

EDUCATIONAL ORGANIZATION USING SERVICENOW

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Team Members: 4

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Problem Statement:

Educational organizations face difficulties in handling student queries, staff requests, IT support, and administrative tasks when managed manually. This leads to delays, errors, and lack of transparency. As a result, processes become inefficient and cause dissatisfaction among students and staff.

Objective:

1. Automate service requests and ticketing system:

Instead of writing complaints or requests manually, the system will automatically create and track tickets, making it faster and easier to manage.

2. Improve communication between students, staff, and administration:

ServiceNow provides a single platform where students, staff, and administrators can easily share information and updates, reducing miscommunication.

3. Reduce response time for IT and administrative issues:

By automating workflows, requests like login problems, Wi-Fi issues, or certificate needs can be solved quickly without unnecessary delays.

4. Provide a centralized platform for service management:

All types of requests (student, staff, IT, admin) can be managed in one place, ensuring transparency, easy tracking, and better efficiency.

Skills:

ServiceNow Platform, Database Management, Scripting, Problem-Solving & Analytical Skills, Documentation & Reporting, Project Management, Communication Skills, Time Management

TASK INITIATION:

Milestone 1: Setting up ServiceNow Instance

Activity 1: Setting up ServiceNow Instance

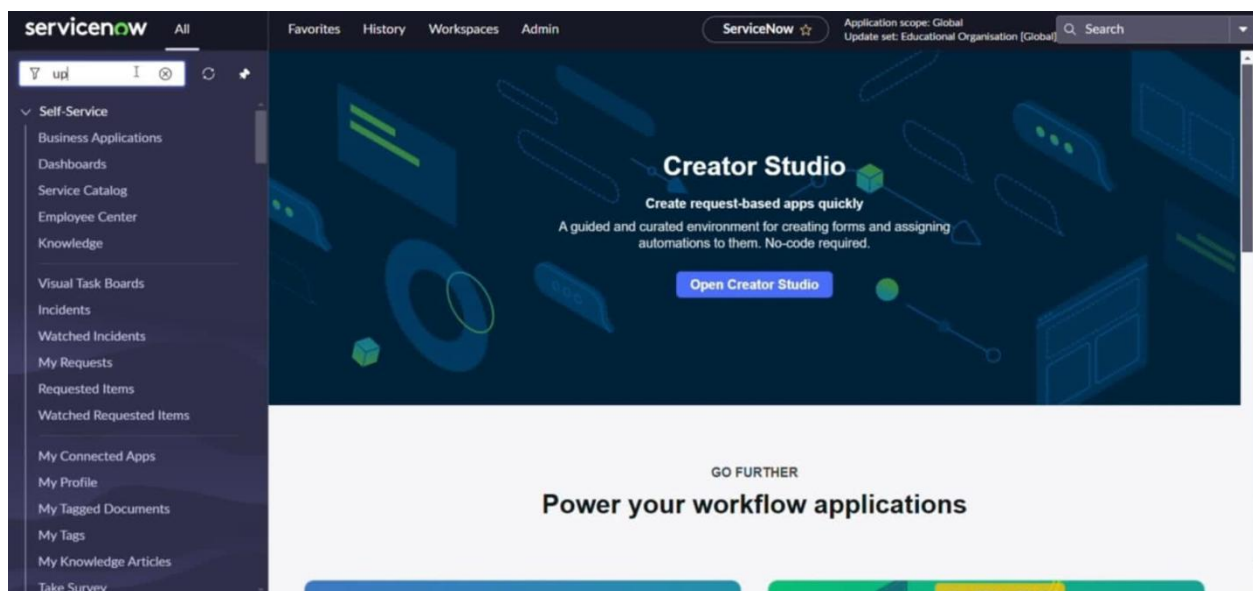
Step 1: Search a developer.servicenow.com

Step 2: Sign in ServiceNow.

Step 3: Click on “Request Instance”.

Step 4. Submit the request.

Step 5. Log in to your ServiceNow Instance.



