

ServiceNow Project Report

Project Title: Educational Organisation Using ServiceNow

INTRODUCTION

Project Overview:

The project titled "Educational Organisation Using ServiceNow" is designed to automate and streamline the administrative workflows of educational institutions. Built on the ServiceNow platform, it facilitates student admissions, academic progress tracking, and smart form-based workflows using no-code/low-code configurations.

Purpose:

To minimize manual intervention in educational data handling and build a centralized digital system for managing student records, tracking performance, and enhancing administrative efficiency.

IDEATION PHASE

Problem Statement:

Manual tracking of student admissions and academic progress is time-consuming and error-prone. There is a need for a centralized digital platform to manage these operations efficiently.

Empathy Map Canvas:

- Users: School Admins, Admission Coordinator
- Needs: Quick data access, automated workflows
- Pains: Time delays, repetitive data entry
- Gains: Real-time dashboards, auto-calculated results, form-level automation

Brainstorming Highlights:

- Use existing cloud platform – ServiceNow
- Leverage personal developer instance
- Design scalable custom tables and relationships
- Use client scripts for automation
- Implement dynamic defaults, choices, and workflow logic

REQUIREMENT ANALYSIS

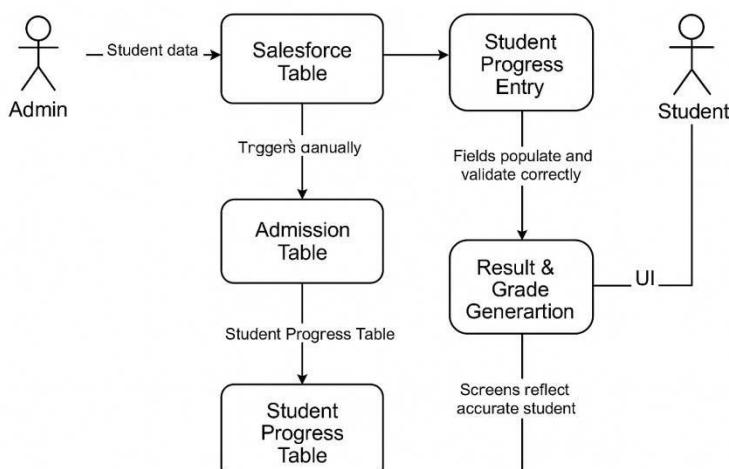
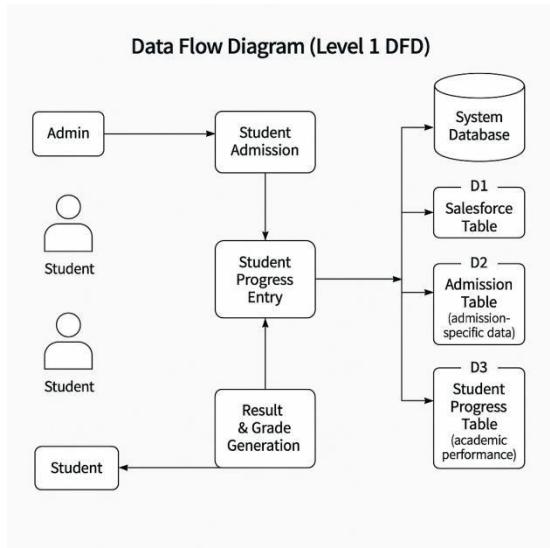
Customer Journey Map:

- Admin logs into ServiceNow
- Navigates to Admission module
- Fills student data (with auto-filled fields)
- Views student performance
- Processes admission status using workflows **Solution**

Requirements:

- Custom tables: Salesforce, Admission, Student Progress
- Forms, views, and layouts configuration
- Automation using Client Scripts
- Admission lifecycle managed through workflow

Data Flow Diagram



Technology Stack:

Component	Technology

Platform	ServiceNow Personal Developer Instance
Scripting	JavaScript (Client Scripts)
Database	ServiceNow Tables
Workflow	Process Flow in ServiceNow UI

PROJECT DESIGN

Problem-Solution Fit:

Digitizing admission and academic workflows saves time, reduces errors, and provides administrative transparency.

Proposed Solution:

An integrated education management solution with modules to:

- Manage student admissions
- Record student progress
- Automate calculations and validations

Solution Architecture:

ServiceNow-based architecture includes:

- Custom table design
- Form-level UI configuration
- Process flow design
- Client-side GlideForm scripting

PROJECT PLANNING & SCHEDULING

Timeline Plan:

Week	Activities

Week 1	Instance Setup & Update Set Creation
Week 2	Table & Field Design
Week 3	Form Layouts & Views
Week 4	Process Flow & Client Scripts
Week 5	Testing & Documentation

FUNCTIONAL & PERFORMANCE TESTING

Performance Testing Metrics:

- Field-level automation is responsive within 1 second
- Script triggers execute and validate as expected
- Record creation/update latency is < 1 second

RESULTS

Output Screenshots:

The screenshot shows a ServiceNow 'Student Progress - Create SAL0001011' form. At the top, there are fields for 'Admission Number', 'Grade' (dropdown), and 'Student Name'. To the right, there are fields for 'Father Name', 'Mother Name', 'Father Cell', and 'Mother Cell'. Below this section is a 'Student Progress' area containing fields for six subjects: Telugu, Hindi, English, Maths, Science, and Social. To the right of these subject fields are 'Total', 'Percentage', and 'Result' fields. At the bottom left of the form is a 'Submit' button.

