

EDUCATIONAL ORGANIZATION USING SERVICE NOW

Problem statement

In an educational institution, managing academic and administrative tasks efficiently is a major challenge. Faculty members often face difficulties in assigning tasks to students, while students are confused about their responsibilities due to the lack of structured workflows and proper access control.

Currently, there is no clear distinction between faculty and student roles in the system, which leads to unauthorized edits, task duplication, and poor accountability. Without automation, monitoring student progress and generating timely reports is also difficult, creating delays in academic activities.

Objectives

1. Define User Roles Clearly

- Faculty (Academic Coordinator) → Can create, assign, edit, and monitor tasks.
- Student → Can only view and update assigned tasks.

2. Implement Access Control Mechanisms

- Use Access Control List (ACL) to restrict student access while giving full privileges to faculty.

3. for transparency and accountability. Workflow Processes using ServiceNow Flow Designer

- Faculty creates and assigns tasks.
- Students receive notifications, update task progress, and mark completion.
- Faculty monitors progress, approves completion, and closes the task.
- Reports are generated

Skills:

Users, Groups, Roles, Tables, Access Control List (ACL), Flow Designer, Notifications, Reporting & Dashboards.

TASK INITIATION

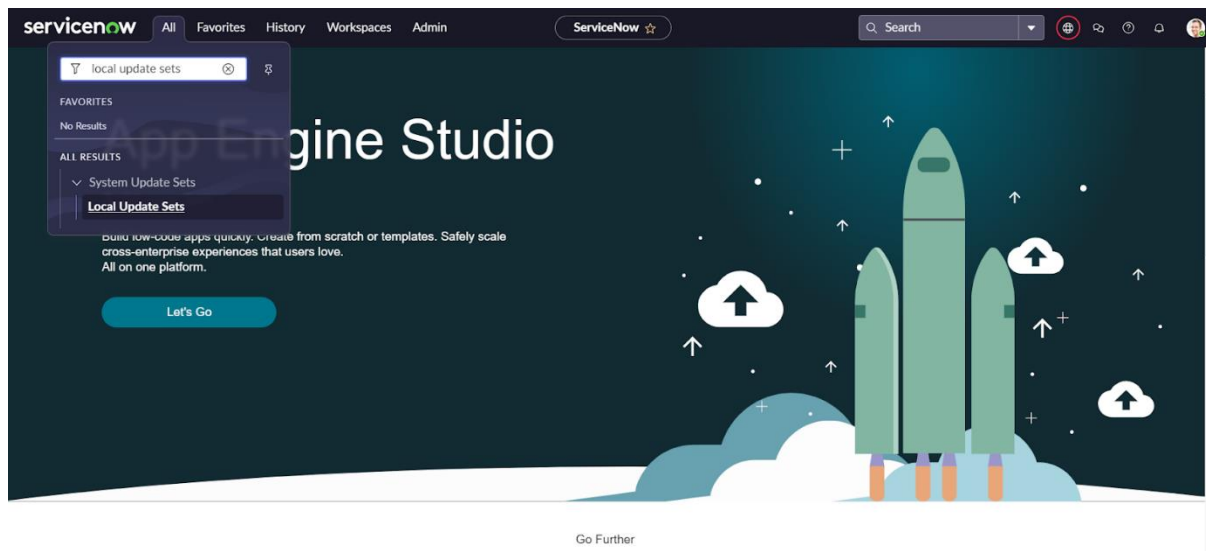
Milestone 1 Users:

Activity 1: setting up service now instance

Go to the ServiceNow Developer site: <https://developer.servicenow.com>

1. Create a developer account (sign up / log in).
2. Open the Personal Developer Instance section.
3. Click Request Instance to get your own ServiceNow instance.
4. Fill in the required details and submit.
5. You will receive an email with your instance link and login details.
6. Use those credentials to log in and start using ServiceNow.