Milestone 2: Creating a Update Set

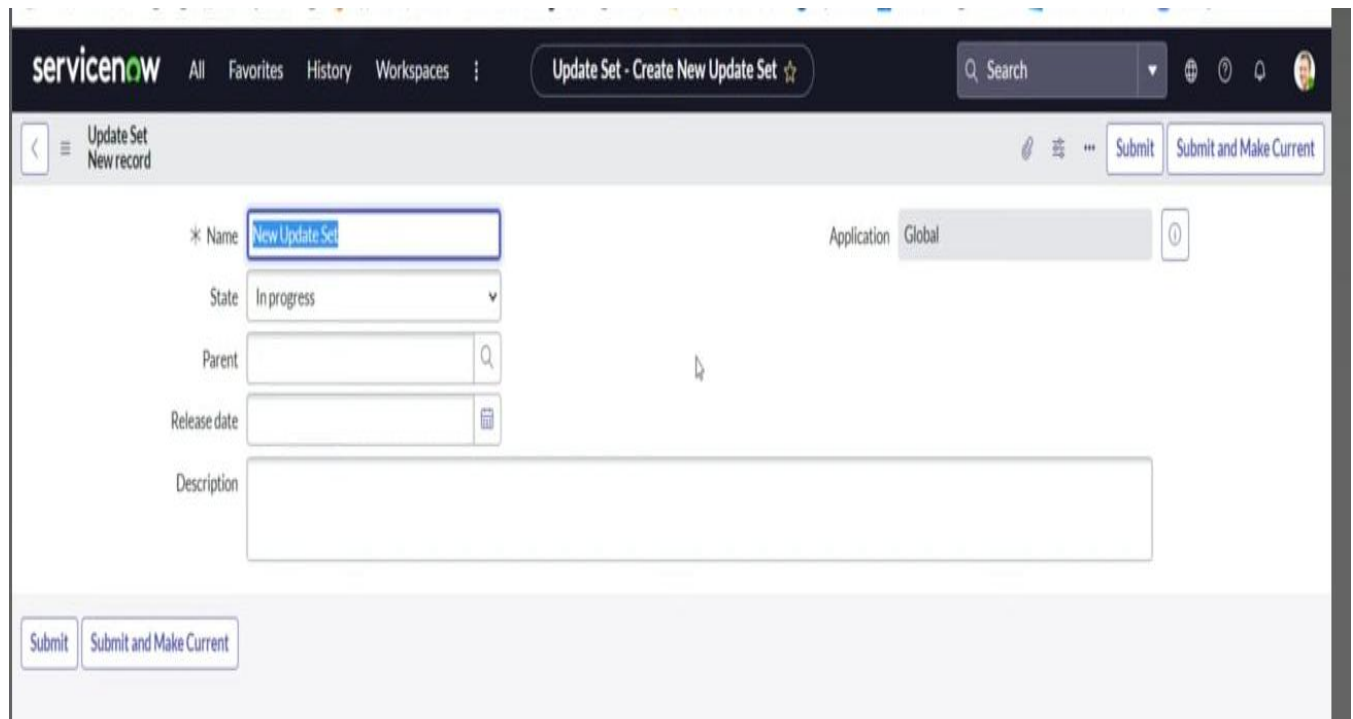
Activity 1: Creating a Update Set

Step 1. Click on All >> Local update sets.

Step 2. Click on new

Step 3. Enter the Details Name: Educational Organisation.

Step 4. Click on Submit and make Current.



The screenshot shows the ServiceNow interface for creating a new update set. The header includes the ServiceNow logo, navigation links (All, Favorites, History, Workspaces), and a search bar. The main form area is titled 'Update Set - Create New Update Set' and contains the following fields:

- Name:** A text field with the value 'New Update Set' entered.
- State:** A dropdown menu with 'In progress' selected.
- Parent:** A text field with a search icon.
- Release date:** A text field with a calendar icon.
- Description:** A large text area.
- Application:** A dropdown menu with 'Global' selected.

At the bottom of the form, there are two buttons: 'Submit' and 'Submit and Make Current'.

