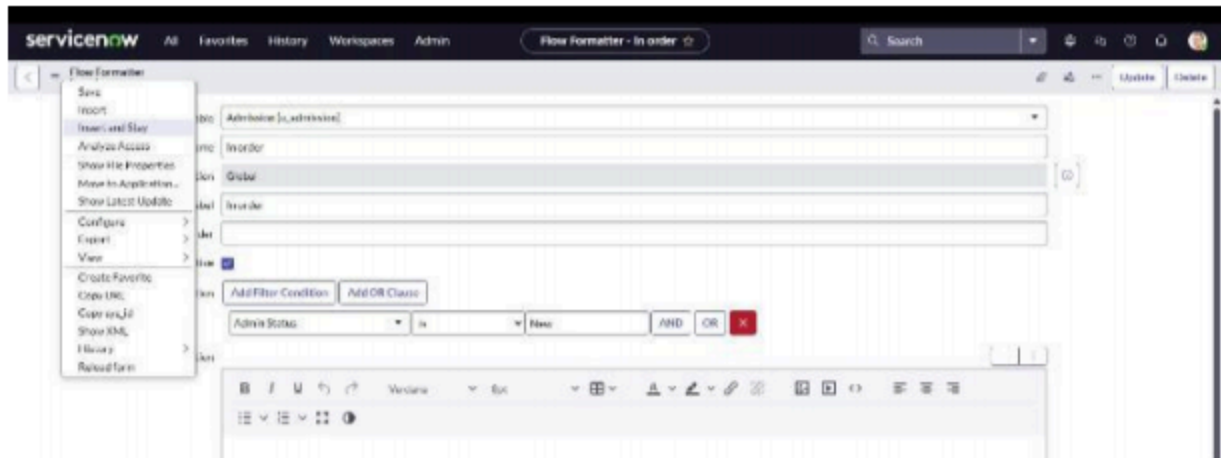
- All >> Number Maintenance >> New
- Fill the details >> submit

A screenshot of the ServiceNow Number Maintenance form for 'Number - SAL'. The form is displayed in a light gray theme. At the top, there's a navigation bar with 'All', 'Favorites', 'History', 'Workspaces', and 'Admin' tabs. A search bar contains 'Number - SAL'. Below the navigation bar, there's a breadcrumb trail: '< Number SAL'. The form fields are: 'Table' (Salesforce), 'Prefix' (SAL), 'Number' (1,000), 'Application' (Global), and 'Number of digits' (7). There are 'Update' and 'Delete' buttons at the top right and bottom left. Below the form, there's a 'Related Links' section with a link to 'Show Counter'.

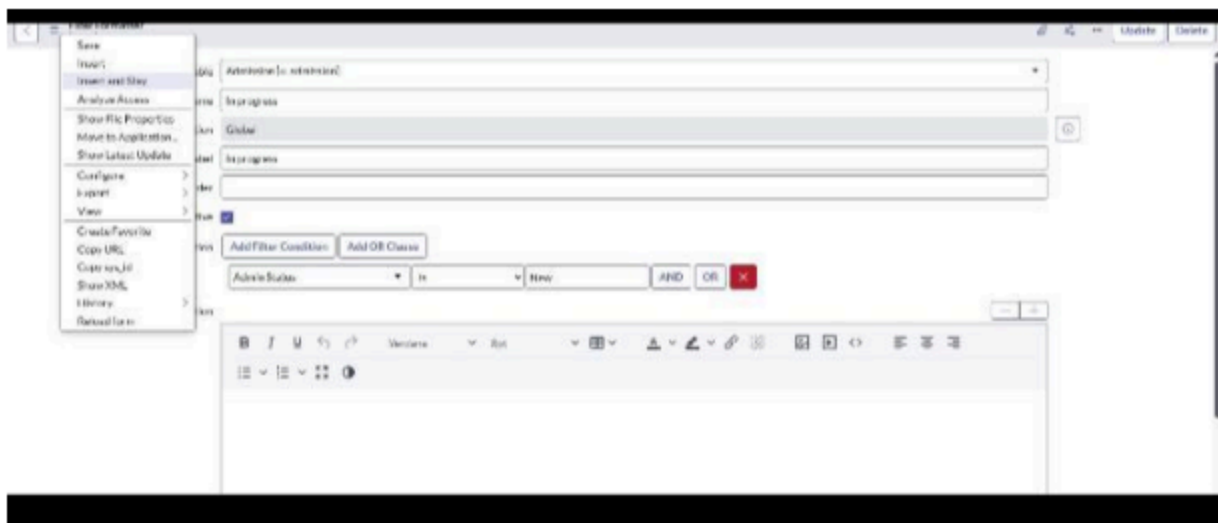
Milestone – 7 Process Flow

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.