Creating a update set:



1. click on new table
2. enter a details and name is Educational organization in progress
3. submit button

servicenow All Favorites History Workspaces **Update Set - educational organization** Search

Update Set
educational organization

✱ Name: educational organization Application: Global ⓘ

State: In progress Created: 2025-06-04 08:18:15

Parent: ⓘ Created by: system

Release date: ⓘ Merged to: ⓘ

Install date: ⓘ

Installed from: ⓘ

Description: Automatically created by the system

[Update](#)

Related Links

[Take This My Current Set](#)

[Merge With Another Update Set](#)

[Can Update Set](#)

Customer Updates (224) Update Set Logs Child Update Sets

Created Search Actions on selected rows...

Milestone 2:

Create a tables :

servicenow All Favorites History Workspaces **Update Set - educational organization** Search

tables

- Archive **Tables**
 - Archive Knowledge Use
 - Archive Audit Result
- System Clone
 - Clone Definition
 - Exclude **Tables**
- System Definition
 - Tables** ⓘ
 - Tables & Columns**
 - Decision **Tables**
 - Remote **Tables**

educational organization

Application: Global ⓘ

Created: 2025-06-04 08:18:15

Created by: system

Merged to: ⓘ

Description: Automatically created by the system

[Update](#)

Related Links

[Take This My Current Set](#)

Click on new table

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

* Name

Extends table

Application

Create module ☒

Create mobile module ☒

Add module to menu

New menu name

Columns * Controls Application Access

Table Columns Column label Search

Creating a column

* Name

Extends table

Create module ☒

Create mobile module ☒

Add module to menu

New menu name

Columns * Controls Application Access

Table Columns Column label Search

Dictionary Entries

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

Submit Cancel

To give a table name for sales force and display the screen & given display to create admin number

servicenow All Favorites History Workspaces Admin Table - Sale_force Search Delete Update Delete All Records

Table Sale_force

* Name

Columns Controls Application Access

Table Columns Column label Search

Dictionary Entries

Column label	Type	Reference	Max length	Default value	Display
Admin Date	Date	(empty)	40		false
Admin Number	String	(empty)	40		true
Class	System Class Name	(empty)	80	javascript:current.getTableName();	false
Created	Date/Time	(empty)	40		false
Created by	String	(empty)	40		false
grade	Choice	(empty)	40		false
Sys ID	Sys ID (GUID)	(empty)	32		false
Updated	Date/Time	(empty)	40		false
Updated by	String	(empty)	40		false
Updates	Integer	(empty)	40		false

The last step is click on grade column and <<choice>>column to give a grade I,II,III to we want

CHOOSE -- CHOOSE WITH -- FORCE --

Create Choice List Delete Column Update

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

Access Controls Choices (3) Attributes Labels (1) Dictionary Overrides

Label Search

Choices

Label	Value	Language	Sequence	Inactive	Updated
II	2	en		false	2025-09-05 07:36:54
I	1	en		false	2025-09-05 07:36:48
III	3	en		false	2025-09-05 07:37:11

+ Insert a new row...

Creating a admission table for sales force

1. Go to Tables module and click Create Table.
2. Enter Table Label as Admission.
3. In Extends Table, select Salesforce.
4. Tick Add module to menu and select Salesforce.
5. Add the required Fields/Columns
6. Save the table and check the new module under Salesforce.

Table admission Delete Update Delete All Records

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

* Label admission

* Name u_admission

Extends table Sale_force ⓘ

Application Global ⓘ

Controls Application Access

Table Columns Column label Search

1 to 17 of 17 New

Column label	Type	Reference	Max length	Default value	Display
Admin Date	Date	(empty)	40		false
Admin Number	String	(empty)	40		true
admin status	String	(empty)	40	7	false
Class	System Class Name	(empty)	80	javascript:current.getTableName();	false
Created	Date/Time	(empty)	40		false
Created by	String	(empty)	40		false

Column label	Type	Reference	Max length	Default value	Display
Admin Date	Date	(empty)	40		false
Admin Number	String	(empty)	40		true
admin status	String	(empty)	40	7	false
Class	System Class Name	(empty)	80	javascript:current.getTableNames();	false
Created	Date/Time	(empty)	40		false
Created by	String	(empty)	40		false
grade	Choice	(empty)	40		false
Number	String	(empty)	40	javascript:global.getNextObjNumberPadded();	false
pincode	String	(empty)	40		false
purpose of join	String	(empty)	40		false
school	String	(empty)	40		false
school area	String	(empty)	40		false
Sys ID	Sys ID (GUID)	(empty)	32		false
Sys ID	Sys ID (GUID)	(empty)	32		false

