

Abstract

The "Educational Organisation Using ServiceNow" project is a comprehensive initiative aimed at automating and optimizing the academic and administrative operations of an educational institution. Built on the robust and flexible ServiceNow platform, this project leverages custom applications to manage student admissions, store and retrieve academic records, and monitor student progress. This system eliminates the need for paper-based processing and reduces human error by integrating automation at various levels of the educational workflow. It ensures a more reliable, transparent, and user-friendly interface for both administrators and students. The project highlights how low-code development using ServiceNow can extend to industries beyond IT Service Management, offering a scalable framework tailored to the needs of educational ecosystems.

Problem Statement

Educational institutions often suffer from inefficient data handling, fragmented processes, and lack of automation, especially in managing student records, admissions, and academic performance tracking. These challenges lead to delays, inconsistent data entry, and loss of productivity. Manual admission processes, disconnected record systems, and error-prone calculations affect decision-making and academic integrity. This project addresses these issues by building a centralized, automated solution using ServiceNow that enhances operational efficiency, data integrity, and overall decision-making in educational institutions.

Objectives

- ✓ Design a modular and scalable Educational Management System using ServiceNow.
 - ✓ Digitize and automate the student admission process.
 - ✓ Enable real-time calculation of student academic progress.
 - ✓ Improve user experience using dynamic forms and auto-population.
 - ✓ Maintain and organize data using custom tables, views, and layouts.
 - ✓ Enhance transparency and traceability using Process Flows.
 - ✓ Reduce human error with automated field calculations and validations.
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Tools and Technologies Used

- ServiceNow Personal Developer Instance

- **Form Designer & Table Configuration**
 - **Client Scripts (JavaScript)**
 - **Business Rules and UI Policies**
 - **Process Flow Designer**
 - **Number Maintenance Module**
 - **Local Update Sets**
 - **ServiceNow Studio (for Application Scoping)**
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System Modules and Functionalities

1. Salesforce Table – Student Core Data

This table acts as the foundation of the system. It includes all basic student-related information such as:

- Admin Number (Auto-generated and unique)
- Student Name, Grade
- Father's and Mother's Name
- Contact Numbers for Parents
- Admission Date

Key configuration:

- The table is marked as extensible to allow future child tables.
- Admin Number is set as the display field with the value generated dynamically using ServiceNow's Number Maintenance.
- Form layout is cleanly organized using sections and logical field groupings.

2. Admission Table – Handling Student Enrollment

This table extends the Salesforce table and captures admission-related details. It includes:

- Admission Status
- Purpose of Joining
- Pincode
- Mandal, City, District (Auto-filled based on Pincode)

- School Name, School Area

Additional Configurations:

- Choice lists for fields like School, Area, and Status.
- Fields auto-filled based on Admission Number selection.
- Pincode-based logic to auto-update location details.
- Process Flow created to visualize student admission stages.

3. Student Progress Table – Academic Tracking

Captures academic performance data for each student:

- Marks in individual subjects (Telugu, Hindi, English, Maths, Science, Social)
- Automatically computed total marks
- Calculated percentage
- Result status (Pass/Fail)

Key Functionalities:

- Dynamic client scripts calculate and populate Total, Percentage, and Result fields.
- Calculated fields are disabled from user input to preserve integrity.
- Form layout displays a clean view for reviewing marks and outcomes.

Configuration Activities

Instance Setup

1. Created an account on developer.servicenow.com
2. Requested and launched a Personal Developer Instance.
3. Logged in to configure environment, scopes, and access rights.

Update Set Creation

- Named: **Educational Organisation**
- Used to track all modifications made to tables, scripts, flows, and forms.

Table Configuration

- Defined three core tables: Salesforce, Admission, and Student Progress.

- Extended Admission and Student Progress from Salesforce for inheritance.
- Enabled modules in the Application Menu for direct access.

Form Design

- Form Designer used to drag and arrange fields by logical groupings.
- Customized section headers to improve readability.
- Ensured dynamic field visibility and mobile responsiveness.

Number Maintenance

- Configured Auto-numbering for Admin Number field.
- Format: Custom Padded ID ensuring uniqueness.

Process Flow Designer

- Created admission process lifecycle: New → InProgress → Joined → Rejected → Rejoined → Closed → Cancelled
- Used visual flow editor to map transitions.
- Enhances traceability of student status changes.

Client Script Implementations

A. Auto-Populate Student Details (Admission Table)

Triggered when Admin Number is selected:

- Fetches and fills associated details from Salesforce record.
- Disables fields to avoid accidental editing.

B. Location Autofill Based on Pincode

Triggered when Pincode is entered:

- Dynamically populates Mandal, City, District fields.
- Based on pre-configured value checks.

C. Disable Calculation Fields (Progress Table)

Disables Total, Percentage, and Result fields to prevent manual entry.

- Triggered on form load.

D. Total Marks Calculation

Triggered onChange of subject marks:

- Sums up all six subjects.
- Populates Total field dynamically.

