LAPTOP REQUEST CATALOG

Service now

NAAN MUDALVAN PROJECT

TEAM ID : NM2025TMID17708

Team Leader :DHARSHINI K

Team Member : DIVIYA DHARASHINI S

Team Member : DINESH KUMAR P

Team Member : DHUBINESH S

ST.JOSEPH'S COLLEGE (ARTS & SCIENCE)

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1. INTRODUCTION:

In today's rapidly evolving digital world, laptops have become an indispensable part of academic, professional, and organizational activities. They are not only used for learning and research but also play a key role in communication, project management, data analysis, and software development. As the reliance on laptops grows, educational institutions, corporate organizations, and government offices are increasingly faced with the challenge of effectively managing requests for laptops from students, faculty members, and employees.

Traditionally, laptop requests are handled using manual processes such as paper-based forms, emails, or informal verbal requests. While these methods may appear simple, they come with several disadvantages:

- Delays in request approval due to lack of structured workflows.
- Errors caused by missing information or inconsistent request formats.
- Lack of transparency, as users have no visibility into the status of their requests.
- Difficulty in record-keeping, making it hard for administrators to track laptop distribution and usage.

These issues not only affect efficiency but also lead to frustration among requestors and administrative overhead for IT or asset management teams.

To overcome these challenges, the Laptop Request Catalog Project proposes the development of an automated catalog-based system using the ServiceNow platform. ServiceNow, known for its robust workflow automation and catalog management capabilities, provides an ideal environment for building such a solution.

In this project, a dedicated service catalog item will be created for laptop requests. The catalog will allow users to:

- Select the laptop model and specifications based on their needs.
- Provide details such as quantity, justification, and department.
- Submit the request, which will be automatically routed to the appropriate approvers.

The system ensures that every request follows a standardized workflow**,** involving approval from department heads and IT administrators before fulfillment. Additionally, requestors will be kept informed at each stage through automated notifications. Administrators, on the other hand, will have access to reports and dashboards to track laptop demand, usage patterns, and request completion timelines.

By implementing the Laptop Request Catalog on ServiceNow, institutions can achieve:

- Faster request processing through automation.
- Error-free approvals by enforcing mandatory fields and business rules.
- Transparency, as users can track their request status in real-time.
- Better resource management, as issued laptops are systematically recorded.

Ultimately, this project highlights how ServiceNow can be extended beyond traditional IT incident management into areas such as resource allocation, asset management, and organizational service delivery. It provides a scalable, efficient, and user-friendly approach to managing laptop requests, ensuring both user satisfaction and administrative efficiency**.**

ABSTRACT:

Manual handling of laptop requests often causes delays, miscommunication, and lack of visibility. This project introduces a **Laptop Request Catalog System** on ServiceNow, designed to automate the end-to-end process of requesting and approving laptops.

Key features include:

- A service catalog item for laptop requests.
- Custom form fields to capture details such as laptop model, specifications, quantity, and justification.
- Automated approval workflows involving department heads or administrators.
- Notifications and Service Level Agreements (SLAs) to ensure timely processing.
- Reports and dashboards for tracking laptop requests and issued assets.

The proposed solution ensures faster processing, accountability, and transparency, while showcasing ServiceNow’s potential in solving real-world problems outside of IT services.

PROBLEM STATEMENT

Managing laptop requests in organizations is often inefficient due to the absence of a structured and automated system. Most institutions rely on emails, paper forms, or manual approvals, which lead to several recurring challenges:

1. Lack of a Centralized System – Requests are scattered across different channels, making it hard for administrators to track and consolidate them.
2. Delays in Approvals – Manual approval processes depend on the availability of managers or administrators, often causing unnecessary delays.
3. No Proper Tracking of Issued Laptops – Once laptops are allocated, records are not consistently maintained, leading to confusion during audits or replacements.
4. Limited Transparency – Requestors cannot easily check the status of their requests, resulting in repeated follow-ups and dissatisfaction.
5. Errors and Incomplete Data – Manual entries often lead to mistakes, such as missing laptop specifications, quantities, or justifications.

These issues highlight the need for a digital, automated, and scalable Laptop Request Catalog System that can streamline the request process, ensure accurate tracking, and provide transparency for both administrators and requestors.