Create student progress table:

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

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

* Label: student progress
 * Name: u_student_progress
 Extends table: Sale_force

Application: Global ⓘ

Columns Controls Application Access

Column label	Type	Reference	Max length	Default value	Display
Admin Date	Date	(empty)	40		false
Admin Number	String	(empty)	40		true
Admission number	Reference	sales force	32		false
Class	System Class Name	(empty)	80	javascript:current.getTableNames();	false
Created	Date/Time	(empty)	40		false
Created by	String	(empty)	40		false
english	String	(empty)	40		false
grade	Choice	(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
Sys ID	Sys ID (GUID)	(empty)	32		false
Sys ID	Sys ID (GUID)	(empty)	32		false
telugu	String	(empty)	40		false
total	String	(empty)	40		false
Updated	Date/Time	(empty)	40		false
Updated by	String	(empty)	40		false

Milestone 3

Form layout

4. Open the Admission Table.
5. Click on Configure → Form Layout.
6. In Form Layout, you can add, remove, or reorder fields for the form.
7. Use the **toggle button

Configuring Dictionary Entry form

Available

- Application [+]
- Array
- Array denormalized
- Attributes
- Calculated
- Calculation
- Calculation Type
- Choice
- Choice field
- Choice table
- Class
- Comments
- Create roles
- Created
- Created by
- Default value

Selected

- * Annotation (Section Details)
- | - begin_split - |
- Table
- Type
- Column label
- Column name
- Max length
- | - split - |
- Application
- Active
- Function field
- Read only
- Mandatory
- Display
- Text index
- Audit

Cancel Save

Form view and section

View name: Default view

Section: Dictionary Entry

Create new field

Name:

Type: String

Field length: Small (40)

Add

Related Links

Milestone 4

Activity: Create form design

1. Go to Setup → Object Manager → Create → Custom Object.
2. Enter Object Name (e.g., Admission) and save.
3. Add Fields (Student Name, Course, Admission Date).
4. Arrange fields in Page Layout and save

servicenow Table - sales force

Save
Analyze Access
Show File Properties
Move to Application...
Show Latest Update
Show Dictionary Record
Configure
Export
View
Create Favorite
Copy URL
Copy sys_id
Show XML
History
Reload form
Sys ID
Insert a new row...

Form Builder
Form Design
Form Layout
Related Lists
All
Table
Security Rules
Business Rules
Client Scripts
UI Policies
Data Policies
UI Actions
Notifications
Dictionary

Update

Related Links
Form Builder
Design Form
Layout Form
Layout List
Show Form
Show List
Show Schema Map
Add to Service Catalog

Type	Reference	Max length	Default value	Display
Sys ID (GUID)	(empty)		32	false

sales force [u_at_sales_force] Default view

Form Design

Fields Field Types

Filter

Formatters

Activities (filtered)

Contextual Search Results

Ratings

student details 1 Column

address 2 Column

To drag

Form Design

Fields Field Types

Filter

Fields

Auto number

Class

Created

Created by

Display name

Extension model

Package

Protection policy

Remote Table

Sys class code

Sys class path

Update name

Updated

Updated by

Updates

Formatters

Activities (filtered)

Contextual Search Results

Annotation

Activities (filtered)

Name

Extends table

Application

Show In Menu (Formatter)

Columns

Table Columns Formatter (Formatter)

Controls

Extensible

Live feed

Annotation


Show Number Maintenance (Formatter)

Auto number Prefix

Auto number Number

Auto number Number of digits

Annotation



Then last step save

create admission table for form design

1. Open the Admission Table.
2. Click Configure → Form Layout (or Page Layout in Salesforce).
3. In Form Layout, you will see Available Fields and Selected Fields.
4. Drag fields from Available to Selected to include them in the form.
5. Reorder fields by dragging up or down to set the display sequence.
6. Click Save to apply the form layout.
7. Open the Admission form to verify the design.

