

ST. JOSEPH'S COLLEGE OF ENGINEERING AND TECHNOLOGY, THANJAVUR

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

LAPTOP REQUEST CATALOG ITEM USING SERVICENOW

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Team Size : 3

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PROBLEM STATEMENT

In many organizations and educational institutions, employees or students often need to request laptops for work, study, or project purposes. Traditionally, this process involves manual form submissions and multiple approvals, which can lead to delays, lack of transparency, and miscommunication. There is a need for a digital solution that simplifies and automates the laptop request and approval process, ensuring efficiency, transparency, and accurate tracking of assets.

OBJECTIVE

The main objective of this project is to design and implement a Laptop Request Catalog Item using ServiceNow.

This system aims to:

- Provide an easy and automated way for users to request laptops.
- Enable department heads and IT administrators to review and approve requests digitally.
- Track laptop requests, allocations, and returns in real-time.
- Generate reports and insights on asset usage and approvals.
- Reduce paperwork and manual approval delays.

SKILLS REQUIRED

1. ServiceNow Development: Catalog item creation, Flow Designer, and UI Policies.
2. Scripting: Glide Script, Client Script for field validation and dynamic updates.
3. Workflow Automation: Approval chains and email notifications.

4. Data Management: Table creation and relationship mapping.
5. Report and Dashboard Creation: For monitoring requests and fulfillment.

TASK INITIATION

- Create a new Catalog Item for Laptop Requests.
- Design a Request Form with fields like Laptop Type, Purpose, Duration, and Justification.
- Configure Flow Designer for approval workflows (Faculty Advisor → IT Admin).
- Implement Notifications to update users on request status.
- Build Reports and Dashboards to track requests and fulfillment.

FEATURES

- Online Laptop Request Form via Service Catalog.
- Dynamic fields based on user role or department.
- Multi-level approval workflow (HOD → IT Admin).
- Automatic notifications and email updates.
- Real-time request status tracking.
- Reports on laptop allocation and usage history.
- Role-based access and security controls.
- Integration with Asset Management module.

MODEL IMPLEMENTED

1. Data Model

- Table 1: u_laptop_request → Stores requester details, laptop model, reason, and duration.
- Table 2: u_asset_inventory → Tracks available laptops and asset status.
- Reference Field: Links the request to the asset table once approved.
- Ensures accurate tracking and management of laptop assignments.

2. Process Model

- User submits laptop request through Service Catalog.
- Request details are stored in u_laptop_request table.
- Flow Designer automatically triggers approval workflow.
- Once approved, the IT Admin assigns a laptop from the inventory.
- Status and notifications are updated automatically.

3. Logical Model

- Flow Designer: Automates request creation, approval, and fulfillment.
- Business Rules: Manage auto-assignments and validations.
- Client Scripts: Dynamically hide/show fields based on user input.
- UI Policies: Enforce mandatory fields and form behavior.

4. Functional Model

- Catalog Item Submission: Users request laptops through the portal.
- Approval Chain: Sequential approval by HOD and IT Admin.
- Assignment & Fulfillment: Laptop allocation recorded in the system.

- Notifications: Auto-emails on each status change.
- Reporting: Summary of pending, approved, and rejected requests.

5. Output Model

- Service Catalog Entry: "Laptop Request" visible to all users.
- Dashboard: Displays request count, approval status, and asset allocation.
- Reports: Department-wise and user-wise request history.
- Alerts: Automatic email when laptops are due for return.

IMPLEMENTATION STEPS

- STEP 1: Create a new Update Set for project tracking.
- STEP 2: Create a new Catalog Item named 'Laptop Request'.
- STEP 3: Add fields — Requester Name, Department, Laptop Model, Duration, Purpose, and Comments.
- STEP 4: Configure Flow Designer for approvals (HOD → IT Admin).
- STEP 5: Add Notifications for request submission, approval, and rejection.
- STEP 6: Create Business Rules for updating asset availability.
- STEP 7: Build Reports and Dashboards for administrators.
- STEP 8: Test workflows and deploy system organization-wide.

OUTCOME

The Laptop Request Catalog Item on ServiceNow successfully automates the process of requesting, approving, and allocating laptops. Users can easily submit requests and track their progress, while administrators gain full visibility of laptop usage and asset distribution. The project improved operational efficiency, reduced manual effort, and provided practical experience in ServiceNow Catalog Item configuration, Flow Designer, scripting, and reporting.

CONCLUSION

The Laptop Request Catalog Item using ServiceNow provides an efficient and transparent way to manage laptop requests and approvals. It ensures accurate asset tracking, quick approvals, and centralized reporting. The system supports scalability and user convenience, making it a valuable addition to IT service management in educational and organizational environments.