SOLUTION:

The proposed solution is to develop a Laptop Request Catalog on the ServiceNow platform. This catalog will serve as a centralized system where users can easily request laptops and track the progress of their requests.

Key features of the solution include:

1. Structured Catalog Item – A dedicated catalog form will capture details such as laptop model, configuration, quantity, and justification, ensuring requests are complete and standardized.

2. Approval Workflows – Each request will follow a predefined workflow, requiring verification and approval from department heads or IT administrators before fulfillment.

3. Automatic Notifications – Users will receive real-time updates on the status of their requests, reducing the need for manual follow-ups.

4. Defined SLAs – Service Level Agreements will set clear timelines for request approvals and laptop issuance, ensuring timely processing.

5. Reports and Dashboards – Administrators can generate reports to track requests, monitor laptop usage, and analyze approval trends for better decision-making.

By implementing this solution, organizations can streamline the request process, reduce delays, maintain accurate records, and provide transparency. Ultimately, it improves both accountability for administrators and satisfaction for end users.

PRACTICAL USE:

The Laptop Request Catalog provides practical benefits for different types of users within an organization:

1. Students – Can request laptops for academic purposes such as online classes, research, and project work. The system ensures their requests are properly documented and approved without unnecessary delays.

2. Employees – Can submit laptop requests for official duties, enabling them to receive the required devices quickly and with proper authorization.

3. Administrators and IT Teams – Can efficiently track the demand for laptops, maintain accurate records of issued devices, and allocate resources based on availability. This reduces confusion and prevents duplicate or unauthorized requests.

4. Organizations as a Whole – Benefit from faster approvals, transparent request tracking, and proper asset management. The catalog also helps in planning budgets and forecasting future laptop requirements.

By streamlining these processes, the system ensures efficiency, accountability, and user satisfaction, while reducing manual work for administrators.

KNOWLEDGE GAINED:

Through the development of the Laptop Request Catalog Project, the team acquired valuable technical and practical knowledge related to ServiceNow and workflow automation. The major learnings include:

1. Setting up and Configuring a ServiceNow Instance – Gained experience in requesting and managing a personal developer instance, exploring the interface, and enabling required modules for application development.

2. Creating Catalog Items and Custom Forms – Learned how to design and configure service catalog items with custom fields to capture detailed request information such as laptop model, quantity, and justification.

3. Designing Approval Workflows and Business Rules – Acquired knowledge in building structured workflows that route requests through appropriate approval hierarchies, along with applying business rules to enforce data accuracy and process consistency.

4. Implementing Notifications and SLAs – Understood how to configure email and system notifications to keep users informed, and how to define Service Level Agreements (SLAs) to ensure timely approvals and request fulfillment.

5. Creating Dashboards and Reports – Learned how to generate meaningful reports and visual dashboards to monitor request trends, approval times, and overall laptop allocation.

6. Applying ServiceNow to Non-IT Use Cases – Discovered how the ServiceNow platform, usually used for IT Service Management, can be adapted for broader organizational needs like asset allocation and resource tracking.

7. Improving Workflow Automation Skills – Enhanced overall skills in workflow automation, low-code/no-code development, and process optimization, which can be applied to other business problems beyond laptop requests.

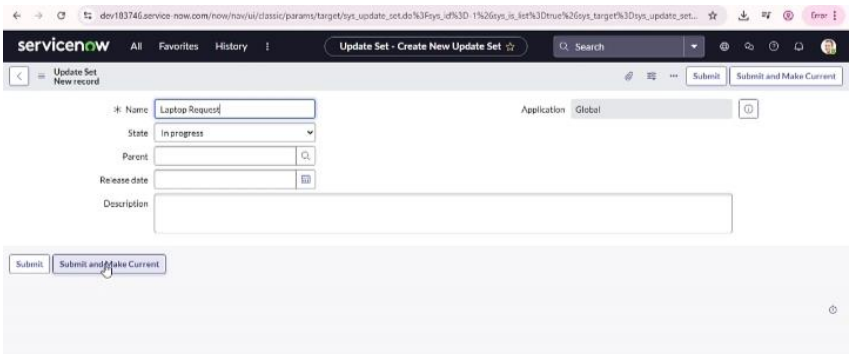
MILESTONE 1: SETTING UP THE SERVICENOW INSTANCE

Activity 1 – Requesting a Developer Instance

1. Visit the official ServiceNow Developer portal: https://developer.servicenow.com.
2. Create a developer account or log in if you already have one.
3. From the dashboard, go to the **Personal Developer Instance** section.
4. Click on **Request Instance** to generate a new ServiceNow environment.
5. Choose the latest available version of ServiceNow and confirm the request.
6. Wait for a confirmation email that includes your instance URL and login credentials.