Form Design

admission [u_admission] default view

Fields Fields Table

Filter

Fields

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

Formatters

- Activities (filtered)
- Contextual Search Results
- Ratings

admission [u_admission] 2 Column

Process Flow (Formatter)

Number

admin status

pincode

purpose of join

school

school area

school details 2 Column

Drag content, drop it here

address 2 Column

Drag content, drop it here

Creating a student progress in form design

Form Design

student progress [u_student] Default view

Fields Field Types

Filter

Fields

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

Formatters

- Activities (filtered)
- Contextual Search Results
- Ratings

student progress [u_student_progress] 2 Column

english

hindi

science

percentage

result

maths

social

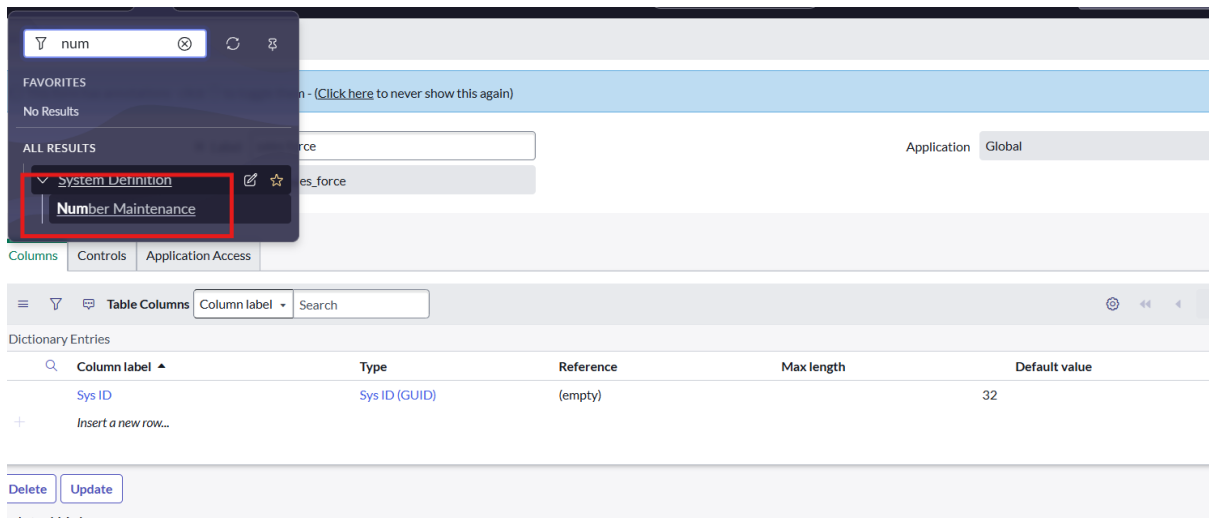
Admission number

telugu

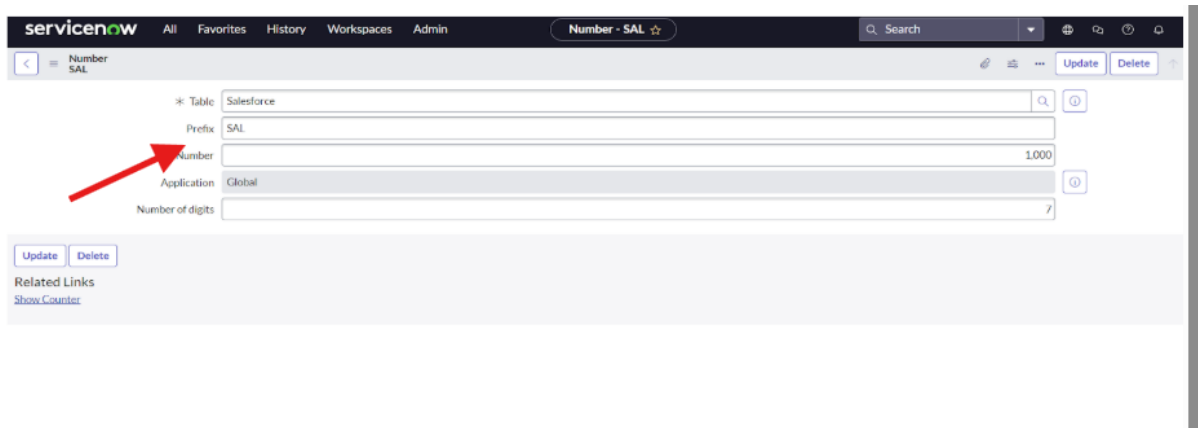
total

Milestone 5

Activity to create a number maintenance



To give a salesforce for label name



Milestone 6

Activity: create processes flow for admission table

1. Create Admission Table – Make a new table for storing admission details.
2. Add Fields – Include Student Name, Age, Course, Admission Date.
