

Title: Educational Management System - nm project

Team Details

Team ID:

Team Leader: Akash Raj H

Team Member 1: Dhanush B

Team Member 2: Delhi Ganesh S

Team Member 3: Manoj Kumar S

Problem Statement

Educational institutions face challenges in managing student data, admissions, and academic progress due to manual processes and scattered data handling. Traditional methods often lead to errors, duplication of work, inefficiency, and lack of real-time tracking. There is a need for a centralized, automated system to streamline admissions, manage student/teacher data, and monitor academic progress effectively.

Objectives

The main objectives of this project are:

- To design and implement an Educational Management System using ServiceNow.
- To automate the admission process with unique Admission Numbers.
- To simplify student and teacher data management.

- To create an automated **Student Progress Tracking System** with total marks, percentage, and result calculation.
- To enhance accuracy, efficiency, and user-friendliness through form design, process flow, and client scripts.

⅍ Skills Used

ServiceNow Platform Skills

- Table creation and configuration
- Form layout and design
- Number maintenance and process flows
- Client scripting (onChange, onLoad)

Programming

• JavaScript (for client-side scripting)

Database Concepts

• Tables, fields, records, relationships

Problem-Solving & Documentation

- Identifying manual process gaps
- Designing workflows
- Project documentation and reporting

Project Milestones

✓ Milestone 1 – ServiceNow Instance Setup

Steps:

- Setup new ServiceNow developer instance at: https://developer.servicenow.com
- Navigate to "Personal Developer Instance"
- Click "Request Instance"
- Submit required details
- Receive credentials via email
- Log into the instance
- Ready to build nm project

✓ Milestone 2 – Table Creation

Steps:

- Create **nm project** table (Admission No, Grade, Student Info, etc.)
- Create **Admission Table** (extends nm project; adds Status, School, Pincode, etc.)
- Create **Student Progress Table** (Subjects, Marks, Total, Percentage, Result, etc.)

Milestone 3 – Form Layout & Design

Steps:

- Configure Form Layouts for **nm project**, Admission, and Student Progress
- Use Form Design (drag and drop fields) for better UI

Milestone 4 – Number Maintenance & Process Flow

Steps:

- Setup auto-increment Admission Number using Number Maintenance
- Create process flow for Admission Table:
 - Stages: Application Received → Under Review → Approved/Rejected

Milestone 5 – Client Script Implementation

Scripts Implemented:

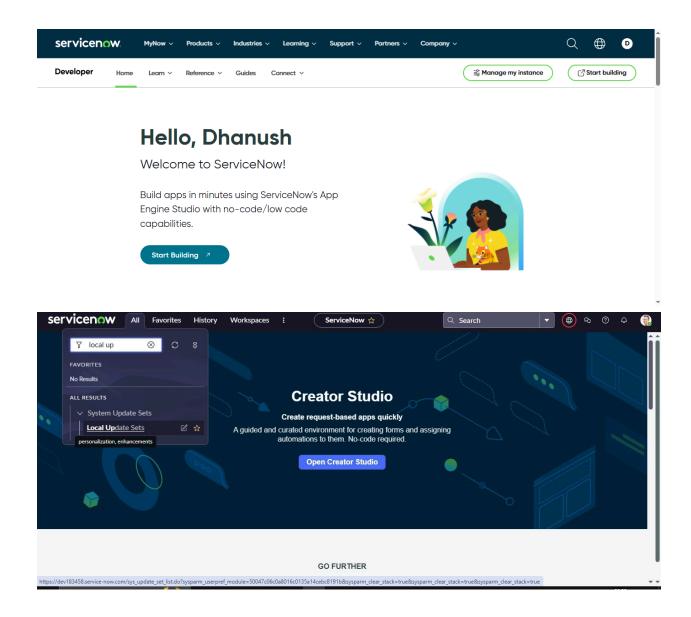
- Auto Populate Script (Admission Table) Copies student info
- Pincode Update Script Auto-fills Mandal, City, District
- Disable Fields Script (Student Progress) Locks Total, Percentage, Result
- Total Update Script Adds marks
- Percentage Script Calculates %
- Result Script Sets Pass/Fail

Activity 1: Setting up ServiceNow Instance

Objective: Set up and access a ServiceNow Personal Developer Instance for **nm project** development.