Activity 2 – Configuring the Instance

1. Use the provided credentials to log in to your ServiceNow instance.
2. Explore the **Application Navigator** to become familiar with the interface.
3. Set up user roles if needed (admin, developer, requester).
4. Configure the environment for project development by enabling access to **Service Catalog** and **Workflow** modules.
5. Verify that your instance is active and ready for further customization.



MILESTONE 2: CREATION OF CATALOG ITEM

Activity – Creating a Laptop Request Catalog Item

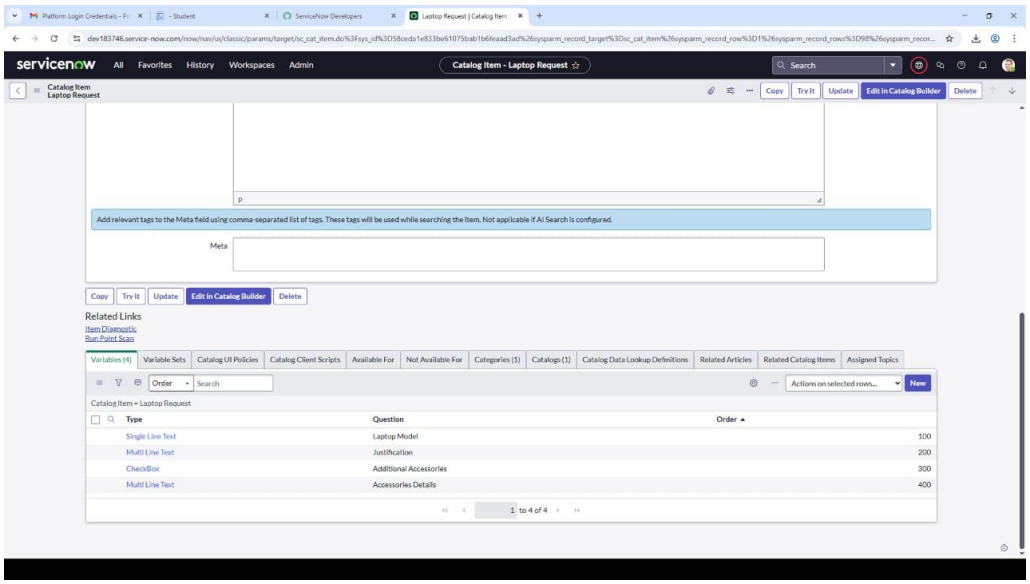
1. In the ServiceNow instance, navigate to **Service Catalog → Catalog Definitions → Maintain Items**.

2. Click on **New** to create a new catalog item.

- Enter the details as follows:
    - **Name**: Laptop Request
    - **Category**: IT Services → Hardware Requests
    - **Short Description**: Request for a new laptop.
    - **Description**: Catalog item to allow users to request laptops with specific configurations.

