



EDUCATIONAL ORGANIZATION USING SERVICE NOW

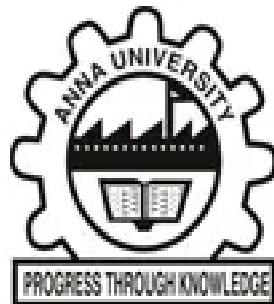
NAAN MUDHALVAN REPORT

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BONAFIDE CERTIFICATE

Certified that this project report “**EDUCATIONAL ORGANIZATION USING SERVICE NOW**” is the Bonafide work of “**SURYA P (953422104086), THIRUMANI AKASH A (953422104091), BARATH K (953422104301), MARTIN J (953422104303), FRANCIS ASWIN J (953422104701)**” who carried out the naan mudhalvan project work under my supervision.

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EXTERNAL EXAMINER

INTERNAL EXAMINER

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EDUCATIONAL ORGANIZATION USING SERVICENOW

1. INTRODUCTION

1.1 PROJECT OVERVIEW

The project “Educational Organization Management using ServiceNow” aims to streamline academic and administrative processes within an educational institution by creating digital workflows on the ServiceNow platform. Educational organizations typically manage tasks such as student enrolment, staff requests, certificate applications, timetable updates, and issue reporting manually. These manual processes often involve paperwork, emails, delays, miscommunication, and lack of proper tracking.

Using ServiceNow, a powerful cloud-based workflow automation platform, this project introduces a centralized Service Portal where students, faculty, and administrative staff can access various academic services in one place. Users can submit requests such as ID card issuance, certificate applications, leave requests, or classroom maintenance issues. Each request is automatically routed to the appropriate department, with real-time tracking, approval workflows, and notifications.

This project demonstrates how ServiceNow’s Service Catalogue, Flow Designer, task workflow automation, and notifications can help educational institutions modernize their operations, reduce administrative workload, and provide transparent, student-friendly services.

1.2 PURPOSE

The purpose of this project is to automate core academic and administrative workflows in an educational organization using ServiceNow, improving both service

delivery and operational efficiency.

Objectives:

- Centralize all academic/administrative services.
- Automate routing to the correct department.
- Improve visibility of request progress.
- Reduce manual tasks and errors.
- Enable faster processing of student and faculty requests.

Benefits:

1. Improved Efficiency: Reduces paperwork and email follow-ups.
2. Transparency: Students and staff can track requests anytime via the Service Portal.
3. Faster Processing: Automatic approvals and escalations minimize delays.
4. Centralized Management: Administration can monitor all academic services in one dashboard.
5. Accurate Data Storage: All records are securely stored within ServiceNow.

The purpose of this project is to automate core academic and administrative workflows in an educational organization using ServiceNow, improving both service delivery and operational efficiency.

2. IDEATION PHASE

2.1 PURPOSE

Educational organizations often struggle with manual processes involving student services, certificate requests, teacher support, and maintenance tasks. The absence of an integrated digital system results in delays, lost forms, poor communication, and no proper tracking.

By using ServiceNow, we aim to automate student and staff service workflows, ensuring requests are digitally logged, routed to the right department, and resolved efficiently. This reduces workload on administrative departments and improves user experience across the institution.

2.2 EMPATHY MAP CANVAS

Who are we empathizing with?

- Students requesting academic and administrative services.
- Faculty needing support for teaching activities.
- Administrative staff processing student and staff requests.

Goals:

- Easy access to services.
- Quick approvals and responses.
- Transparent tracking and historical records.

Pain Points:

- Manual forms and repeated follow-ups.
- Delayed responses.
- No central service portal.
- Poor visibility into request status.

Needs:

- Self-service portal for students and staff.
- Automated workflows.
- Real-time updates and notifications.
- Transparent escalation paths.

Empathy Map Summary:

Understanding the needs of students, faculty, and administrator's helps design a user-friendly digital system that minimizes workload, speeds up processes, and enhances satisfaction across the organization.