- 1. Sign up at https://developer.servicenow.com
- 2. Go to Personal Developer Instance
- 3. Click "Request Instance"
- 4. Choose latest version and submit

- 5. Get login details via email
- 6. Log in to your instance
- 7. Begin building the **nm project** application
- Result: A working developer instance is set up and ready for custom development.

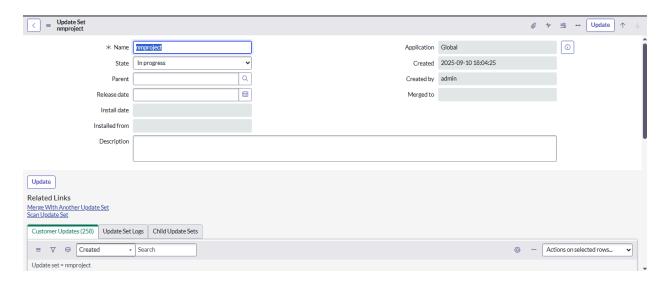


Activity 2: Creating an Update Set

Objective: Create an Update Set to track and move customizations for the nm project.

Steps:

- 1. Navigate to: All → System Update Sets → Local Update Sets
- 2. Click New
- 3. Enter Name: nm project
- 4. Click Submit
- 5. Then click Make Current
- ✓ Result: The Update Set nm project is created and tracking changes.



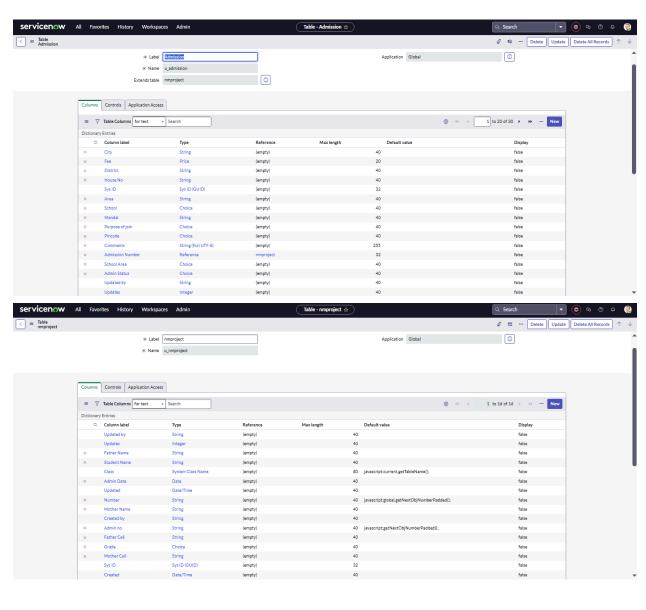
Activity 3: Assign Table Access

Objective: Restrict access to only users in the nm project scope.

Steps:

Go to System Definition → Tables

- Open nm project, Admission, Student Progress tables
- Under Application Access, configure:
 - o Allow: Read, Create, Update, Delete
 - Restrict to Application Scope: nm project
- Save
- Result: Tables are protected and secure.



Activity 4: Create Roles and Assign to Users

Objective: Define user access roles.

Steps:

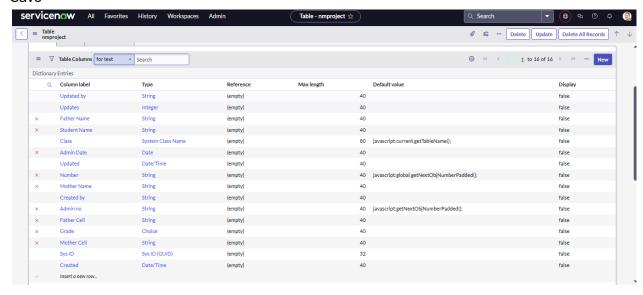
- Navigate → User Administration → Roles → New
- Create Roles:
 - o Admin Full access
 - Teacher Admission + Progress update
 - Student View only
- Assign to users in User Administration → Users
- Result: Role-based access is enforced.

