

# 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:

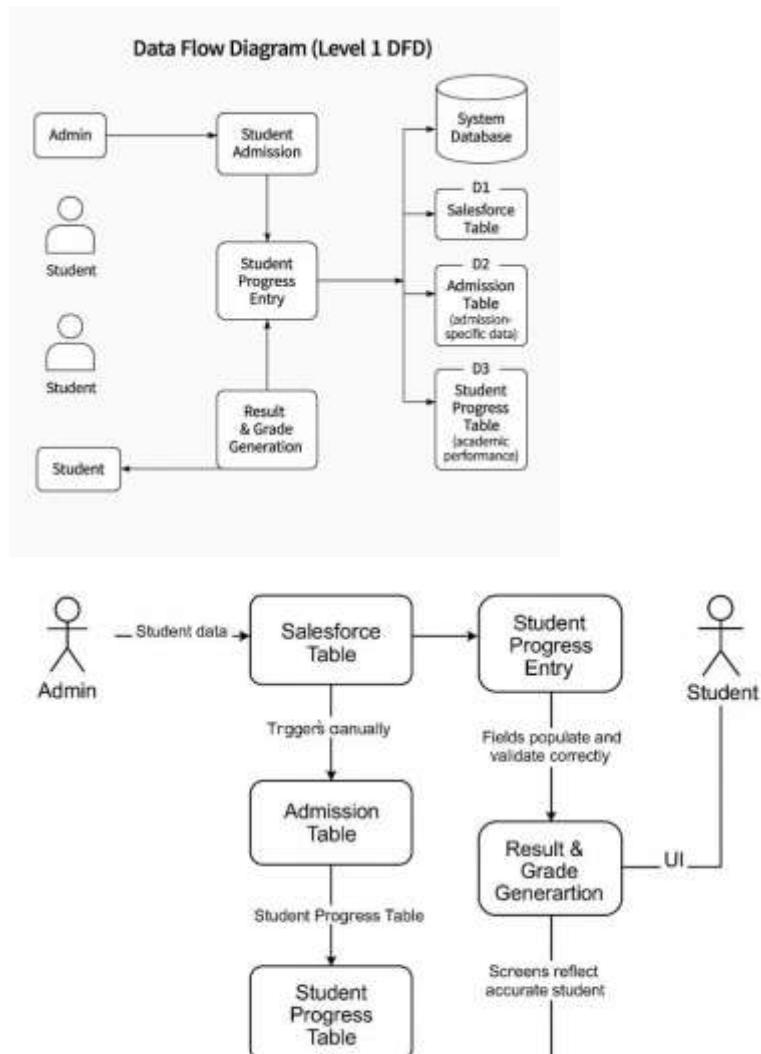
- Admin logs into ServiceNow
- Navigates to Admission module
- Fills student data (with auto-filled fields)
- Views student performance

- 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        |

## 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 image displays two screenshots of ServiceNow forms, illustrating the user interface for data entry.

**Student Progress - Create SAL0001011**

This form is for creating a new student record. It includes fields for:

- Admission Number (input field)
- Grade (dropdown menu: --None--)
- Student Name (input field)
- Father Name (input field)
- Mother Name (input field)
- Father Cell (input field)
- Mother Cell (input field)

**Student Progress**

This section displays student progress data:

| Subject | Total | Percentage | Result |
|---------|-------|------------|--------|
| Telugu  |       |            |        |
| Hindi   |       |            |        |
| English |       |            |        |
| Maths   |       |            |        |
| Science |       |            |        |
| Social  |       |            |        |

**Submit**

**Admission - Create SAL0001012**

This form is for creating a new admission record. It includes fields for:

- Admission Number (input field)
- Purpose of join (dropdown menu: --None--)
- Student Name (input field)
- Father Name (input field)
- Mother Name (input field)
- Admission Date (input field)
- Grade (dropdown menu: --None--)
- Fee (\$ 0.00) (input field)
- Father Cell (input field)
- Mother Cell (input field)
- Admin Status (dropdown menu: --None--)
- Comments (input field)

**School Details**

This section displays school details:

| Pincode                   | Area                   |
|---------------------------|------------------------|
| (dropdown menu: --None--) | (input field)          |
| Mandal (input field)      | City (input field)     |
| House No (input field)    | District (input field) |

**Submit**

The screenshot shows a ServiceNow form titled "Create SAL0001013". The form contains several input fields: "Admin Number" (text), "Admin Date" (date), "Grade" (dropdown menu with "None" selected), "Student Name" (text), "Father Name" (text), "Mother Name" (text), "Father Cell" (text), and "Mother Cell" (text). There is also a "Submit" button 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);
}
```

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## **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');
}
```

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## **4. OnLoad – Set Default Admission Status**

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

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## 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);
    }
}
```

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## 6. Show Alert on Form Submission

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

- GitHub Repository: <https://github.com/hemanthyeluguri/EducationalOrganisation-using-Service-Now>
- DemoVideo: <https://docs.google.com/videos/d/1UzwQmZGimBpWzHaXz9kNuT9Cb-4G2GVrHPUbepdUYZI/edit?usp=sharing>