2.3 BRAINSTORMING

Ideas Generated:

- Create a Service Catalogue titled “Educational Services Portal.”
- Catalogue items could include:
 - Bonafide certificate request
 - ID card request
 - Fee payment enquiry
 - Hostel request
 - Maintenance issue reporting
 - Faculty leave request
- Build Flow Designer workflows for approvals and task assignments.
- Configure email/SMS notifications.
- Admin dashboard for monitoring open requests.

Key Questions:

1. What services should be prioritized for automation?
2. Who approves different types of requests—HOD, Principal, Admin?
3. Should requests include attachments such as documents?

Should academic records sync with other systems?

3. REQUIREMENT PHASE

3.1 OBJECTIVE

To design and implement a centralized Educational Services Portal in ServiceNow that automates the end-to-end service delivery process for students and faculty.

Current Challenges:

- Manual form submissions.
- No centralized tracking system.
- Delayed communication between departments.

Expected Outcomes:

- Unified Service Catalogue for academic/administrative services.
- Automated approvals for high-volume requests.
- Department-based routing.
- Improved turnaround time (TAT).
- Enhanced user satisfaction.

Scope:

- Catalogue item creation for student and staff services.
- Approval workflows via Flow Designer.
- Role-based notifications and escalations.
- Service Portal enablement.
- Tracking and reporting dashboards.

Stakeholders:

1. Students
2. Faculty
3. Department Heads (Approvers)
4. Administrative Staff (Fulfillers)
5. IT Team (System Maintenance)

Success Metrics:

- 80% reduction in paperwork.
- Faster approvals by at least 50%.
- 100% visibility into service progress.
- Improved SLA compliance.

3.2 SOLUTION REQUIREMENTS

Functional Requirements:

- Create service catalogue items for educational services.
- Automated approval workflows (e.g., HOD → Admin).
- Notifications at each stage.
- Ability to upload required documents.
- Dashboards for monitoring.

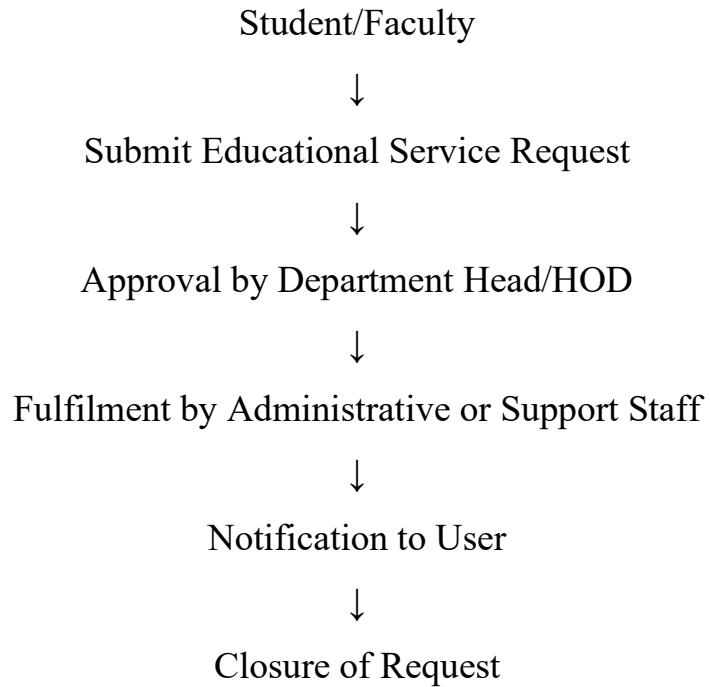
Non-Functional Requirements:

- Responsive design for mobile and desktop.
- 24/7 availability via portal.
- Secure access with student/faculty authentication.

Technical Requirements:

- Use modules: Service Catalogue, Flow Designer, Notifications.
- Integrate with User, Approval, and Task tables.
- Configuration via update sets for migration.

3.3 FLOW DIAGRAM



3.4 TECHNOLOGY STACK

- **Platform:** ServiceNow ITSM
- **Automation:** Flow Designer, Business Rules
- **Notifications:** Email/Portal Messages
- **Scripting:** JavaScript
- **Security:** ACLs, Roles

4. PROJECT DESIGN

4.1 TECHNOLOGY STACK

- ServiceNow ITSM
- Flow Designer workflows
- Email notifications

- Service Catalogue items
- Admin dashboards

4.2 PROPOSED SOLUTION

The solution provides a digital education services portal where students and faculty can submit their requests. Each request is validated, routed for approval, and fulfilled by the appropriate department.