3. Save the catalog item.

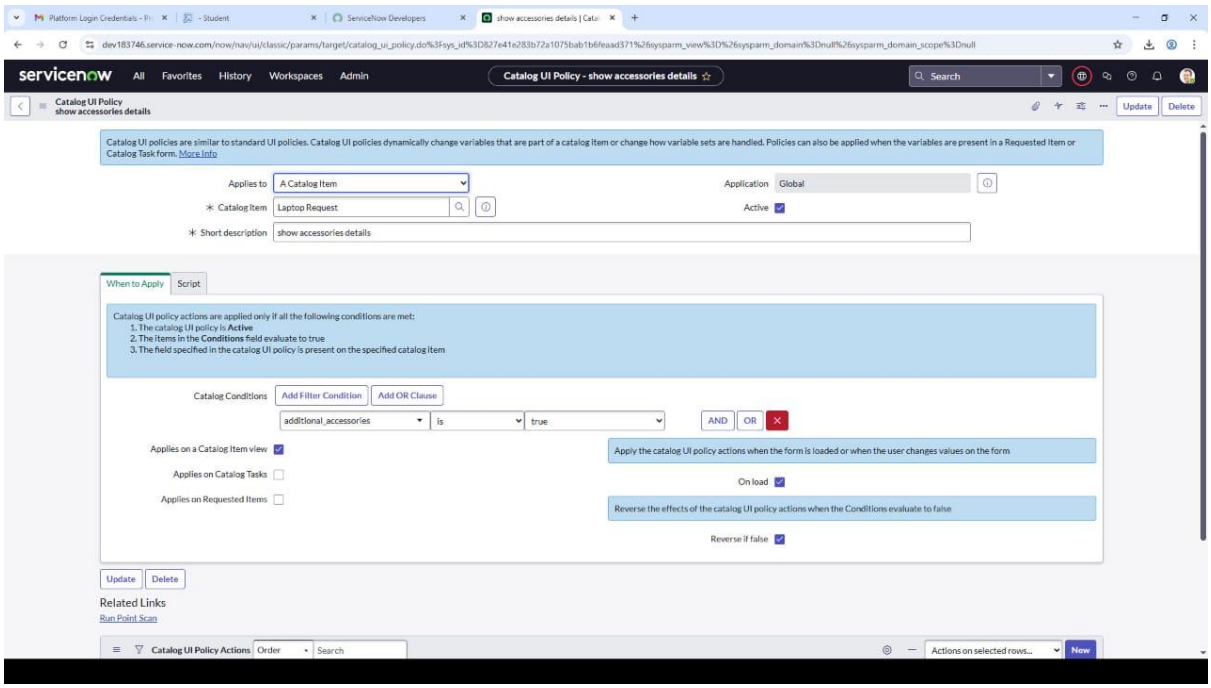
4. Verify that the item appears under the correct category in the Service Catalog.



MILESTONE 3: DESIGNING LAPTOP REQUEST FORM

Activity – Adding Fields to the Form

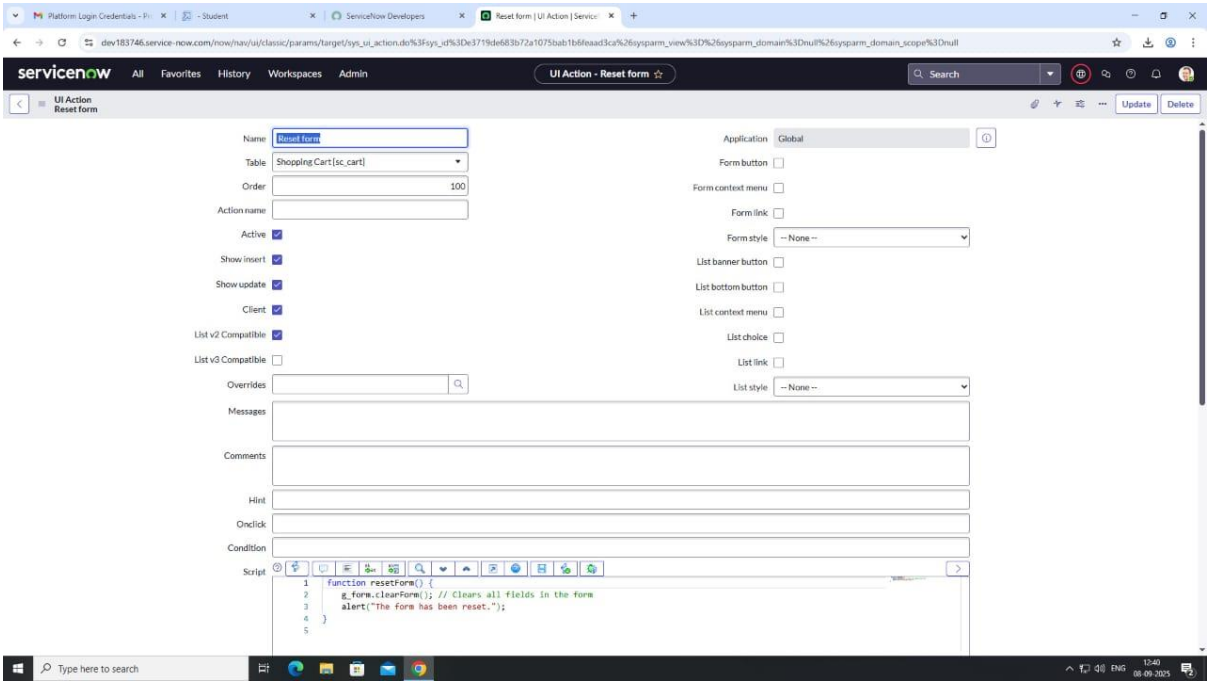
1. Open the **Laptop Request catalog item**.
2. Under the **Variables tab**, add fields to capture request details:
    - Laptop Model (Choice field: e.g., Dell, HP, Lenovo)
    - Configuration (String/Choice: i5, i7, RAM, SSD options)
    - Quantity (Integer)
    - Justification (Multi-line Text, Mandatory)
    - Department (Reference field to Department table)
3. Apply field properties:
    - Make **Justification** and **Department** fields mandatory.
    - Set **Quantity** field default to “1.”
4. Save the form and preview it under the catalog.



