DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

NM1051- SERVICENOW ADMINISTRATORS

REGULATION 2021

LABORATORY REORD

This is to certify that this is a bonafide record of the work done by Ms/Mr…………………………… Register Number………………………. in the …………………………… Laboratory in the ……………… semester.

Staff-in-charge   **Head of the Department**

Submitted for the University Examination held on

……………………………

Internal Examiner   **External Examiner**

EDUCATIONAL ORGANIZATION USING SERVICENOW

OBJECTIVE:

The main objective of this project is to understand and implement how ServiceNow can be used to manage and automate processes in an educational organisation. The project focuses on creating a custom application in ServiceNow that helps streamline record management, form design, and workflow automation for educational purposes.

INTRODUCTION:

ServiceNow is a cloud-based platform that provides IT service management and process and the automation solutions. Educational institutions can use ServiceNow to manage student data, staff information, requests, and other administrative processes efficiently. In this project, we develop a simple application to the simulate how an educational organisation can use the ServiceNow to manage and automate its operations
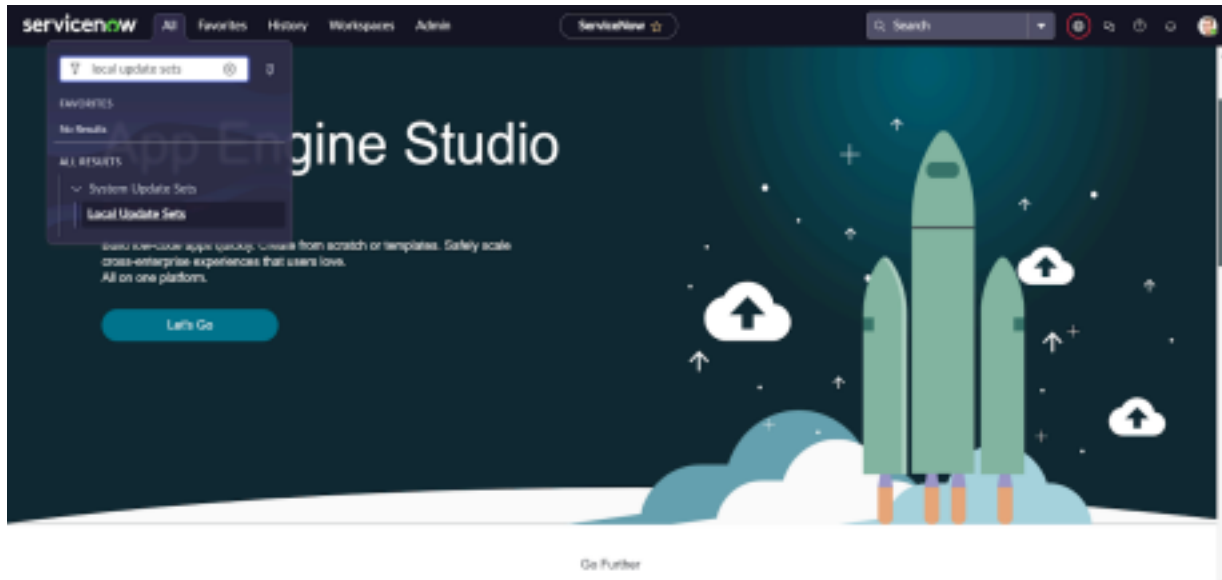
MODULES/ STEPS INVOLVED:

- Setting Up ServiceNow Instance
- Creating an Update Set
- Creating a Table
- Form Layout
- Form Design
- Number Maintenance
- Process Flow
- Client Script
- ResultResult

Setting Up ServiceNow Instance:

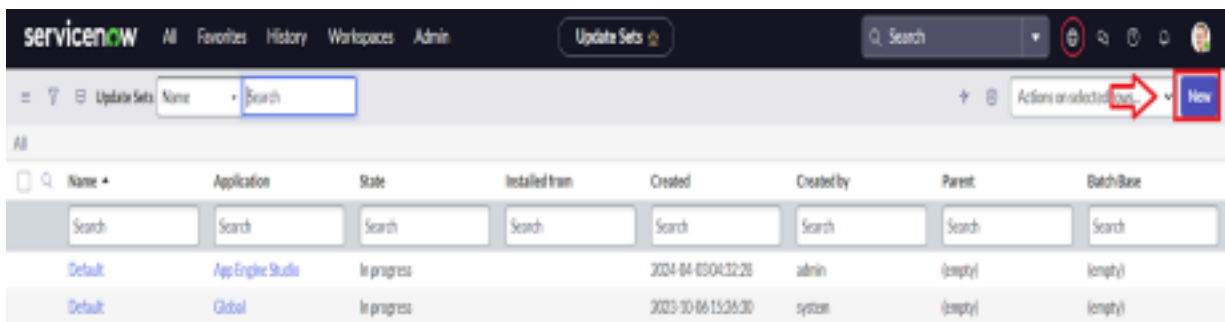1. Sign up for a developer account on the ServiceNow Developer site "https://developer.servicenow.com".
2. Once logged in, navigate to the "Personal Developer Instance" section.
3. Click on Request Instance" to create a new ServiceNow instance.
4. Fill out the required information and submit the request.
5. You'll receive an email with the instance details once it's ready.
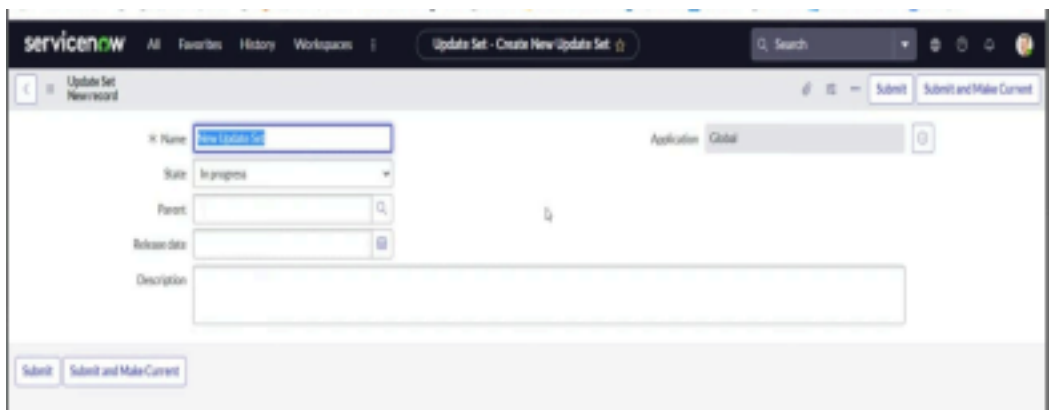
Creating a Update Set:

1. Click on All >> Local update sets .

2. Click on new

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

Creating a Table:

- Creating Salesforce Table
- Creating Admission Table
- Creating Student Progress Table

Creating Salesforce Table:

1. All >> Tables.

2. Click on new.

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

4. 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 .

5. For "Admin Number" Give Display as True and right click on the toggle bar on top >> save.

6. Click on controls >> Enable Extensible.

7. 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 .

Creating Admission Table:

- 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

● Create choice for Admin Status as:

● Create choice for Pincode as:

● Create choice for Purpose of Join as:

● Create choice for School Area as:

Form Layout:

Configuring Table form for Student Progress Table:

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

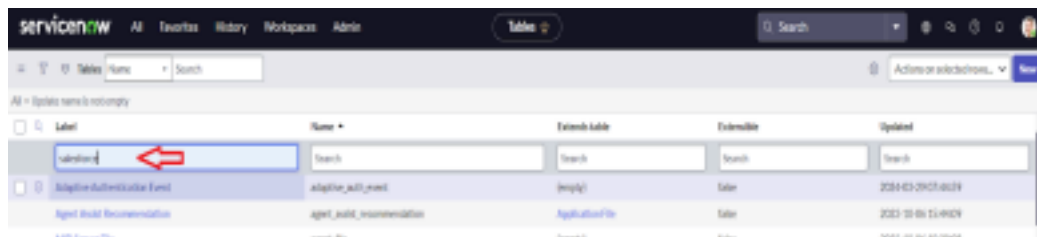- Select below Admission Number fields in Available side and send it to selected side as
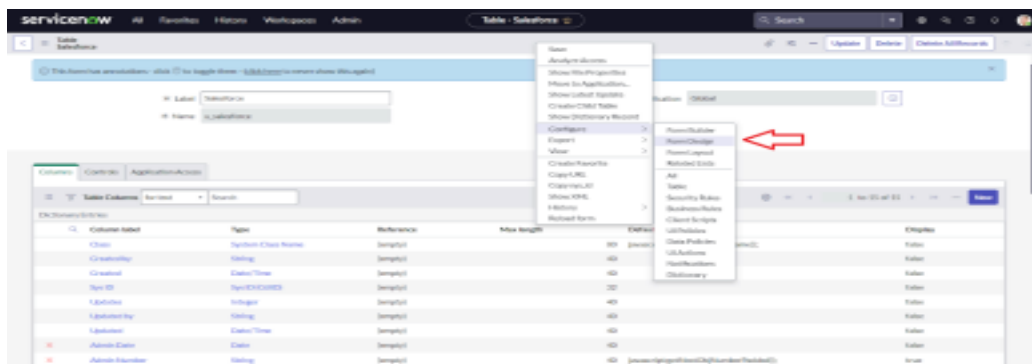
Form Design:

- Creating Form Design for Salesforce Table
- Creating Form Design for Admission Table
- Creating Form Design for Student progress Table

Creating Form Design for Salesforce Table

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

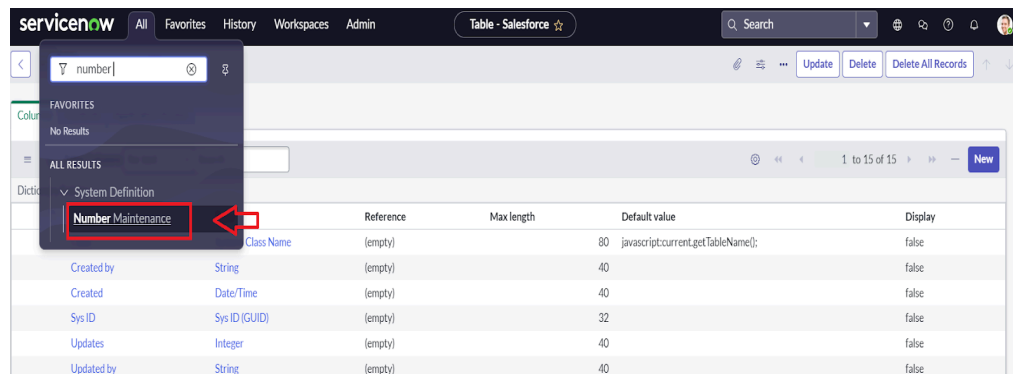3. Right Click on top Toggle >> Configure >> Form Design.In drop down select Salesforce(u_salesforce).

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

Number Maintenance:

1. All >> Number Maintenance >>

2. NewFill the details >> Submit.

Process Flow:

● All >> Process Flow>> New.
● Fill the Details as given BelowRight Click on toggle and click on the save.