Milestone 3: Creating a Table

Activity 1: Creating Salesforce Table

Step 1. Search Tables.

Step 2. Click on New.

Step 3. Enter the label: Salesforce.

Step 4. Click on name.

Step 5. Create a column, double click the column.

Step 6. Enter the column and click the tick mark.

Step 7. Fill the Admin Name>>Save.

Step 8. Click on Controls>> Enable Extensible.

Step 9. Admin Number>>advanced view>>default value.

Step 10. Select get next padded number in Dynamic Default Value>>Update.

Step 11. Click on Grade>>choices and label the value>>Update.

The screenshot shows the ServiceNow interface for configuring a table named 'Salesforce Progress'. The 'Controls' tab is selected, showing options for 'Extensible' and 'Live feed', both of which are unchecked. A blue informational box states: 'Use auto-numbering to define a sequential identifying code made up of a prefix, a base number and a padding value to ensure a consistent format'. Below this, the 'Auto-number' checkbox is also unchecked. Another blue box notes: 'Security Rules (ACLs) are required if anyone other than an administrator needs to work with this table. Creating default security rules will grant full access to this table to anyone with the user role you specify.' The 'Create access controls' checkbox is checked. A text field for 'User role' contains the value 'u_salesforce_progress_user'. At the bottom, there are 'Delete', 'Update', and 'Delete All Records' buttons. A 'Related Links' section at the very bottom includes links for 'Form Builder' and 'Design Form'.

Activity 2: Creating Admission Table

Step 1. All>>Table>>New.

Step 2. Label: Admission>>Name>>Select extend Table.

Step 3. Salesforce, Add module to menu.

Step 4. Create fields.

Step 5. Create a Admin status.

Step 6. Create choices for Pincode.

Step 7. Create choice for Purpose of Join.

Step 8. Create choice for School.

Step 9. Create choice for School Area.

naanmudhalvan.smartinternz.com/Student/guided_project_info/23061#

Submit Cancel

Table Admission

Columns Controls Application Access

Table Columns for text Search

1. to 29 of 29 New

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.getTableName();	false

Activity 3: Creating Student Progress Table

Step 1. Create a Student Progress Table with Columns given.

Step 2. Select Add module to menu >>Salesforce.

Step 3. Create Fields as shown:

X	Admission Number	Reference	Salesforce	32	false
X	English	String	(empty)	40	false
X	Hindi	String	(empty)	40	false
X	Maths	String	(empty)	40	false
X	Percentage	String	(empty)	40	false
X	Result	String	(empty)	40	false
X	Science	String	(empty)	40	false
X	Social	String	(empty)	40	false
X	Telugu	String	(empty)	40	false
X	Total	String	(empty)	40	false
+	Insert a new row...				

Milestone 4: Form Layout

Activity 1: Configuring Table form for Student Progress Table

Step 1. In the Student Progress Table Page, Click on Layout form.

Step 2. Click on Admission Number.

Step 3. Select below Admission Number fields in Available side.

Step 4. Send it to selected side as below >> save.

ServiceNow

All Favorites History Admin

ServiceNow

Search

Configuring Table form

Cancel Save

Available

- Admission Number [+]
- Created
- Created by
- Updated
- Updated by
- Updates
- [- begin_split -]
- [- split -]
- [- end_split -]
- * Annotation
- * Chart
- Activities (filtered)
- Contextual Search Results
- Ratings
- Attachments
- Goal relationships

Selected

- Admission Number
- Hindi
- English
- Telugu
- Science
- [- split -]
- Total
- Average
- Social
- Maths
- [- end_split -]
- Admission Number.Admin Date
- Admission Number.Student Name
- Admission Number.Father Name
- Admission Number.Mother Name
- Admission Number.Father Cell
- Admission Number.Mother Cell

Cancel Save

Form view and section

View name

Create new field

Name

Milestone 5: Form Design

Activity 1: Creating Form Design for Salesforce Table

Step 1. All >> System Definition >> Tables.

Step 2. In Label Search for Salesforce and open.