Benefits:

- Reduced workload for administrative staff.
- Enhanced transparency for students and faculty.
- Faster processing with automated workflows.
- Clear audit logs for compliance.
- Scalable across multiple departments.

4.3 SOLUTION ARCHITECTURE

1. Identify required user roles.
2. Design Service Catalogue items.
3. Build workflows using Flow Designer.
4. Configure approvals and notifications.
5. Test end-to-end service flow.
6. Publish on Service Portal.

5. PROJECT PLANNING & SCHEDULING

Phase	Duration
Requirement Analysis	1 Hour
Catalogue Item Creation	2 Hours
Workflow Development	3 Hours
Notification Setup	1 Hour
Role Configuration	45 Minutes
Testing & Debugging	2 Hours
Documentation	1 Hour

6. FUNCTIONAL AND PERFORMANCE TESTING

6.1 PERFORMANCE TESTING

- Evaluate portal load time.
- Check workflow execution speed.
- Test concurrent user requests.
- Validate system stability during peak hours.

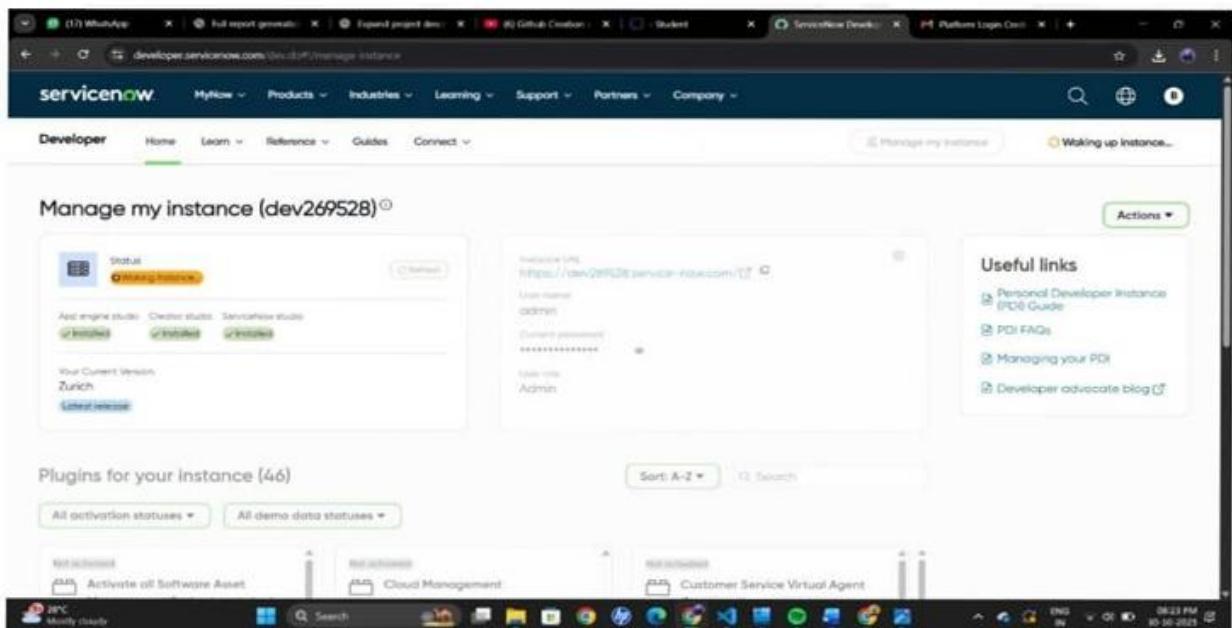
6.2 FUNCTIONAL TESTING

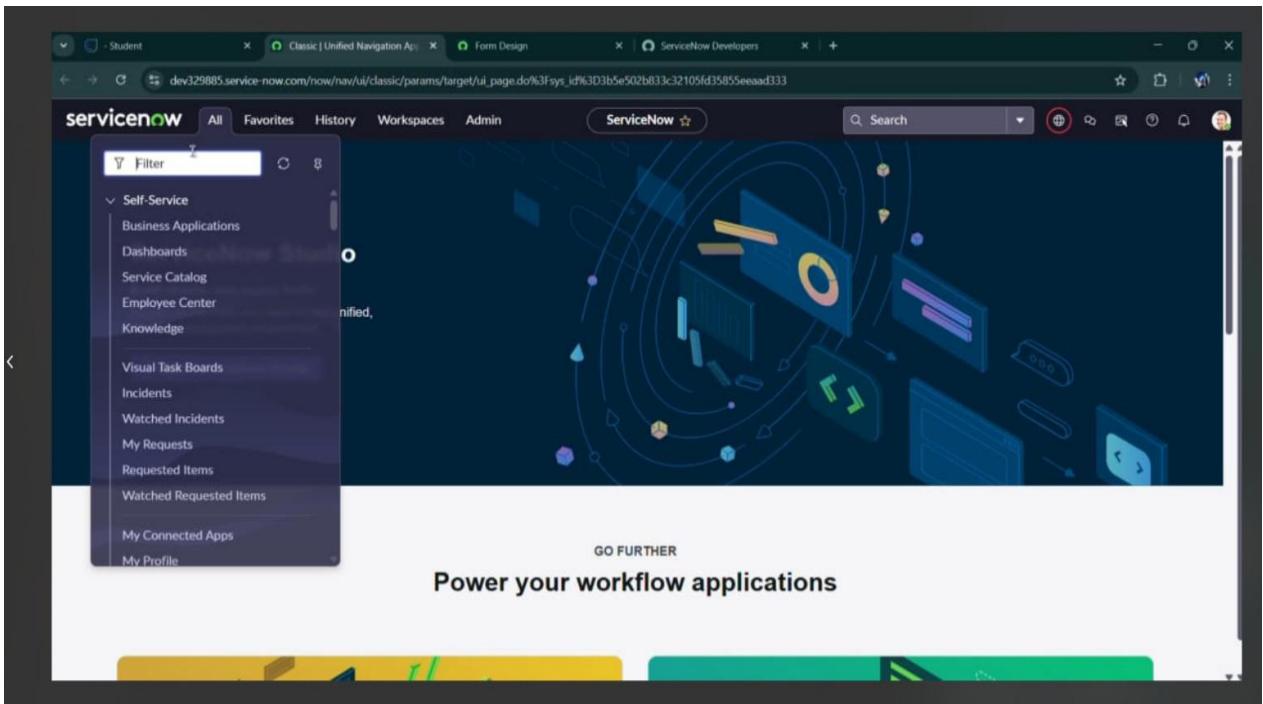
- Validate catalogue fields and mandatory inputs.
- Verify approval routing paths.
- Confirm notifications at every stage.
- Ensure tasks reach the correct fulfills.
- Validate final closure and feedback options.

7. RESULT

- ServiceNow Instance Setup
- Creation of Update Set
- Creating A Table
- Form Design
- Number Maintenance
- Process Flow
- Client Script
- Result

1. SETTING UP SERVICE NOW INSTANCE





2. CREATION OF NEW UPDATE SET

The image shows the 'Update Sets' list page in ServiceNow. The header includes tabs for 'Student', 'Update Sets | ServiceNow', 'Form Design', and 'ServiceNow Developers'. Below the header is a search bar and a navigation bar with links for 'All', 'Favorites', 'History', 'Workspaces', and 'Admin'. A 'Update Sets' logo with a star icon is also present. The main content area displays a table of update sets. The columns are: Name, Application, State, Installed from, Created, Created by, Parent, and Batch Base. The table lists several entries, including 'Default' (Now Assist Troubleshooting, In progress), 'Default' (Global, In progress), 'Default' (Security Center, In progress), 'Default' (Pipeline, In progress), 'Educational Organisation' (Global, In progress), 'Educational Organisation' (Global, In progress), 'Educational Organisation' (Global, In progress), and 'Educational Organisation' (Global, In progress).