Activity 5: Create nm project Table

Objective: Store student and parent master details.

- Go to System Definition → Tables → New
- Label: nm project
- Add fields: Admission Number, Grade, Student Name, Father Name, etc.
- Enable: Extensible, Dynamic Defaults

Save



Result: Master table for students is ready.

Activity 6: Create Admission Table

Objective: Record new admission data.

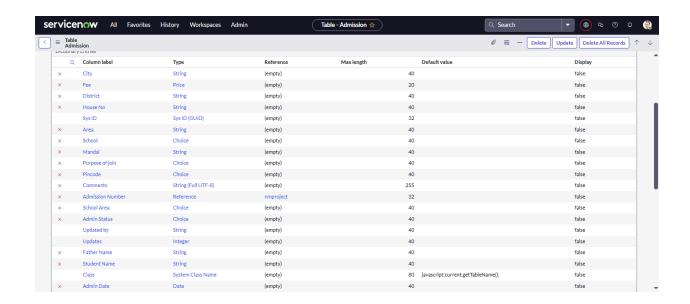
Steps:

• Label: Admission

Extends: nm project

• Add fields: Status, Purpose of Join, School, Area, Pincode etc..

• Add module to menu

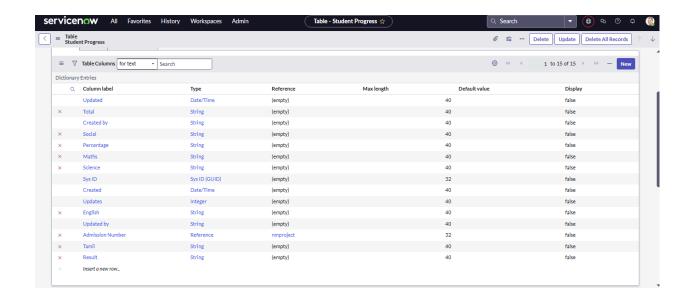


Result: Admission form is created.

Activity 7: Create Student Progress Table

Objective: Track subject-wise marks and academic result.

- Label: Student Progress
- Add fields: Telugu, Hindi, English, Maths, Science, Social, Total, Percentage, Result
- Add module under menu

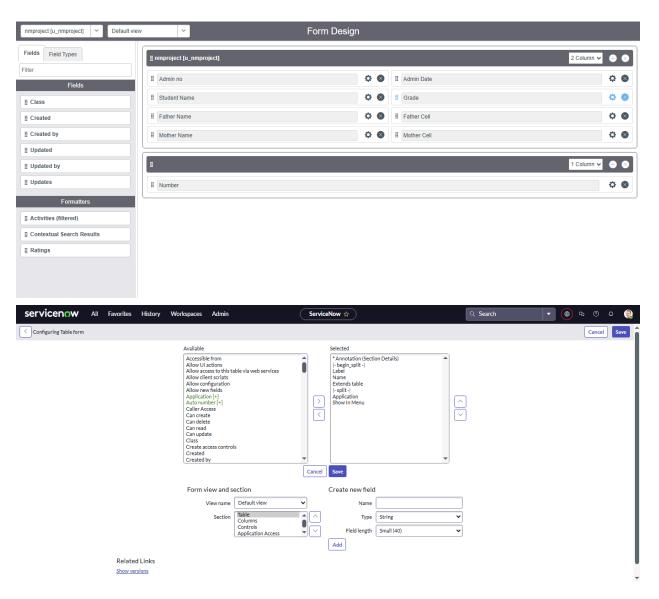


Result: Academic tracking table is built.

Activity 8: Configure Form Layouts & Form Design

Objective: Make data entry easy and clean.