Milestone – 8 :

Activity- 1 : Creating “Auto populate” Client Scripts for Admission Table

- All >> Client Scripts >> New.

- The Details Fill has given.

mother_name);

G_form.setDisabled('u_father_cell',a.u_father_cell);

G_form.setDisabled('u_mother_cell',a.u_mother_cell);

} 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_
```

Activity- 2: Creating “Pincode Update” Client Scripts for Admission Table

- Fill the Details as given.

The screenshot shows the ServiceNow interface for configuring a Client Script. The title bar indicates 'Client Script - Pincode Update'. Below the title bar, there's a navigation bar with 'Client Script' and 'Pincode Update' tabs. A warning message states: 'New client-scripts are run in strict mode, with direct DOM access disabled. Access to jQuery, prototype and the window object are likewise disabled. To disable this on a per-script basis, configure this form and add the "isolate script" field. To disable feature for all new globally-scoped client-side scripts set the system property "glide.script.block.client_globals" to false.' The form fields are as follows:

- 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: (code editor with the following content)

```
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 a = g_form.getValue('u_pincode');  
8  
9   if(a == '509358')  
10  {  
11  
12
```

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
}
```

Activity- 3 :Creating “Disable Fields” Client Scripts for Student progress Table

- Fill the Details as given.

Client Script
disable fields on out-of-scope table

New client-scripts are run in strict mode, with direct DOM access disabled. Access to jQuery, prototype and the window object are likewise disabled. To disable this on a per-script basis, configure this form and add the "Isolate script" field. To feature for all new globally-scoped client-side scripts set the system property "glide.script.block.client.globals" to false.

Name	disable fields on out-of-scope table	Application	Global
Table	Data Policy Rule [sys_data_policy_rule]	Active	<input checked="" type="checkbox"/>
UI Type	All	Inherited	<input type="checkbox"/>
Type	onLoad	Global	<input checked="" type="checkbox"/>

Description

Disables the Mandatory field if the table is not in the current scope

Messages

Script

```

1 function onLoad() {
2   limitDataPolicyRuleOnOutOfScopeTable();
3 }
4
5 function limitDataPolicyRuleOnOutOfScopeTable() {
6   var tableName = g_form.getValue("table");
7   var outOfScope = !isTableInScope(tableName);
8   g_form.setReadOnly("mandatory", outOfScope);
9 }
10
11 function isTableInScope(tableName) {
12   if (tableName == "")
  
```

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);

}

Activity-4: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);
}
}

```

Activity- 5:Creating “Result” Client Scripts for Student progress Table

Fill the Details as given.

The screenshot shows the Salesforce Client Script configuration page. The script is named 'Result' and is associated with the 'Student Progress' table. The configuration details are as follows:

- Name:** Result
- Table:** Student Progress [u_student_pr...]
- UI Type:** All
- Type:** onChange
- Field name:** Percentage
- Application:** Global
- Active:** ☒
- Inherited:** ☐
- Global:** ☒

The script code is as follows:

```

function onChange(control, oldValue, newValue, isLoading, isTemplate) {
    if (isLoading || newValue === '') {
        return;
    }
    //Type appropriate comment here, and begin script below
    if(newValue) {

```

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');
```

```
}
```

```
}
```

```
}
```

Activity- 6 :

Creating “Percentage” Client Scripts for Student progress Table

Fill the Details as given.

The screenshot shows the 'Client Script' configuration window for 'Renew Cost Percentage'. The 'Name' field is 'Renew Cost Percentage', 'Table' is 'Contract [ast_contract]', 'UI Type' is 'All', 'Type' is 'onChange', and 'Field name' is 'Cost adjustment percentage'. The 'Application' is set to 'Global', 'Active' is checked, 'Inherited' is unchecked, and 'Global' is checked. The 'Description' field contains the text: 'If the user enter any percentage other than zero, the amount field should set to 0'. The 'Script' field contains the following code:

```
1 function onChange(control, oldValue, newValue, isLoading, isTemplate) {
2     if (isLoading || newValue === '') {
3         return;
4     }
5     //If the user enter any percentage other than zero, the amount field should set to 0
6     if (newValue != 0) {
7         g_form.setValue('cost_adjustment', 0);
8     }
9 }
```

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+'%');  
}
```