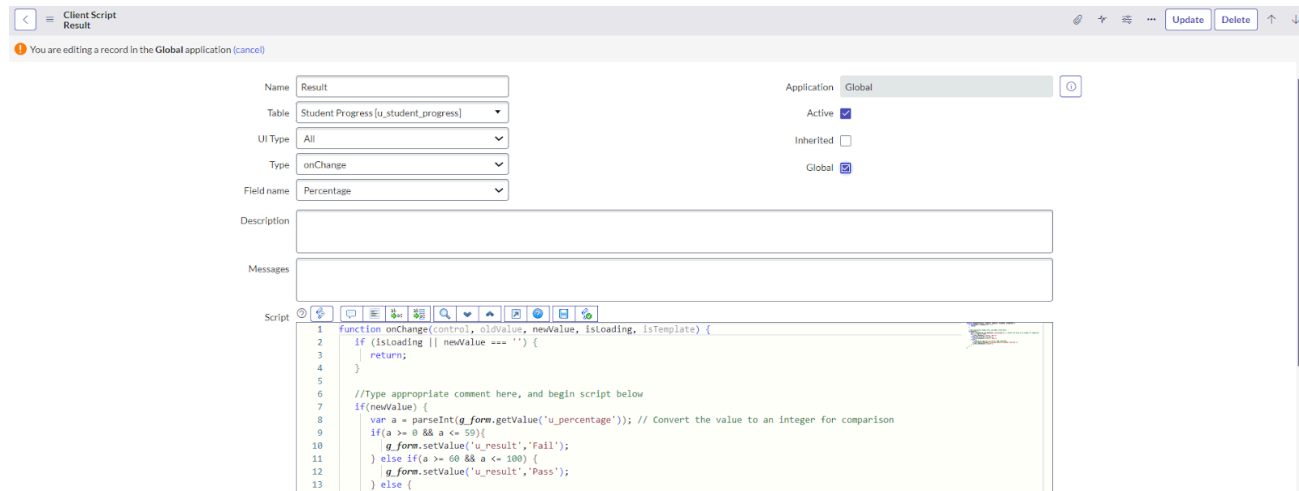● Replace the Name and Label as below and click on Insert on stay.

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

Client Script:

● Creating "Auto populate" Client Scripts for Admission Table
● Creating "Pincode Update" Client Scripts for Admission Table
● Creating "Disable Fields" Client Scripts for Student progress Table
● Creating "Percentage" Client Scripts for Student progress Table

Creating "Auto populate" Client Scripts for Admission Table

1. All >> Client Scripts >> New.
2. Fill the Details as given.

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

Name	Result	Application	Global
Table	Student Progress [u_student_progress]	Active	✓
UI Type	All	Inherited	☐
Type	onChange	Global	☑
Field name	Percentage		

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_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 {
```

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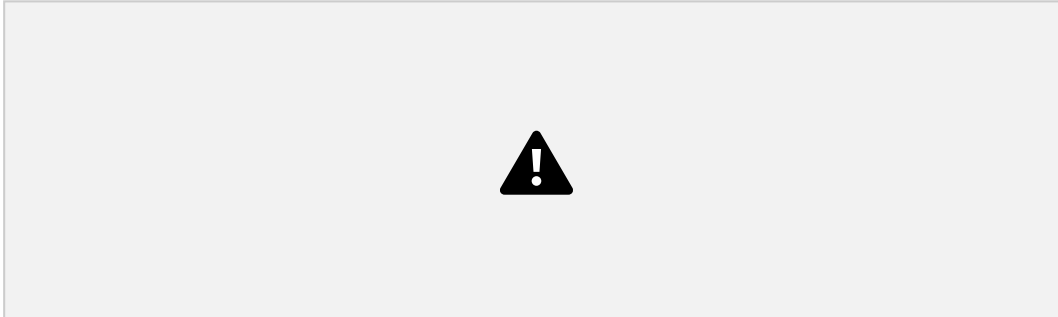
g_form.setDisabled('u_father_cell',a.u_father_cell);

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

}

Creating "Pincode Update" Client ScriptsforAdmission 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;
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

● Fill the Details as given.

● 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 give.

● Write the Code as below, Enable Isolate script and Save.function onChange(control, oldValue, newValue, isLoading, isTemplate) {
  if (isLoading || newValue === ''){

}

  //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.

- Project Workspace

  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');

  }

  }

  }
```

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+'%');

}
```

RESULT:

CONCLUSION:

This project successfully demonstrates how ServiceNow can be implemented to automate and streamline various processes within an educational organization. By creating custom tables, forms, and workflows, the system efficiently manages student admissions, progress tracking, and administrative data. The use of client scripts further enhances functionality by enabling dynamic updates and validations, improving the overall user experience.

Through this project, we have learned how ServiceNow's powerful tools and features can be customized to meet specific institutional needs, resulting in improved efficiency, accuracy, and transparency in managing educational operations.