

Project Design Phase

Solution Architecture

Date	2 November 2025
Team ID	NM2025TMID01266
Project	Laptop Request Catalog Item
Maximum Marks	4 Mark

Solution Architecture:

Goal Of Architecture:

- To design a user-friendly interface for employees to request laptops easily
- To standardize the laptop request process across the organization.
- To ensure automated approval workflows based on role, department, or cost center.
- To integrate with asset and inventory management for tracking and allocation.
- To provide real-time visibility into request status for users and IT teams.

Key Point:

- Simplify and speed up the laptop request process.
- Ensure proper approval and authorization workflow.
- Automate fulfillment to reduce manual work.
- Integrate with asset and inventory management systems.
- Maintain standard laptop models and configurations.

Development Phase:

- Requirement gathering
- Design phase
- Development/build phase
- Integration phase
- Testing phase
- Deployment phase
- Post-implementation and maintenance

Solution Architecture Description:

The solution architecture for the Laptop Request Catalog Item is designed to create a seamless, automated, and user-centric process for employees to request laptops. The architecture integrates multiple ServiceNow modules such as the Service Catalog, Workflow, Approval Engine, and Asset Management to ensure end-to-end service delivery. When a user submits a laptop request, the catalog item triggers an automated workflow that validates the request, routes it for necessary approvals, and initiates fulfillment once approved. The architecture connects with the organization's asset and inventory management systems to verify stock availability, assign laptops, and update asset records automatically. Notifications are configured to keep users and approvers informed at each stage. The design also supports reporting and analytics to track request volume, fulfillment time, and asset utilization. Overall, this architecture ensures standardization, transparency, and operational efficiency while aligning with IT governance and business requirements.

Example-Solution Architecture Diagram:

