Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	31 January 3035
Team ID	LTVIP2025TMID31059
Project Name	27 JUNE 2025
Maximum Marks	4 Marks

Technical Architecture:

The technical architecture integrates ServiceNow's workflow automation, asset management, and notification systems to enable seamless laptop request tracking and fulfillment across users and departments.

Reference: https://developer.ibm.com/patterns/ai-powered-backend-system-for-order-processing-during-pandemics/

ServiceNow Laptop Request Catalog
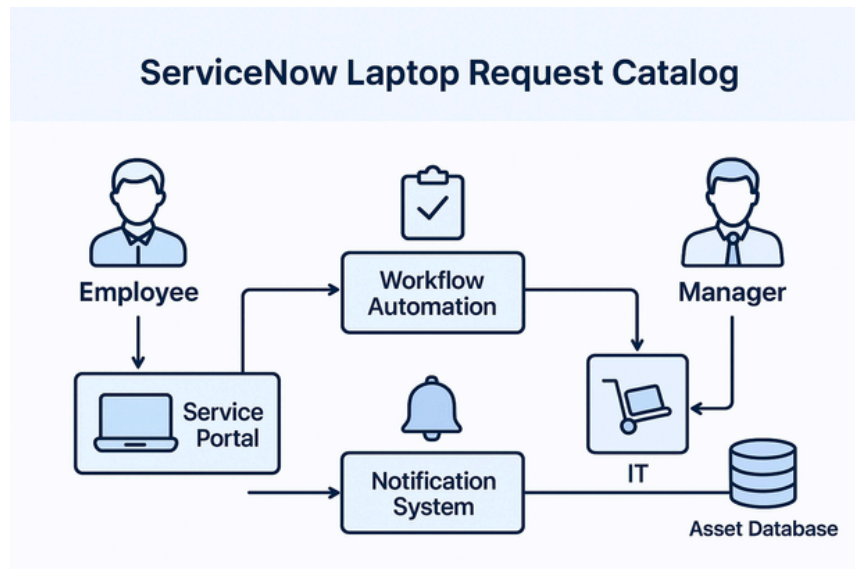
Guidelines:

- Clearly define user roles (Employee, Manager, IT Team) before configuration.
- Create standardized forms in the ServiceNow catalog for laptop requests.
- Automate approval and fulfillment workflows to reduce manual steps.
- Set up notifications for each status change (Submitted, Approved, In Progress, Completed).
- Integrate with the Asset Management module for tracking laptop availability and assignment.
- Use dashboards to monitor request progress, SLA adherence, and overall performance.
- Ensure role-based access to maintain security and data integrity.
- Test all workflows thoroughly before deployment to avoid process gaps.
- Provide user training for employees and IT staff on using the catalog.
- Continuously review and optimize the workflow based on feedback and analytics.

Table-1 : Components & Technologies:

Component	Technology Used
Service Portal	ServiceNow Portal
Laptop Request Form	ServiceNow Catalog Item
Workflow Automation	Flow Designer
Approval Process	Approval Rules
Notifications	Email / ServiceNow Notifications
Tracking Dashboard	Performance Analytics
Asset Management	ServiceNow Asset Module
Integration	REST / SOAP APIs
Reporting	ServiceNow Reports
Security	Role-based Access Control

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Table-2: Application Characteristics:

Project Performance Summary

Characteristic	Solution Architecture	Project Backlog	Delivery & Velocity	Solution Quality
Description	Defines operational foundation	Total estimated work volume	Planned length of delivery cycle	Employees submit requests easily
Details	ServiceNow Portal, Workflow Engine	80 Story Points	6 Days	Reduce Manual Follow-ups
Integrations	Asset & Procurement Databases	79 Story Points completed	20 Story Points per Sprint	Minimize Delays
Security	Role-Based Access Control (RBAC)	1 Story Point Remaining	19.75 Story Points per Sprint	Improve Visibility