- Go to Tables → Right-click → Configure → Form Layout
- Arrange fields appropriately
- Use Form Design to drag/drop for intuitive layout



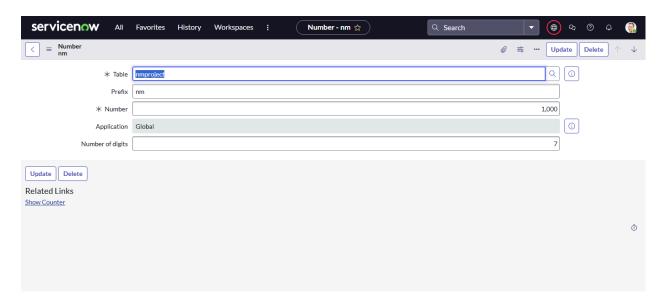
Result: User-friendly forms are created.

Activity 9: Number Maintenance

Objective: Auto-generate unique Admission Numbers.

- Navigate → Number Maintenance → New
- Set Prefix, Starting Number, Increment

- Link to Admission Table
- Save

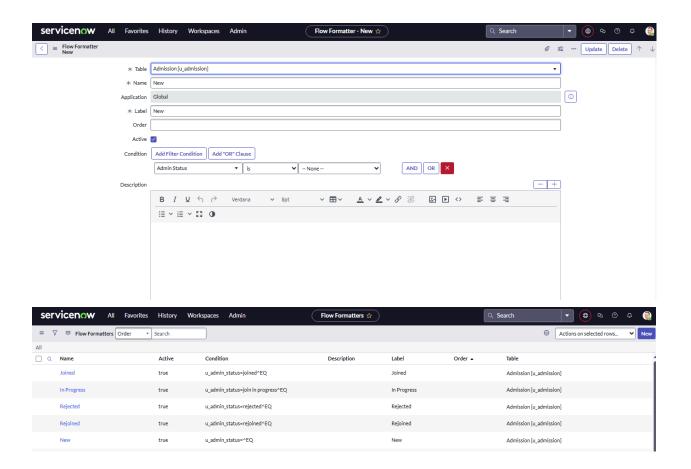


Result: Admission Numbers are auto-generated.

Activity 10: Create Process Flow for Admission

Objective: Track admission application progress.

- Go to: Process Automation → Flow Designer
- Table: Admission
- Define Stages: Application Received → Under Review → Approved/Rejected
- Save



Result: Visual workflow for admission lifecycle created.

Activity 11: Implement Client Scripts

Objective: Automate field calculations and reduce user error.

Scripts Created:

lable	Script Purpose
Admission	Auto Populate student details
Admission	Auto-fill Mandal, City, District by Pincode

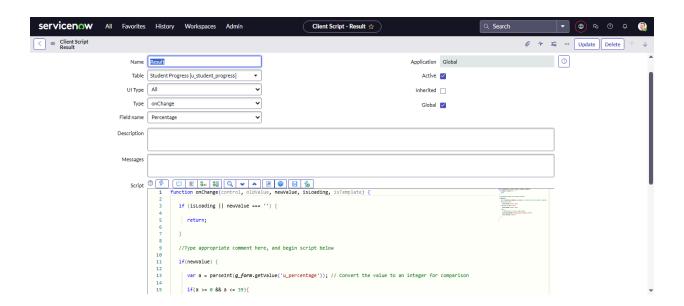
Student Progress Lock Total, Percentage, Result fields

