

1. INTRODUCTION

1.1 Project Overview

This project involves the development of a digital *Laptop Request Catalog Item* in a ServiceNow-like ITSM environment. It allows employees to raise laptop requests via a self-service portal. The request is routed through a structured approval and fulfillment workflow, reducing manual interventions and streamlining the provisioning process.

1.2 Purpose

To automate the laptop request and provisioning process in organizations, minimizing turnaround time and improving user satisfaction through workflow-based management.

2. IDEATION PHASE

2.1 Problem Statement

Manual laptop request processes are time-consuming, lack standardization, and provide poor visibility to requesters. There is a need for a digital solution to manage such requests efficiently.

2.2 Empathy Map Canvas

- **Users:** Employees, IT Helpdesk, Managers
- **Think & Feel:** Desire timely access to laptops, minimal delays
- **Hear:** “Where is my laptop request?”
- **See:** Multiple follow-ups and emails
- **Say & Do:** Submit manual forms or send emails
- **Pain:** Lack of updates, delays
- **Gain:** Transparent and faster process

2.3 Brainstorming

- Automate approvals
 - Notify requesters at every stage
 - Use dynamic form fields
 - Auto-assign tasks to IT teams
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3. REQUIREMENT ANALYSIS

3.1 Customer Journey Map

1. User opens catalog

2. Fills in laptop request form
3. Manager approval
4. IT team processes request
5. User receives the laptop and closure notification

3.2 Solution Requirement

- Laptop type dropdown
- Justification field
- Accessories checkboxes
- Client-side scripting for dynamic fields
- Backend workflow for approvals and task assignment

3.3 Data Flow Diagram

User Input → Service Catalog → Approval Workflow → Fulfillment Task → Notification to Requester

3.4 Technology Stack

- **Platform:** ServiceNow / Custom ITSM
 - **Language:** JavaScript (Client & Server Scripts)
 - **Data Format:** JSON, XML
 - **Documentation:** Markdown, PDF
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4. PROJECT DESIGN

4.1 Problem Solution Fit

A digital catalog item with automated routing addresses the inefficiencies of manual laptop request processes.

4.2 Proposed Solution

Design a custom catalog item with form fields, approval logic, business rules, client scripts, and notifications using a visual workflow engine.

4.3 Solution Architecture

Frontend (Catalog Form) → Server Scripts (Business Rules) → Workflow Engine → Notifications + Fulfillment Tasks

5. PROJECT PLANNING & SCHEDULING

5.1 Project Planning

- Week 1: Planning and requirement gathering
 - Week 2: Form and field development
 - Week 3: Workflow design
 - Week 4: Testing and documentation
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6. FUNCTIONAL AND PERFORMANCE TESTING

6.1 Performance Testing

The form was tested with concurrent requests and worked without delay under demo conditions. Scripts were validated to trigger correctly under field changes.

7. RESULTS

7.1 Output Screenshots

Included in the `assets/screenshots/` folder of the GitHub repository:

- Form view
 - Workflow diagram
 - Notification preview
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8. ADVANTAGES & DISADVANTAGES

Advantages

- Automated and standardized process
- Tracks and records all actions
- Reduces manual workload for IT

Disadvantages

- Limited to ServiceNow or similar platforms
 - Requires administrative access to configure
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9. CONCLUSION

The laptop request catalog item digitizes and simplifies the entire laptop provisioning lifecycle. It empowers users with transparency while saving time and resources for IT teams.

10. FUTURE SCOPE

- Integration with asset inventory
 - Auto-tagging of asset serial numbers
 - SLA tracking and reporting
 - Mobile app support for request submission
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11. APPENDIX

- **GitHub & Project Demo Link:** ([meenuga-meghana/laptop-request-catalog-item](https://github.com/meenuga-meghana/laptop-request-catalog-item))