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

Step 4. In drop down select Salesforce(u_salesforce).

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

Step 6. Save.

Salesforce [u_salesforce] Default view Form Design Undo Save

Fields Field Types

Filter

Fields

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

Formatters

- Activities (filtered)
- Contextual Search Results
- Ratings

Salesforce [u_salesforce] 2 Columns

Admin Number	Father Name
Admin Date	Mother Name
Grade	Father Cell
Student Name	Mother Cell

Activity 2: Creating Form Design for Admission Table

Step 1. Follow the same steps as Activity1, Configure the fields as below and Save.

Admission [u_admission] Default view Form Design

Fields Field Types

Filter

Fields

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

Formatters

- Activities (filtered)
- Contextual Search Results
- Ratings

Admission [u_admission] 1 Date

Process Flow (Formatter)

2 Columns

Admission Number	Admin Date
Purpose of join	Grade
Student Name	Fee
Father Name	Father Cell
Mother Name	Mother Cell
	Admin Status

1 Date

Comments

School Details 2 Date

School Area	School
-------------	--------

Address 2 Date

Pincode	Area
Mandal	City
House No	District

Activity 3: Creating Form Design for Student progress Table

Step 1. Follow the same steps as Activity1, Configure the fields as below and Save.

The screenshot shows the 'Form Design' interface for 'Student Progress (by Model)'. The interface is divided into three main sections:

- Fields:** A list of fields on the left, categorized into 'Class', 'Created', 'Social', 'Updated', and 'Formatters'. The 'Formatters' section includes 'Activities (filtered)', 'Contextual Search Results', and 'Ratings'.
- Form Structure:** The main area displays a form structure with sections:
 - New Section:** Contains a single field 'Admission Number'.
 - Student Progress:** Contains a grid of fields: 'Admission Number Grade', 'Admission Number Father Name', 'Admission Number Mother Name', 'Admission Number Father Cell', and 'Admission Number Mother Cell'.
 - Student Progress:** Contains a grid of fields: 'Telugu', 'Hindi', 'English', 'Math', 'Science', 'Total', 'Percentage', and 'Result'.

Milestone 6: Number Maintenance

Activity 1: Creating Number Maintenance for Admin Number

Step 1. All >> Number Maintenance >> New

Step 2. Fill the details >> Submit.

The screenshot shows the 'Number - SAL' configuration page in ServiceNow. The page has a header with 'servicenow' and navigation links: All, Favorites, History, Workspaces, Admin. The main content area contains the following fields:

- Table:** Salesforce
- Prefix:** SAL
- Number:** 1,000
- Application:** Global
- Number of digits:** 7

At the bottom, there are 'Update' and 'Delete' buttons. Below these buttons, there is a 'Related Links' section with a link to 'Show Counter'.

Milestone 7: Process Flow

Activity 1: Creating Process Flow for Admission Table

Step 1. All >> Process Flow >> New.

Step 2. Fill the Details as given Below.

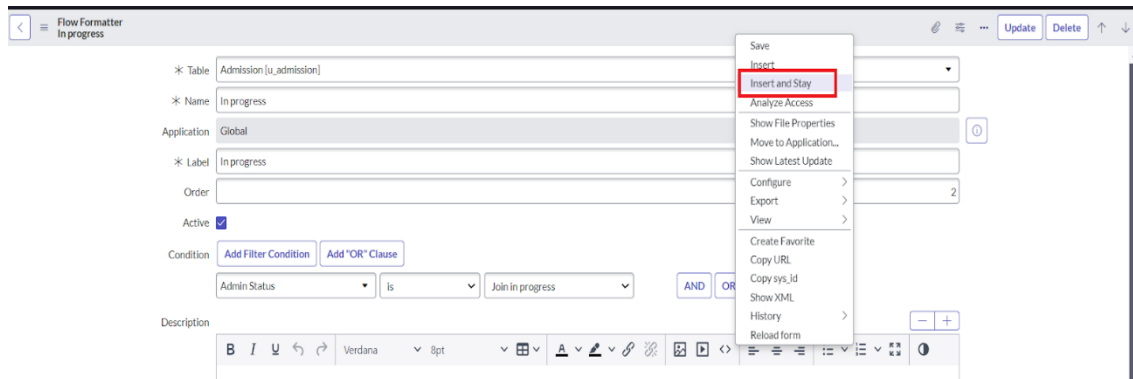
Step 3. Right Click on toggle and click on the save.