Name	Application	State	Installed from	Created	Created by	Parent	Batch Base
Default	Now Assist Troubleshooting	In progress		2025-06-26 00:11:31	admin	(empty)	(empty)
Default	Global	In progress		2025-06-25 22:14:10	system	(empty)	(empty)
Default	Security Center	In progress		2025-06-26 00:10:48	system	(empty)	(empty)
Default	Pipeline	In progress		2025-09-30 22:20:26	system	(empty)	(empty)
Educational Organisation	Global	In progress		2025-11-06 21:30:33	admin	(empty)	(empty)
Educational Organisation	Global	In progress		2025-11-06 21:31:26	admin	(empty)	(empty)
Educational Organisation	Global	In progress		2025-11-06 21:32:30	admin	(empty)	(empty)
Educational Organisation	Global	In progress		2025-11-06 22:14:06	admin	(empty)	(empty)

Related Links

[Merge Update Sets](#)

ServiceNow - Student

Educational Organisation | Upd.

Form Design

ServiceNow Developers

dev329885.service-now.com/nav/ui/classic/params/target/sys_update_set.do?sys_id=3D7179f1b9834132105fd35855eeaad312&sysparm_record_target=%3Days_update_set%26syspar...

Update Set - Educational Organisation

Search

Update Set
Educational Organisation

Name: Educational Organisation

State: In progress

Parent:

Release date:

Install date:

Installed from:

Description:

Application: Global

Created: 2025-11-06 21:30:33

Created by: admin

Merged to:

Update

Related Links

[Merge With Another Update Set](#)

[Scan Update Set](#)

Customer Updates (299) Update Set Logs Child Update Sets Install History

Created Search

Actions on selected rows...

Update set = Educational Organisation

Created	Type	View	Target name	Updated by	Remote update set	Action
2025-11-08 01:05:06	Application Menu		Admission	admin	(empty)	INSERT_OR_UPDATE

3. CREATING A TABLE

Tables				
	Name	Extends table	Extensible	Updated
<input type="checkbox"/>	Label	<input type="text" value="Search"/>	<input type="button" value="Search"/>	<input type="button" value="Actions on selected rows..."/>
All > Update name is not empty				
<input type="checkbox"/>	<input type="text" value="Label"/>	<input type="text" value="Search"/>	<input type="button" value="Search"/>	<input type="button" value="Search"/>
NET Application	omdb_ci_app_dot_net	Application	false	2025-06-25 22:06:00
A/B Testing Evaluation	evaluation	empty()	false	2025-06-25 21:59:00
A/B Testing Evaluation Execution	evaluation_execution	empty()	false	2025-06-25 21:59:00
A/B Testing Evaluation Parameter	evaluation_parameter	empty()	false	2025-06-25 21:59:00
A/B Testing Evaluation Parameter Result	evaluation_parameter_result	empty()	false	2025-06-25 21:59:00
AI/BI Load Balancer	omdb_ci_lb_a10	Load Balancer	false	2025-06-25 22:05:48
Access Analyzer Query	sn_access_analyzer_request	empty()	false	2025-06-25 23:19:30
Access Comparison Request	sn_access_analyzer_access_comparison_req	empty()	false	2025-06-25 23:19:29
Access Control	sys_security_acl	Application File	false	2025-06-25 21:54:03
Access Result	sn_access_analyzer_access_result	empty()	false	2025-06-25 23:19:30
Access Roles	sys_security_ac_role	Application File	false	2025-06-25 21:54:03
Accessory	omdb_ci_acc	Configuration Item	false	2025-06-25 22:06:03
Account level entitlements	sn_sub_main_st_account_level_entitlement	empty()	false	2025-06-25 23:00:07
Account Subscription Entitlement	account_subscription_entitlement	empty()	false	2025-06-25 22:59:57
ACE	omdb_ci_lb_ac	Load Balancer	false	2025-06-25 22:03:24
ACL Endpoint	omdb_ci_endpoint_acl	Endpoint	false	2025-06-25 22:03:20

ServiceNow Form Design - Student

Table: Admission

Properties:

- * Label: Admission
- * Name: u_admission
- Extends table: Salesforce
- Application: Global
- Create module:
- Create mobile module:
- Add module to menu: -- Create new --
- New menu name:
- Remote Table:

Columns:

Column label	Type	Reference	Max length	Default value	Display
City	String	(empty)	40		false
Updated	Date/Time	(empty)	40		false
House No	String	(empty)	40		false
Class	String	(empty)	40		false
Father Name	String	(empty)	40		false
Sys ID	Sys ID (GUID)	(empty)	32		false

ServiceNow Form Design - Student

Table: Student Progress

Properties:

- * Label: Student Progress
- * Name: u_student_progress
- Application: Global
- Remote Table:

Columns:

Column label	Type	Reference	Max length	Default value	Display
Grade	String	(empty)	40		false
Hindi	String	(empty)	40		false
Admission Number.Father Name	String	(empty)	40		false
Admission Number.Mother Cell	String	(empty)	40		false
Result	String	(empty)	40		false
Created by	String	(empty)	40		false
Social	String	(empty)	40		false
Maths	String	(empty)	40		false
Telugu	String	(empty)	40		false
Admission Number.Mother Number	String	(empty)	40		false

4. FORM DESIGN

The screenshot shows the ServiceNow Form Design interface for the 'Student Progress' table. The left sidebar contains a 'Fields' panel with various student-related fields like Created, Grade, and Social, and a 'Formatters' panel with Ratings. The main area displays two sections: 'Student Progress [u_student_progress]' and 'New Section'. The first section contains fields for Hindi, Result, Maths, Telugu, Total, Percentage, English, and Science. The second section contains a single field for Admission Number.

The screenshot shows the ServiceNow Form Design interface for the 'Admission' table. The left sidebar contains a 'Fields' panel with fields like Admin Status, Class, Created, Updated, and Ratings, and a 'Formatters' panel with Ratings. The main area displays three sections: 'Process Flow (Formatter)', 'Address', and 'School Details'. The 'Process Flow' section contains fields for Admin Number, Mother Name, Fee, Purpose of join, Grade, Father Cell, Admin Date, Father Name, and Student Name. The 'Address' section contains fields for Pincode, House No, City, Mandal, District, and Area. The 'School Details' section contains a single field for Comments.

The screenshot shows the ServiceNow Form Design interface. On the left, there's a sidebar with sections for 'Fields' and 'Field Types'. Under 'Fields', several fields are listed: Hindi, Telugu, Result, Total, Maths, Percentage, English, and Science. Below these, a section titled 'New Section' contains a field for 'Admission Number'. A note says 'Drag content, drop it here'. Further down, there's another section with fields for 'Admission Number Father Cell', 'Admission Number Mother Cell', 'Admission Number Mother Number', 'Admission Number Student Name', 'Admission Number Grade', and 'Admission Number Father Name'. Each field has a gear icon for settings.

5. NUMBER MAINTENANCE

The screenshot shows the ServiceNow UI Action - New Record configuration page. The form has the following fields and settings:

- Name:** Reset Form
- Table:** Shopping Cart [sc_cart]
- Order:** 100
- Action name:** Reset Form
- Active:**
- Show insert:**
- Show update:**
- Client:**
- List v2 Compatible:**
- List v3 Compatible:**
- Overrides:** A search bar with a magnifying glass icon.
- Messages:** A text input field.
- Application:** Global
- Form button:**
- Form context menu:**
- Form link:**
- Form style:** -- None --
- List banner button:**
- List bottom button:**
- List context menu:**
- List choice:**
- List link:**
- List style:** -- None --

6. PROCESS FLOW

The screenshot shows the ServiceNow 'Flow Formatters' list view. The table has columns: Name, Active, Condition, Description, Label, Order, and Table. The data includes:

Name	Active	Condition	Description	Label	Order	Table
Rejected	true	u_admin_status>New^EQ		Rejected		Admission [u_admission]
Closed	true	u_admin_status>New^EQ		Closed		Admission [u_admission]
In progress	true	u_admin_status>Join in progress^EQ		In progress		Admission [u_admission]
Rejoined	true	u_admin_status>Rejoined^EQ		Rejoined		Admission [u_admission]
Cancelled	true	u_admin_status>New^EQ		Cancelled		Admission [u_admission]
In progress	true	u_admin_status>New^EQ		In progress		Admission [u_admission]
Rejoined	true	u_admin_status>Rejoined^EQ		Rejoined		Admission [u_admission]
New	true	u_admin_status>New^EQ		New		Admission [u_admission]
Joined	true	u_admin_status>New^EQ		Joined		Admission [u_admission]
author	true	stage>author^EQ		Author	1	Publication [sn_publications_publication]
review	true	stage>review^EQ		Review	3	Publication [sn_notifications_notification]