3. Design Form Layout – Arrange fields using drag & drop.
4. Save & Use – Save the table and start entering admission records

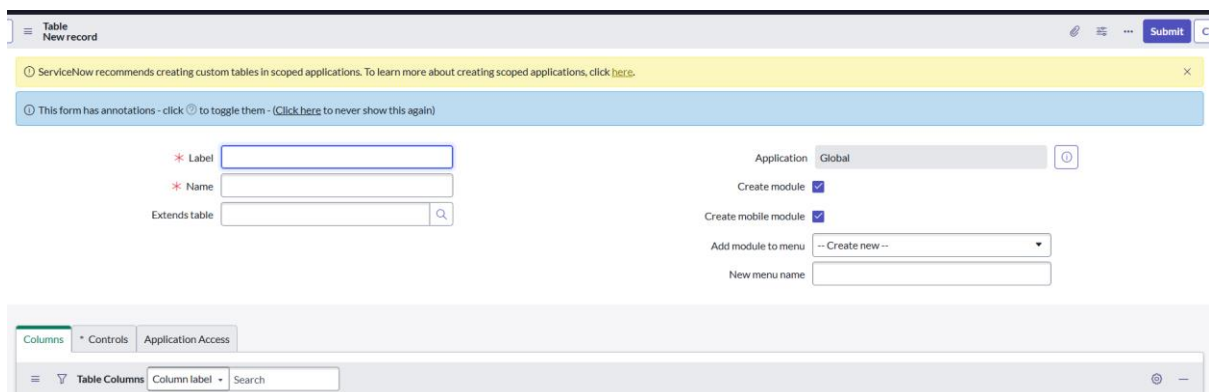


Table admission

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

* Label Application Global ⓘ

* Name

Extends table ⓘ

Columns Controls Application Access

Table Columns Column label Search 1 to 17 of 17 New

Column label	Type	Reference	Max length	Default value	Display
Admin Date	Date	(empty)	40		false
Admin Number	String	(empty)	40		true
admin status	String	(empty)	40	7	false
Class	System Class Name	(empty)	80	javascript:current.getTableName();	false
Created	Date/Time	(empty)	40		false
Created by	String	(empty)	40		false
grade	Choice	(empty)	40		false
Number	String	(empty)	40	javascript:global.getNextObjNumberPadded();	false
pincode	String	(empty)	40		false

Flow Formatter In progress

* Table ⓘ

* Name

Application

* Label

Order

Active ☒

Condition

is

AND OR

Description

B I U ↶ ↷ Verdana 8pt

Save
Insert
Insert and Stay
Analyze Access
Show File Properties
Move to Application...
Show Latest Update
Configure
Export
View
Create Favorite
Copy URL
Copy sys_id
Show XML
History
Reload form

