

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

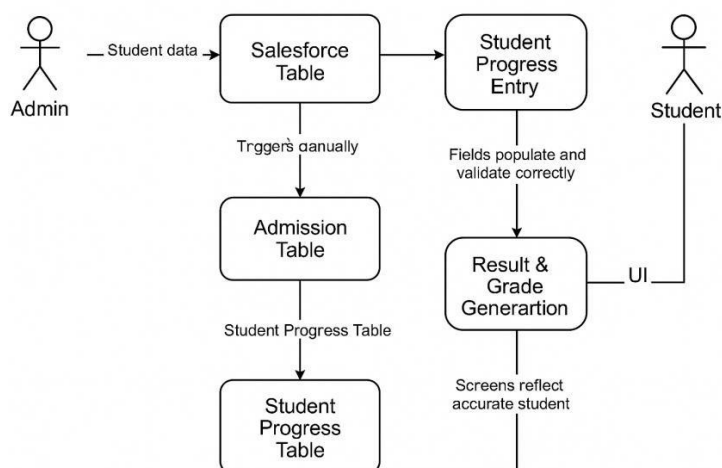
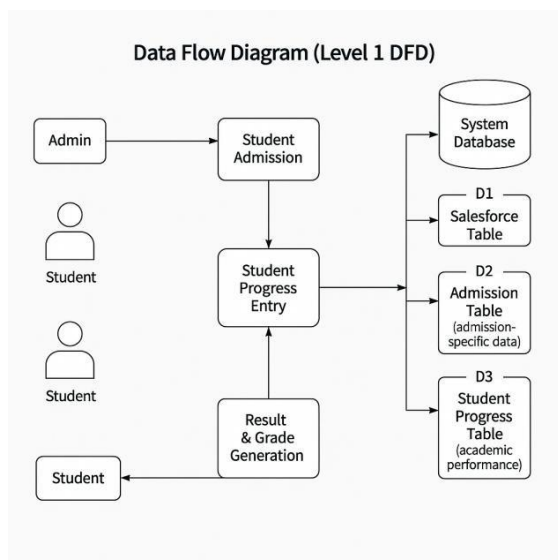
Customer Journey Map:

- 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 form titled "Student Progress - Create SAL0001011". The form is divided into several sections. At the top, there are navigation tabs: "All", "Favorites", "History", and "Workspaces". Below these, there is a search bar and a "Submit" button. The main form area contains the following fields:

- Admission Number (text input)
- Grade (dropdown menu, currently set to "-- None --")
- Student Name (text input)
- Father Name (text input)
- Mother Name (text input)
- Father Cell (text input)
- Mother Cell (text input)

Below these fields is a section titled "Student Progress" which contains a grid of input fields for various subjects and a summary section:

| Subject | Score |
|---------|-------|
| Telugu | |
| Hindi | |
| English | |
| Maths | |
| Science | |
| Social | |

Summary fields:

- Total (text input)
- Percentage (text input)
- Result (text input)

A "Submit" button is located at the bottom left of the form.

servicenow All Favorites History Workspaces : Admission - Create SAL0001012 Search

Admission - Create SAL0001012

Admission Number Admin Date

Purpose of join -- None -- Grade -- None --

Student Name Fee \$ 0.00

Father Name Father Cell

Mother Name Mother Cell

Admin Status -- None --

Comments

School Details Address

Pincode -- None -- Area

Mandal City

House No District

Submit

servicenow All Favorites History Workspaces : Salesforce - Create SAL0001013 Search

Salesforce - Create SAL0001013

Admin Number Admin Date

Grade -- None --

Student Name

Father Name

Mother Name

Father Cell

Mother Cell

Submit

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;
}
```

- **GitHub Repository:** <https://github.com/shaikhifza/Educational-Organisation-Using-ServiceNow>
- **DemoVideo:** https://drive.google.com/file/d/1CPI2IzjbNon8ictJY64K_rL6u7rZh58b/view?usp=drive_sdk