MILESTONE 4: WORKFLOW FOR APPROVALS

Activity – Building the Approval Workflow

1. Navigate to **Workflow Editor → New Workflow**.
2. Name the workflow **Laptop Request Approval Workflow**.
3. Drag and drop activities:
    - **Approval – User**: Manager Approval (first level).
    - **Approval – User**: IT Approval (second level).
    - **Task Assignment**: Assign request to IT team after approvals.
4. Configure workflow conditions:
    - If manager rejects → request is closed with rejection note.
    - If manager approves → routed to IT for final approval.
    - Once IT approves → laptop provisioning task is generated.
5. Save and publish the workflow.



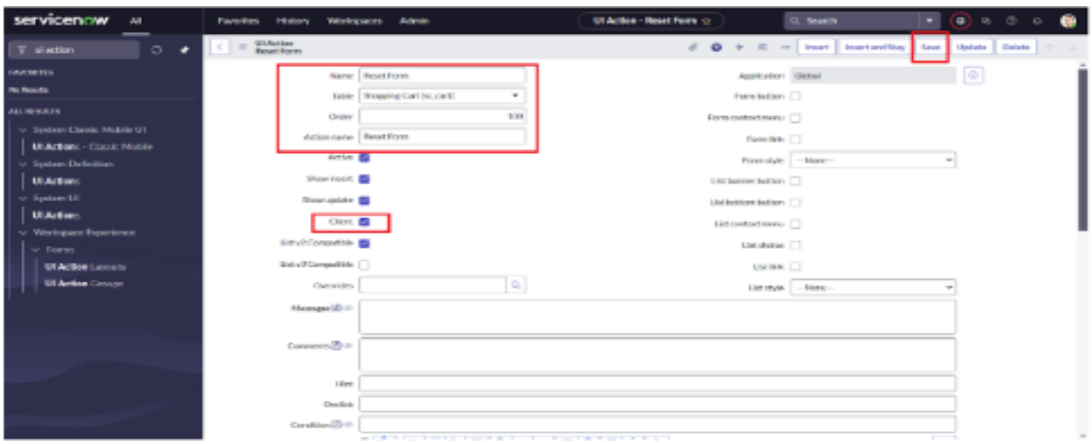
MILESTONE 5: NOTIFICATIONS AND SLAS

Activity – Configuring Notifications

1. Navigate to **System Notification → Email → Notifications**.
2. Create notifications for key stages:
    - Request Submitted
    - Approval Pending
    - Approved/Rejected
    - Laptop Issued
3. Define recipients: requestor, approver, and IT team.

Activity – Defining SLAs

1. Navigate to **Service Level Management → SLAs → SLA Definitions**.
2. Create SLAs for:
    - **Approval**: Must be completed within 2 days.
    - **Fulfillment**: Laptop to be issued within 5 days of approval.
3. Attach SLAs to the Laptop Request catalog item.