Milestone 7

Activity1: Creating “Auto populate” Client Scripts for Admission Table

Activity: 2 To create client script

Name	Extends table	Extensible	Updated
u_cmdb_qb_result_1859dc7fe9d74abd9844d8a...	Query Builder Results	false	2025-06-04 08:50:36
u_cmdb_qb_result_d3bda2a94c2c358b33baadf...	Query Builder Results	false	2025-06-04 08:50:40
u_cmdb_qb_result_9a270798bac9295a427ea2f...	Query Builder Results	false	2025-06-04 08:50:41
u_cmdb_qb_result_b00b22494898682e88f2afc...	Query Builder Results	false	2025-06-04 08:50:36
u_cmdb_qb_result_917e91fecba01ca08f922d...	Query Builder Results	false	2025-06-04 08:50:39
sys_installation_exit	Application File	false	2025-06-04 07:58:18
cmdb_ci_installed_bundles	Virtual Machine Object	false	2025-06-04 08:08:42
sp_instance	Application File	true	2025-06-04 08:24:31
clone_instance	Database Clone	false	2025-06-04 08:00:15
sys_sync_preview	(empty)	false	2025-06-04 08:02:41
sn_vsc_instance_hardening_settings	(empty)	false	2025-06-04 08:53:35
sp_instance_carousel	Instance	false	2025-06-04 08:24:38
sp_instance_vlist	Instance with Table	false	2025-06-04 08:24:32
cmdb_instance_run_history	(empty)	false	2025-06-04 08:09:29
sys_instance_state	(empty)	false	2025-06-04 07:59:13
sp_instance_link	Instance	false	2025-06-04 08:24:32

Click on new:

Activity: 3Display the given details:

To given the copy code in display

```
//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);
```

Activity: 4 Creating a pin code:

The screenshot shows the Dynamics 365 Client Script editor for a form named 'Pincode Update'. The form is associated with the 'Admission' table and the 'u_admission' field. The UI Type is 'Desktop' and the Type is 'onChange'. The Field name is 'Pincode'. The Application is set to 'Global'. The form is active and inherited. The Description and Messages fields are empty. The Script area contains the following code:

```
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');
```

Activity: 5 Creating “Disable Fields” Client Scripts for Student progress Table

Client Script
 Disable Fields

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: ☒

UI Type: All
 Inherited: ☐

Type: onLoad
 Global: ☒

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 }
    
```

Activity: 6 Creating “Total Update” Client Scripts for Student progress Table

servicenow All Favorites History Workspaces Admin Client Script - Total Up...

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

Name: Total Update
 Application: Global ⓘ

Table: Student Progress [u_student_progress]
 Active: ☒

UI Type: All
 Inherited: ☐

Type: onChange
 Global: ☒

Field name: Social

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   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);
    
```

Activity: 7 Creating “Result” Client Scripts for Student progress Table

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

Name	<input type="text" value="Result"/>	Application	Global <input type="button" value="ⓘ"/>
Table	<input type="text" value="Student Progress[u_student_progress]"/>	Active	<input checked="" type="checkbox"/>
UI Type	<input type="text" value="All"/>	Inherited	<input type="checkbox"/>
Type	<input type="text" value="onChange"/>	Global	<input checked="" type="checkbox"/>
Field name	<input type="text" value="Percentage"/>		
Description	<input type="text"/>		
Messages	<input type="text"/>		
Script	<pre> 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 <= 50){ 10 g_form.setValue('u_result','Fail'); 11 } else if(a >= 60 && a <= 100) { 12 g_form.setValue('u_result','Pass'); 13 } else { </pre>		

Activity: 8 Creating “Percentage” Client Scripts for Student progress Table

Client script Percentage

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

Name	<input type="text" value="Percentage"/>	Application	Global <input type="button" value="ⓘ"/>
Table	<input type="text" value="Student Progress[u_student_progress]"/>	Active	<input checked="" type="checkbox"/>
UI Type	<input type="text" value="All"/>	Inherited	<input type="checkbox"/>
Type	<input type="text" value="onChange"/>	Global	<input checked="" type="checkbox"/>
Field name	<input type="text" value="Total"/>		
Description	<input type="text"/>		
Messages	<input type="text"/>		
Script	<pre> 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 } </pre>		

Result

Sale_force New record

Admin Number	<input type="text"/>	grade	<input type="text" value="-- None --"/>
Admin Date	<input type="text"/>		
<input type="button" value="Submit"/>			

student progress
 New record

english
 hindi
 science
 persentage
 result

maths
 social
 Admission number
 telugu
 total

Submit

admission
 New record

new

Number
 admin status
 pincode

purpose of join
 school
 school area

school details

Submit

Conclusion

By creating tables, adding fields, designing form layouts, and applying workflows in ServiceNow / Salesforce, educational organizations can manage admissions and tasks more efficiently. Using Users, Roles, ACL, Flow Designer, and Reporting, the system ensures clear responsibilities, secure access, structured workflows, and smooth data management. This improves transparency, accountability, and productivity in the institution.