7. CLIENT SCRIPT

The screenshot shows the ServiceNow 'Client Scripts' editor for a script named 'Auto populate'. The script is triggered on 'onChange' of the 'Admin Number' field in the 'Admission' table. The code is as follows:

```
function onChange(control, oldValue, newValue, isloading, isTemplate) {
    if (isloading || newValue === '') {
        return;
    }
    //Type appropriate comment here, and begin script below
    var a = g_form.getReference('u_admission_number');
    g_form.setValue('u_admin_date', a.u_admin_date);
}
```

The screenshot shows the ServiceNow Client Scripts list view. The table has the following data:

Name	Active	Table	Application	View	Type	Updated
Maximum Duration Range Check	true	Transaction Quota Rule [sysrule_quota]	Global	Search	onChange	2012-05-30 14:47:01
Create default value	true	Response Template Channel [sn_templated_snip_channel]	Templated Snippets	Search	onChange	2020-09-22 17:06:27
Show overlap field based on data labels	true	Widgets [pa_widgets]	Global	Search	onChange	2021-04-23 02:59:51
Set protocol based on auth type	false	HTTP(s) Connection [http_connection]	Global	Search	onChange	2017-06-02 15:49:24
Set default values for OIDC PKCE flow	true	OAuth OIDC Entity [oauth_oidc_entity]	Global	Search	onChange	2020-02-28 00:59:58
Make notification read only	true	Additional Notification Recipients [sys_notification_recipient]	Global	Search	onLoad	2021-02-05 22:42:13
Deprecated - SN - Make serial number man	false	Asset [alm_asset]	Global	Search	onChange	2025-03-06 00:42:54
Validate StatefulSet Name	true	MID-KBs Deployment Request [mid_k8s_deployment]	Global	Search	onChange	2022-10-09 23:18:07
Set Use current record if delete	true	Action item [sys_sg_write_back_action_item]	Global	Search	onChange	2019-04-14 07:30:02
Warning when no destination type enabled	true	Notification [sys_notification]	Global	Search	onLoad	2021-05-13 04:51:51