Step 4. Replace the Name and Label as below and click on Insert on stay.

Step 5. Replace the Name and Label in order and click on Insert on stay.

Joined >> Rejected >> Rejoined >> Closed >> Cancelled.

Step 6. Order should be New >> InProgress >> Joined >> Rejected >> Rejoined >> Closed >> Cancelled.



Milestone 8: Client Script

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

Step 1. All >> Client Scripts >> New.

Step 2. Fill the Details as given.

Step 3. 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);

}

```

Client Script New record

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

Name: Auto populate

Table: Admission [u_admission]

UI Type: Mobile / Service Portal

Type: onChange

Field name: Admin Number

Application: Global ⓘ

Active: ☒

Inherited: ☐

Global: ☒

Description:

Messages:

Script

```

1 function onChange(control, oldValue, newValue, isLoading, isTemplate) {
2   if (isLoading || newValue === '') {
3     return;
4   }
5
6   //Type appropriate comment here, and begin script below
7
8 }

```

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

Step 1. Fill the Details as given.

Step 2. 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');  
    }  
}
```

}

The screenshot shows the 'Client Script' editor for a form named 'Pincode Update'. The form is associated with the 'Admission[u_admission]' table and is a 'Desktop' type. The script is triggered on the 'Pincode' field when its value changes. The script code is as follows:

```
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 == '509258')  
7     {  
8         g_form.setValue('u_mandal', 'kadthal');  
9         g_form.setValue('u_city', 'kadthal');  
10    }  
11 }
```

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

Step 1. Fill the Details as given.

Step 2. Write the Code as below, Enable Isolate script and Save.

```
functiononLoad() {
```

```
    //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);
```

```
}
```

Client Script
Disable Fields

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

Name: Disable Fields

Table: Student Progress [u_student_progress]

UI Type: All

Type: onLoad

Application: Global ⓘ

Active: ☒

Inherited: ☐

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

Step 1. Fill the Details as given.

Step 2. Write the Code as below, Enable Isolate script and Save.

```

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