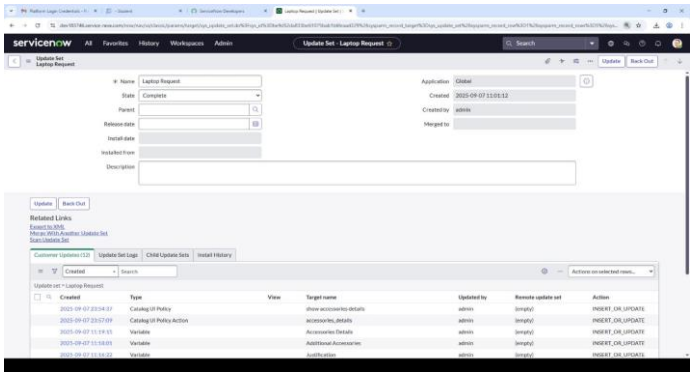
MILESTONE 6: CATALOG CATEGORIES AND USER ACCESS

Activity – Creating Categories

1. Navigate to **Service Catalog → Catalog Definitions → Maintain Categories**.
2. Add categories such as:
    - Standard Laptops
    - High-Performance Laptops
    - Lightweight/Portable Laptops
3. Assign catalog items to these categories for easier selection.

Activity – Applying Role-Based Access

1. Define user roles: **Requestor, Approver, IT Staff**.
2. Configure access so:
    - Students/Employees (Requestors) can only submit requests.
    - Managers (Approvers) can review and approve.
    - IT Staff can process fulfillment tasks.



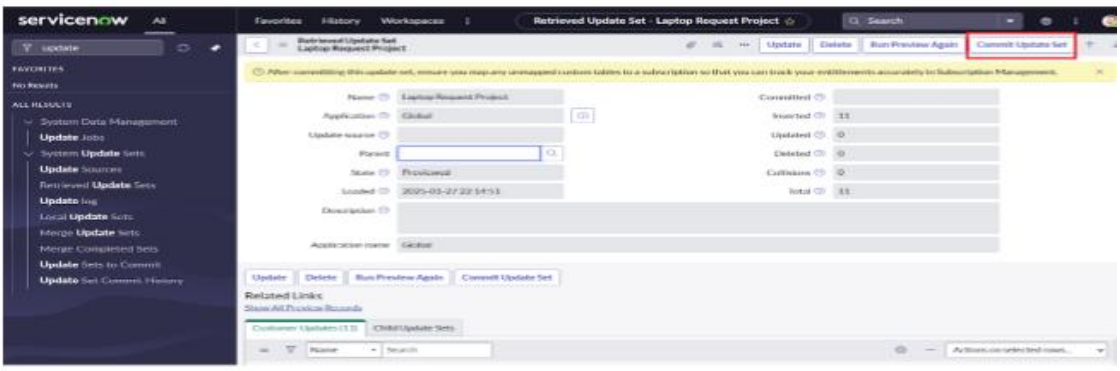
MILESTONE 7: REPORTS AND DASHBOARDS

Activity – Creating Reports

1. Navigate to **Reports → Create New**.
2. Build reports such as:
    - Requests by Department
    - Pending Approvals
    - Requests Fulfilled within SLA
3. Save and share reports with administrators.

Activity – Creating Dashboards

1. Navigate to **Performance Analytics → Dashboards**.
2. Create a **Laptop Request Dashboard**.
3. Add widgets for:
    - Total Requests Submitted
    - Average Approval Time
    - Number of Laptops Issued per Month
4. Publish the dashboard for managers and IT staff.