The screenshot shows the Client Script - Disable Fields edit view. The script editor contains the following code:

```

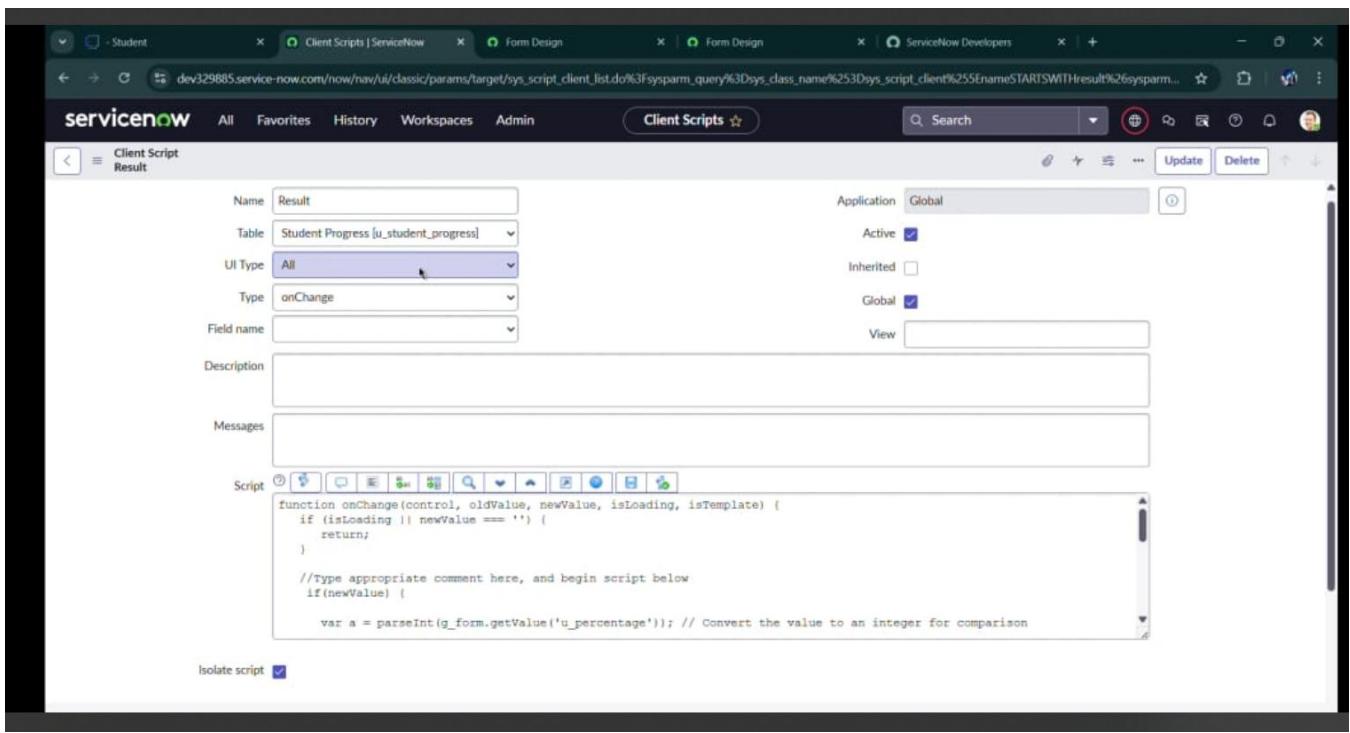
function onLoad() {
    //Type appropriate comment here, and begin script below
    g_form.setDisabled('u_total',true);
    g_form.setDisabled('u_percentage',true);
    g_form.setDisabled('u_result',true);
}

```

The bottom section shows the Versions tab with one recorded version:

Name	Recorded at	State	Source	Reverted from
sys_script_client_396a3a0a83c5b2105fd35855eeaad36a	2025-11-07 20:47:19	Current	Update Set: Educational Organisation	(empty)

8. RESULT



8. CONCLUSION

The “Educational Organization Management using ServiceNow” project successfully demonstrates how academic and administrative services can be centralized, automated, and delivered more efficiently through a modern digital platform. By replacing traditional paper-based and email-driven processes with ServiceNow workflows, the institution gains improved transparency, faster response times, and a significant reduction in manual effort. Students and faculty benefit from a user-friendly self-service portal, real-time tracking, and consistent communication, while administrative teams gain better control over approvals, task assignments, and service monitoring. The implementation ensures accuracy, accountability, and scalability, making it suitable for institutions of any size. Overall, the project enhances operational efficiency, strengthens service quality, and supports a more digitally empowered educational environment.

9. FUTURE SCOPE

- Integration with Student Information Systems (SIS)
- Development of a dedicated mobile application
- Implementation of AI-based chatbot/Virtual Agent
- Automatic generation of certificates and documents
- Advanced analytics and reporting dashboards
- Addition of more academic and administrative services
- Integration with external systems such as payment and hostel management
- Enhanced security and detailed role-based access controls

10. APPENDIX

- A. ServiceNow Instance Details**

Includes information about the instance URL, version, and configurations used during the project.

- B. List of Catalogue Items Created**

Contains the complete list of academic and administrative service items added to the portal.

- C. Workflow Diagrams**

Visual representations of approval flows and fulfilment processes designed using Flow Designer.

- D. Variable and Field Definitions**

Detailed description of all variables, field types, and mandatory requirements used in catalogue items.

- E. Role and Permission Mapping**

Complete mapping of roles such as Student, Faculty, HOD, and Admin with their access privileges.

- F. Notification Templates**

Sample email and portal notifications configured for request submission, approval, rejection, and closure.

- G. Test Cases and Validation Logs**

Documentation on scenarios tested, test results, and issues identified during testing.

- H. Update Set Export Details**

Information on the update set exported, including captured customizations and migration notes.