# Project Design

| TEAM ID | **LTVIP2025TMID29135** |
|---|---|
| PROJECT NAME | Educational Organization Management Using ServiceNow |

## Proposed Solution Template

### 📃 Project Design Overview

| S. No | Parameter | Description |
|---|---|---|
| 1 | **Problem Statement** | Educational institutions often rely on manual processes for student admissions, academic tracking, and faculty coordination, leading to inefficiencies and delays. |
| 2 | **Idea/Description** | Design a centralized digital platform using ServiceNow to manage admissions, academic data, and staff workflows efficiently and transparently. |
| 3 | **Novelty/Uniqueness** | Utilizes ServiceNow's low-code/no-code tools to build scalable modules for student progress tracking, automated workflows, and dynamic client scripts. |
| 4 | **Social Impact / Satisfaction** | Reduces administrative burden, improves accuracy, and enhances service delivery to students and faculty. |
| 5 | **Business Model** | The solution can be licensed to schools and colleges through a SaaS model with integrations for fee management and academic analytics. |
| 6 | **Scalability** | Can be expanded to universities with modular additions such as LMS integration, parent portals, or hostel management. |

# 🔧 Implementation Steps in ServiceNow

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## 1️⃣ Setting Up the Instance

- Sign up at: https://developer.servicenow.com
- Request and activate a Personal Developer Instance
- Log in using credentials sent via email

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## 2️⃣ Creating an Update Set

- Navigate to: All → Local Update Sets → New
- Name: Educational Organisation
- Submit and click **Make Current**

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## 3️⃣ Creating the Salesforce Table

- Go to All → Tables → New
- Label: Salesforce, API name auto-generated
- Create columns like Admin Number, Name, Grade, etc.
- Set Admin Number as **Display = True**
- Enable **Extensible** in Controls
- For Admin Number, use Dynamic Default → Get Next Padded Number
- For Grade, add choices with label, value, and sequence

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## 4️⃣ Creating the Admission Table

- Go to Tables → New
- Label: Admission, extends table: Salesforce
- Add to Menu → Salesforce

- Fields: Student Name, Phone, Email, Grade, DOB, etc.
- Add **choice lists** for:
    - Admin Status
    - Pincode
    - Purpose of Join
    - School
    - School Area

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### 5️⃣ Creating Student Progress Table

- Go to Tables → New
- Label: Student Progress
- Add to Menu → Salesforce
- Add fields: Telugu, Hindi, English, Maths, Science, Social, Total, Percentage, Result

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### 6️⃣ Configuring Student Progress Form

- Navigate to: Student Progress Table → Layout Form
- Add fields from Admission table (linked via Admission Number)
- Click Admission Number [+] → Move fields from Available to Selected
- Save

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### 🛠️ Additional Configuration Activities

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### 🔷 Form Design for Salesforce Table

- Go to System Definition → Tables
- Search and open Salesforce
- Right-click → Configure → Form Design

- Select Salesforce (u_salesforce)

- Drag-and-drop fields into the form

- Save

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### 🔶 Number Maintenance for Admin Number

- Go to: All → Number Maintenance → New

- Fill details and click Submit

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### 🔄 Process Flow for Admission Table

- Navigate to All → Process Flow → New

- Save form, then replace **Name & Label** for each state:

  - New → In Progress → Joined → Rejected → Rejoined → Closed → Cancelled

- Use "Insert and Stay" to add states in order

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### 🗣️ Client Scripts for Automation

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### ✅ Auto-Populate Fields from Admission Table

javascript

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function onChange(control, oldValue, newValue, isLoading, isTemplate) {

  if (isLoading || newValue === '') return;

  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);

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      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', true);

      g_form.setDisabled('u_grade', true);

      g_form.setDisabled('u_student_name', true);

      g_form.setDisabled('u_father_name', true);

      g_form.setDisabled('u_mother_name', true);

      g_form.setDisabled('u_father_cell', true);

      g_form.setDisabled('u_mother_cell', true);

}
```

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### 📍 Pincode Auto-Fill Script

javascript

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```
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');
```

```javascript
  } else if (a == '500079') {

    g_form.setValue('u_mandal', 'Abids');

    g_form.setValue('u_city', 'AsifNagar');

    g_form.setValue('u_district', 'Hyderabad');

  }

}
```

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### ⛔ Disable Total, Percentage, Result Fields

javascript

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```javascript
function onLoad() {

  g_form.setDisabled('u_total', true);

  g_form.setDisabled('u_percentage', true);

  g_form.setDisabled('u_result', true);

}
```

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### ➕ Calculate Total from Subjects

javascript

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```javascript
function onChange(control, oldValue, newValue, isLoading, isTemplate) {

  if (isLoading || newValue === '') return;

  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'));
```

```javascript
    var e = parseInt(g_form.getValue('u_science'));

    var f = parseInt(g_form.getValue('u_social'));

    var Total = a + b + c + d + e + f;

    g_form.setValue('u_total', Total);

  }

}
```

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## 📊 Calculate Result Based on Percentage

javascript

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```javascript
function onChange(control, oldValue, newValue, isLoading, isTemplate) {

  if (isLoading || newValue === '') return;

  if(newValue) {

    var a = parseInt(g_form.getValue('u_percentage'));

    if(a >= 0 && a <= 59){

      g_form.setValue('u_result','Fail');

    } else if(a >= 60 && a <= 100) {

      g_form.setValue('u_result','Pass');

    } else {

      g_form.addErrorMessage('Percentage should be between 0 and 100.');

      g_form.clearValue('u_result');

    }

  }

}
```

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## 📈 Calculate Percentage from Total

javascript

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```javascript
function onChange(control, oldValue, newValue, isLoading, isTemplate) {

  if (isLoading || newValue === '') return;

  var Total = g_form.getValue('u_total');

  var Percentage = (Total / 600) * 100;

  g_form.setValue('u_percentage', Percentage + '%');

}
```

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## ▓ Conclusion

This ServiceNow-based solution offers a powerful, low-code approach to digitizing education workflows. With features like automated admissions, role-based dashboards, and smart form behavior using client scripts, it enhances operational speed, accuracy, and accountability in academic institutions. It is a robust model ready to scale across departments and campuses.