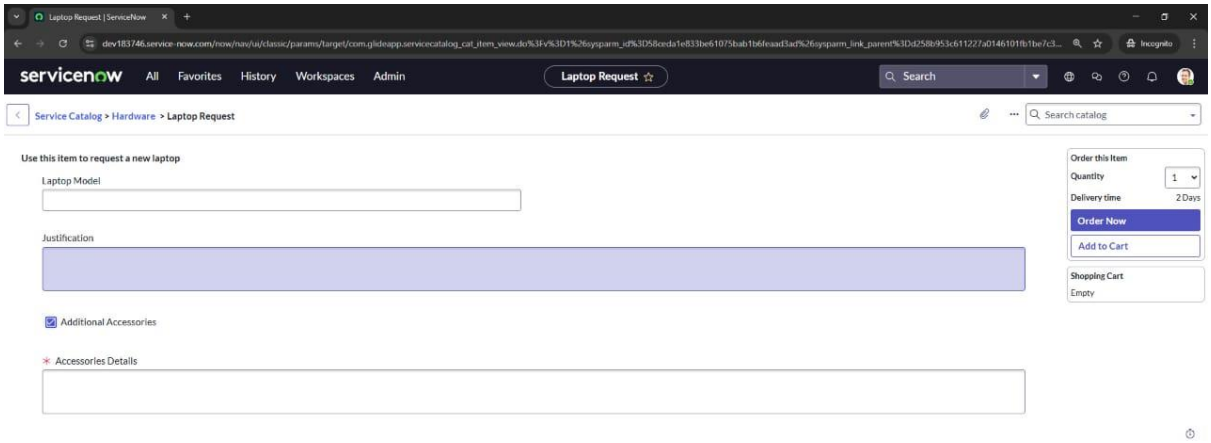
MILESTONE 8: TESTING AND VALIDATION

Activity – Testing the Catalog Item

1. Submit a sample laptop request as a student/employee.
2. Verify that the request routes correctly to the manager for approval.
3. Approve the request as a manager, then confirm it moves to IT approval.
4. Fulfill the request as IT staff and check that the system records the action.

Activity – Validation

1. Ensure mandatory fields prevent incomplete submissions.
2. Confirm notifications are sent at each stage.
3. Verify SLA timers are triggered and monitored.
4. Test reports and dashboards to ensure accurate data display.



CORE AND MOTIVE OF THE PROJECT

Core of the Project

The core of this project lies in **digitizing and automating the laptop request process** through the ServiceNow platform. Instead of relying on outdated, manual methods such as paper forms and email requests, this project provides a **centralized service catalog system** that standardizes the way laptops are requested, approved, and issued.

The main functional core includes:

- **Service Catalog Integration** – A dedicated catalog item for submitting laptop requests with predefined fields.
- **Workflow Automation** – Structured approval flows ensuring that requests are validated by managers and IT teams.
- **Transparency and Tracking** – Users can monitor their request status in real time, while administrators can track laptop allocation and usage history.
- **Reporting and Analytics** – Reports and dashboards help in decision-making, resource allocation, and demand forecasting.

Thus, the **technical core** is the application of **ServiceNow's low-code platform capabilities**—forms, workflows, business rules, notifications, and dashboards—to build a scalable and efficient request management system.

MOTIVE OF THE PROJECT:

The main motive of developing the **Laptop Request Catalog** is to:

1. **Streamline the Laptop Request Process**
   To eliminate inefficiencies caused by manual request handling and replace them with an automated, faster, and more reliable system.

2. **Ensure Accountability and Transparency**
   To give requestors clear visibility into their request status and provide administrators with accurate records of issued laptops, improving trust in the process.

3. **Reduce Administrative Burden**
   To minimize repeated follow-ups, miscommunication, and manual record-keeping, thereby saving time and effort for IT staff and management.

4. **Support Organizational Growth**
   To create a scalable system that can handle increasing laptop demands as institutions or companies expand, while maintaining consistency in approvals and tracking.

5. **Promote Smarter Decision-Making**
   To provide administrators with analytical insights, helping them plan budgets, forecast future laptop requirements, and manage resources effectively.

CONCLUSION:

The **Laptop Request Catalog Project** demonstrates how ServiceNow can be effectively utilized to automate and simplify organizational processes beyond traditional IT incident management. By creating a structured service catalog, approval workflows, and reporting mechanisms, the project successfully addresses the challenges of manual laptop request handling, such as delays, errors, and lack of transparency.

Through this system, users can easily submit requests, track their progress, and receive timely updates, while administrators gain accurate records and valuable insights into laptop allocation and usage. The inclusion of **notifications, SLAs, and role-based access** ensures accountability and efficiency at every stage of the process.

This project also highlights the flexibility and scalability of the ServiceNow platform. It proves that with the right configurations—catalog items, workflows, business rules, and dashboards—organizations can extend ServiceNow to solve real-world administrative challenges like **asset management and resource distribution**.

On a learning perspective, the project strengthened knowledge in **workflow automation, catalog configuration, and non-IT use cases** of ServiceNow. More importantly, it provided a **practical, user-friendly, and scalable solution** that can be adapted by educational institutions, corporate offices, and other organizations to streamline laptop request processes.

In conclusion, the **Laptop Request Catalog Project** not only provides an efficient solution for managing laptop requests but also showcases the potential of low-code platforms like ServiceNow in delivering innovative and impactful applications for modern organizations.