This screenshot shows the ServiceNow interface for creating a new admission record. The top navigation bar includes 'servicenow', 'All', 'Favorites', 'History', 'Workspaces', and a search bar. The main title is 'Admission - Create SAL0001012'. The form fields include:

- Admission Number: [Input Field]
- Purpose of join: [Dropdown: -- None --]
- Student Name: [Input Field]
- Father Name: [Input Field]
- Mother Name: [Input Field]
- Admin Date: [Input Field]
- Grade: [Dropdown: -- None --]
- Fee: [\$ 0.00]
- Father Cell: [Input Field]
- Mother Cell: [Input Field]
- Admin Status: [Dropdown: -- None --]
- Comments: [Text Area]

Below the main form, there are two tabs: 'School Details' and 'Address'. The 'Address' tab is selected, showing fields for Pincode, Mandal, House No, Area, City, and District. A 'Submit' button is located at the bottom left.

This screenshot shows the Salesforce interface for creating a new record. The top navigation bar includes 'servicenow', 'All', 'Favorites', 'History', 'Workspaces', and a search bar. The main title is 'Salesforce - Create SAL0001013'. The form fields include:

- Admin Number: [Input Field]
- Admin Date: [Input Field]
- Grade: [Dropdown: -- None --]
- Student Name: [Input Field]
- Father Name: [Input Field]
- Mother Name: [Input Field]
- Father Cell: [Input Field]
- Mother Cell: [Input Field]

A 'Submit' button is located at the bottom left.

ADVANTAGES & DISADVANTAGES

Advantages:

- Cloud-based, no installation needed
- Easy form and workflow customization
- Low-code development with fast deployment
- Real-time data updates

Disadvantages:

- Requires internet connectivity
- Limited advanced UI customization
- Requires basic familiarity with ServiceNow

CONCLUSION

This project demonstrates the potential of low-code platforms like ServiceNow in digitizing real-world administrative functions. It enhances efficiency, reduces human errors, and offers scalable solutions for educational institutions.

FUTURE SCOPE

- Add modules for teacher and staff management
- Integrate notification system (email/SMS)
- Real-time dashboard analytics
- Fee and library management integration

APPENDIX

- Source Code:

Below are the key **Client Scripts** used in the application:

1. Auto-Generate Admission Number

```
javascript CopyEdit
function onLoad() {
var date = new Date();
var uniqueID = 'ADM' + date.getTime();
g_form.setValue('admission_number', uniqueID); }
```

2. Auto-Fill Address Based on PIN

```
javascript CopyEdit
function onChange(control, oldValue, newValue, isLoading) {
if (isLoading || newValue == '') return;

if (newValue === '500001') {
g_form.setValue('state', 'Telangana');
g_form.setValue('district', 'Hyderabad');
}
}
```

3. Calculate Total Marks, Percentage, Result

```
javascript CopyEdit
function onChange(control, oldValue, newValue, isLoading) {
if (isLoading) return;
var marks1 = parseInt(g_form.getValue('subject1')) ||
0; var marks2 = parseInt(g_form.getValue('subject2')) ||
0; var marks3 = parseInt(g_form.getValue('subject3')) ||
0;

var total = marks1 + marks2 + marks3;
var percent = total / 3;
```

```
g_form.setValue('total_marks', total);
g_form.setValue('percentage', percent.toFixed(2));
g_form.setValue('result', percent >= 35 ? 'Pass' : 'Fail'); }
```

4. OnLoad – Set Default Admission Status

```
javascript CopyEdit
function onLoad() {
    g_form.setValue('status', 'Application Received');
```

5. Disable Fields After Admission Finalized

```
javascript CopyEdit
function onChange(control, oldValue, newValue, isLoading) {
if (isLoading) return;
    if (newValue === 'Admission Confirmed') {
g_form.setReadOnly('student_name', true);
g_form.setReadOnly('dob', true);
g_form.setReadOnly('email', true);
    }
}
```

6. Show Alert on Form Submission

```
javascript CopyEdit
function onSubmit() {
    alert('Your application has been submitted successfully!');
return true;
}
```

- DemoVideo:<https://drive.google.com/file/d/1T9kl8Unkz9F8hQkSQ-E987yiuLnrHDsF/view?usp=drivesdk>
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