```

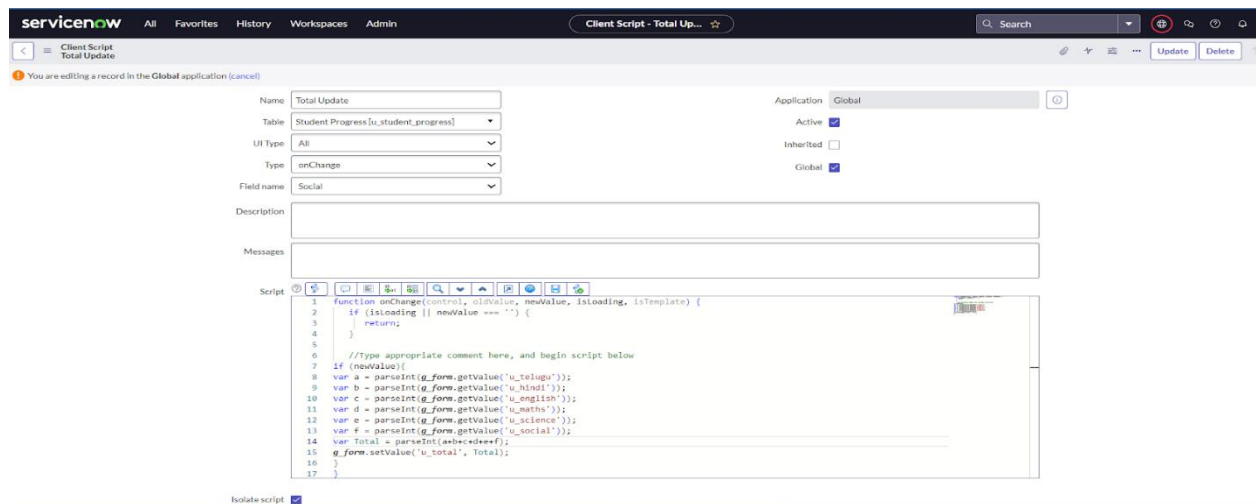
//Type appropriate comment here, and begin script below

```

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

Step 1. Fill the Details as given.

Step 2. 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');

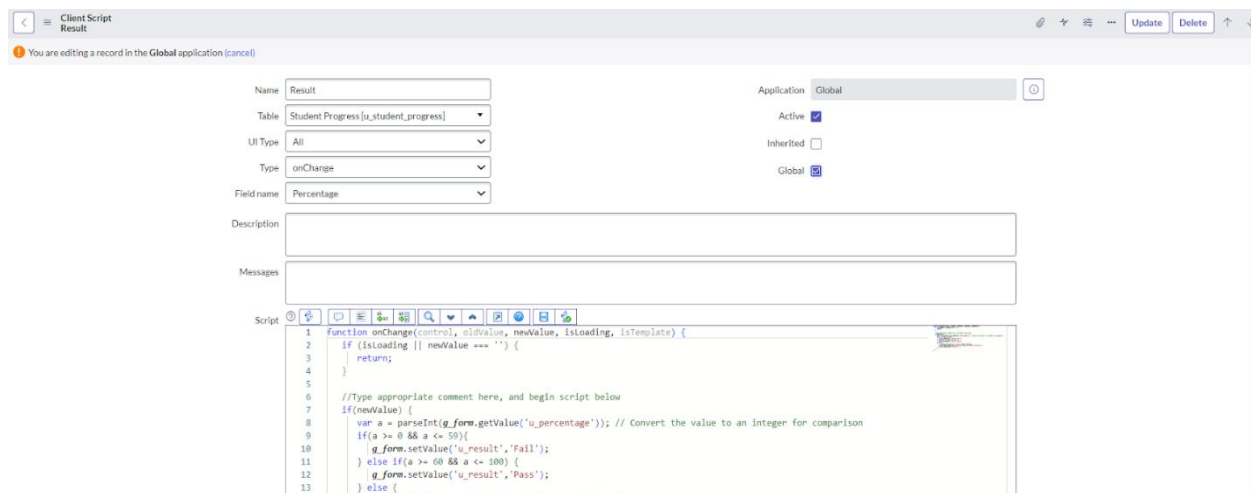
```

    }

}

}

```



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

Step 1. Fill the Details as given.

Step 2. 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+'%');

}
```

The screenshot shows the ServiceNow Client Script editor interface. At the top, there's a breadcrumb trail: Client Script > Percentage. Below this, a warning message states: "You are editing a record in the Global application (cancel)".

The configuration section on the left includes the following fields:

- Name: Percentage
- Table: Student Progress [u_student_progress]
- UI Type: All
- Type: onChange
- Field name: Total

On the right side, there are checkboxes for:

- Application: Global (selected)
- Active: ☒
- Inherited: ☐
- Global: ☒

Below the configuration, there are empty text areas for "Description" and "Messages".

The "Script" section contains a code editor with the following JavaScript code:

```
1 function onChange(control, oldValue, newValue, isLoading, isTemplate) {
2   if (isLoading || newValue === '') {
3     return;
4   }
5
6   //type appropriate comment here, and begin script below
7   var Total = g_form.getValue('u_total');
8   var Percentage = (Total/600)*100;
9   g_form.setValue('u_percentage',Percentage+'%');
10 }
```

At the bottom left, there is an "Isolate script" checkbox which is checked. At the bottom right, there are "Update" and "Delete" buttons.

Conclusion:

The implementation of ServiceNow in educational institutions helps automate tasks, streamline workflows, and improve communication between students, staff, and administrators. It reduces response times, enhances transparency, and supports better decision-making, leading to a more efficient and effective academic environment.