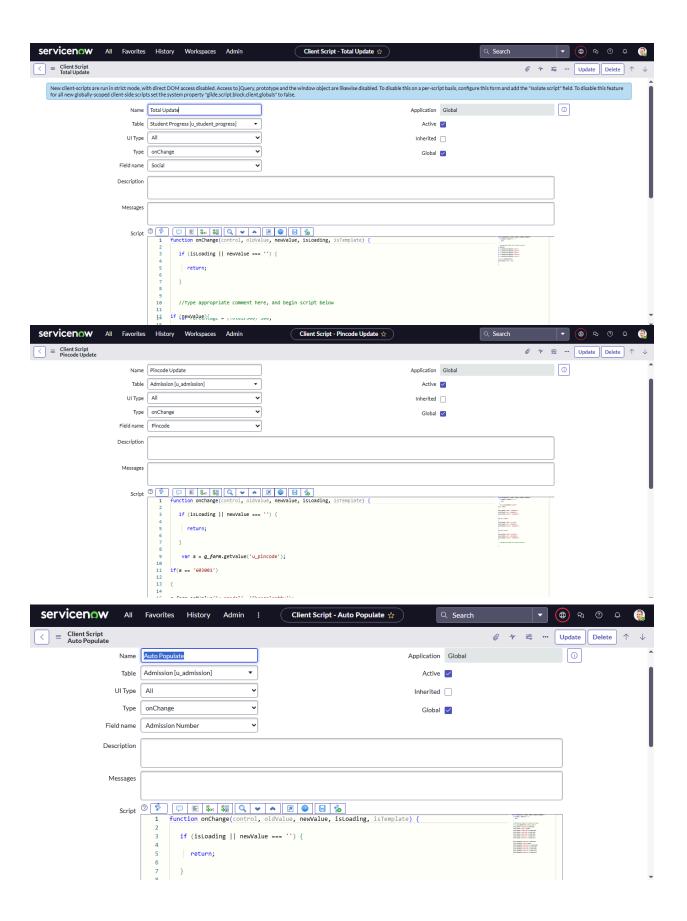
Student Progress Auto-calculate Total

Student Progress Auto-calculate Percentage (Total/600)

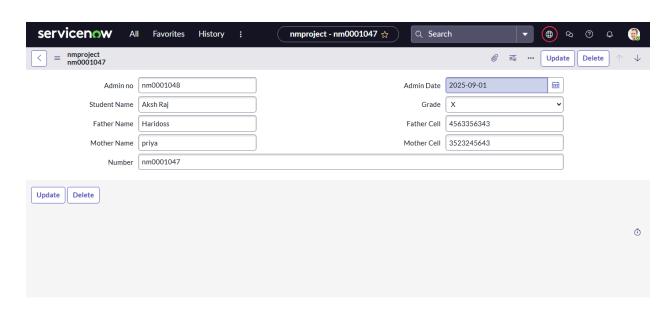
Student Progress Result logic: Pass/Fail

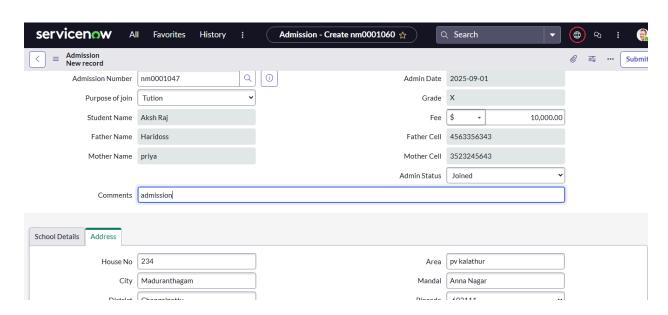
Result: Automation improves speed and accuracy.

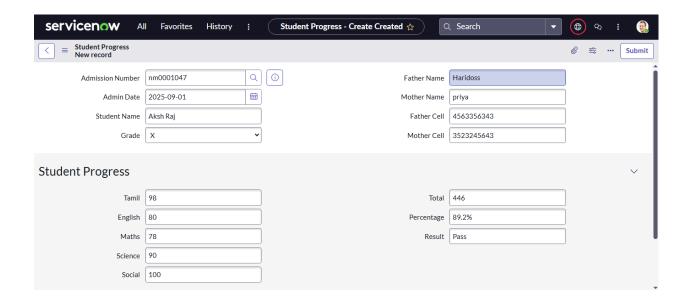




Output Page







Truture Scope

- External Integration Connect with Google Classroom, Salesforce, Microsoft Teams
- Analytics & Dashboards Predictive insights on student performance
- Mobile App Access Port the app to iOS/Android for students & parents
- Notifications Email/SMS alerts for results, fees, admissions
- **Multi-Institution Support** Use for entire education groups
- Al & RPA Chatbots, automation for form filling, document upload

Conclusion

The **nm project** is a comprehensive Educational Management System built on the ServiceNow platform. It automates student admissions, academic tracking, and role-based access while offering smart process flows and client-side scripting for automation. The project demonstrates ServiceNow's capability in streamlining administrative operations in the education sector.