E. Percentage Calculation

Triggered onChange of Total:

- Computes $\text{Percentage} = (\text{Total} / 600) * 100$

F. Result Calculation

Triggered onChange of Percentage:

- If $< 60 \rightarrow \text{Fail}$, else $\rightarrow \text{Pass}$
- Adds error message if outside 0–100 range.

Outcomes and Benefits

- ✓ **Streamlined Admissions:** Reduces manual steps using workflows.
- ✓ **Accurate Academic Reports:** Automated calculations eliminate errors.
- ✓ **Responsive Forms:** Reacts to user input for enhanced usability.
- ✓ **Data Quality Assurance:** Field locking and validation rules applied.
- ✓ **Administrative Oversight:** Process Flow provides lifecycle visibility.
- ✓ **Future Ready Design:** Easily extendable to Faculty, Fees, Exams, etc.

Conclusion

The "Educational Organisation Using ServiceNow" project demonstrates the platform's ability to build fully functional, scalable applications in domains beyond IT. By automating repetitive tasks, ensuring data consistency, and delivering a modern UI/UX, this solution creates a smarter way to manage educational operations. Whether used in schools, colleges, or training centers, this project offers a reusable blueprint for digital transformation in education.

Educational Organisation Using ServiceNow

Update Set: Educational Organisation

Application: Global

Created: 2025-06-24 02:44:34

Created by: admin

Merged to:

Name: Educational Organisation

State: Complete

Parent:

Release date:

Install date:

Installed from:

Description:

Update Back Out

Related Links

[Report to XML](#)

[Merge With Another Update Set](#)

[Scan Update Set](#)

Customer Updates (144) Update Set Logs Changelog Sets Install History

servicenow All Favorites History Workspaces Admission - SAL0001008 Search

Admission [u: admission] SAL0001008

Update Delete

New In progress Joined Rejected Rejected Closed Cancelled

Admission Number

Admin Date

Purpose of join: -- None --

Admission Number Grade: -- None --

Fee: \$ 0.00

Admission Number Student Name

Admission Number Father Name

Admission Number Mother Name

Admission Number Father Cell

Admission Number Mother Cell

Admin Status: -- None --

Comments

School Details Address

School Area: -- None --

School: -- None --

Salesforce New record Submit

Admin Number: SAL0001012

Admin Date

Admission Number Grade: -- None --

Admission Number Student Name

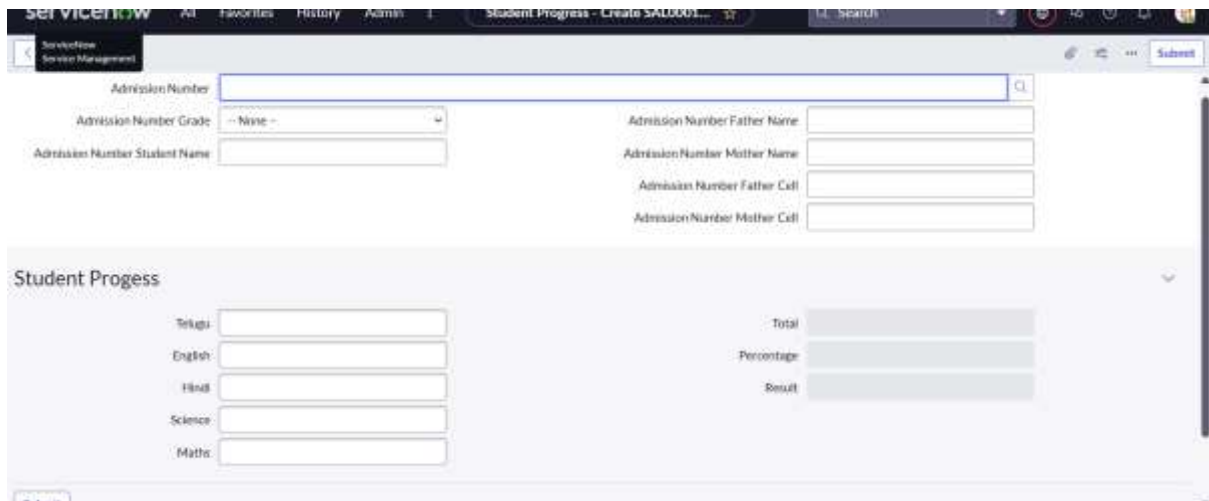
Admission Number Father Name

Admission Number Mother Name

Admission Number Father Cell

Admission Number Mother Cell

Submit



ServiceNow
Service Management

Student Progress - Create SPAD001...

Admission Number

Admission Number Grade

Admission Number Student Name

Admission Number Father Name

Admission Number Mother Name

Admission Number Father Cell

Admission Number Mother Cell

Student Progress

Telugu

English

Hindi

Science

Maths








Total

Percentage

Result

Submit

Future Enhancements

-  Automated Email & SMS notifications for admission updates.
-  Mobile App integration for real-time updates and submissions.
-  Visual dashboards with filters for Admins and Teachers.
-  Faculty Module with class, subject, and attendance management.
-  Fee Management and Transaction History.
-  Student Certification and Exam Result Portals.
-  Integration with external LMS (e.g., Moodle, Google Classroom).