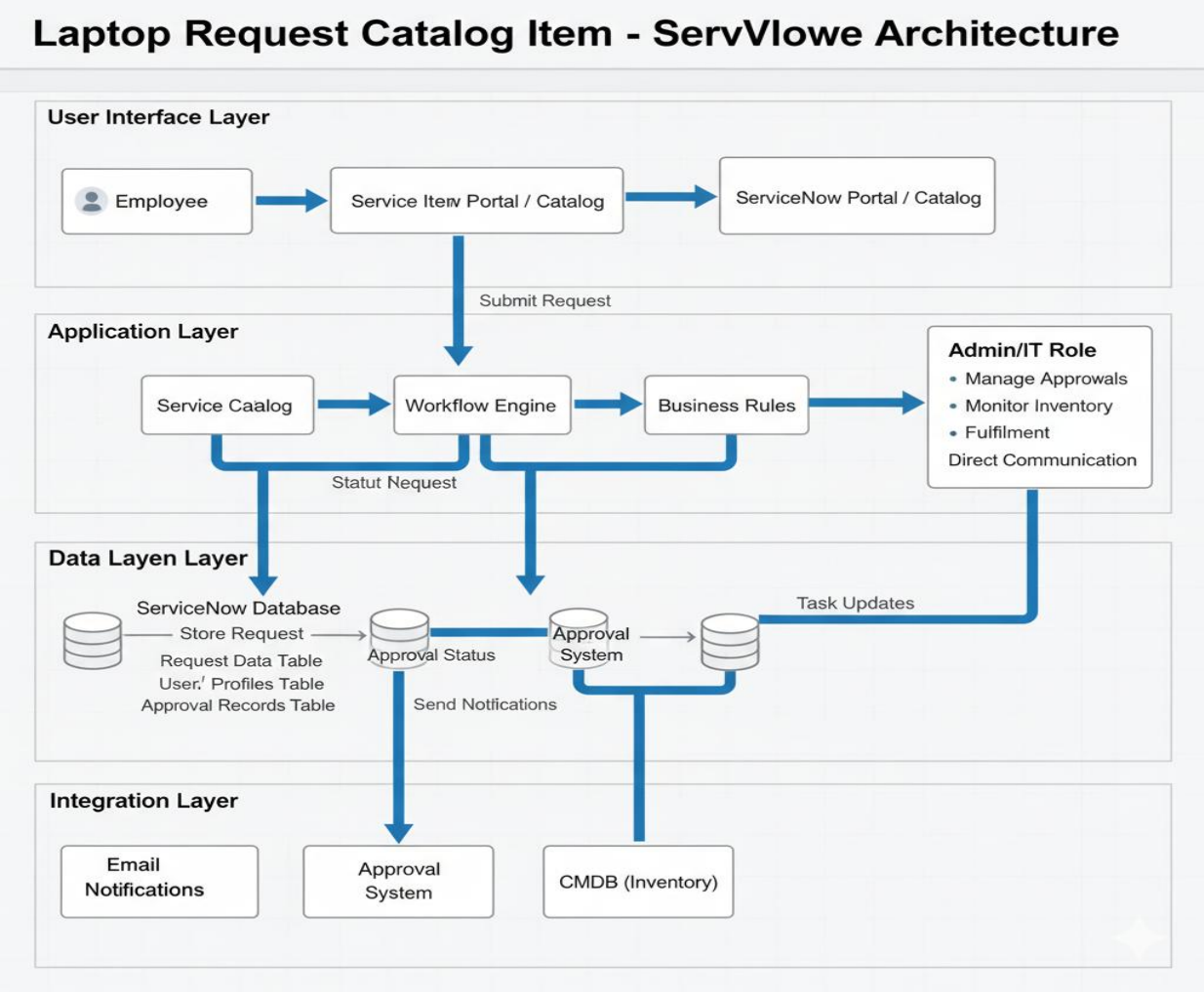
Requirements Analysis

Technology Stack(Architecture & Stack)

Date	14 November 2025
Team ID	NM2025TMID06861
Project Name	Laptop Request Catalog Item
Maximum Marks	4 Marks

Technical Architecture



The **Laptop Request Catalog Item** architecture uses ServiceNow's layered framework to automate and simplify laptop requests.Users interact through a

dynamic catalog form that adjusts fields like laptop type or accessories based on input.Business logic is managed through client scripts, UI policies, and workflows for approvals and automation.Data is stored in ServiceNow tables (sc_request, sc_req_item, task) and linked to the CMDB for asset tracking. Update sets manage deployment across instances (Dev → Test → Prod), ensuring smooth rollout and scalability.

Technology Stack

1. Platform:
    - ServiceNow – Main platform for building the catalog item, workflows, and managing service requests.
2. Frontend:
    - Service Portal / Catalog UI – Used to create the dynamic and interactive laptop request form.
    - HTML, CSS, JavaScript – For customizing catalog form layout and dynamic behavior.
3. Backend / Logic Layer:
    - ServiceNow Scripting (GlideScript / Server-side Script Includes) – To manage data validation, workflow automation, and business logic.
    - Workflow Editor / Flow Designer – For automating approval and fulfillment processes.
4. Database:
    - ServiceNow Database Tables (Task, Catalog Item, Variables, Request Item) – For storing request, approval, and fulfillment data.
5. Integration & Automation:
    - Email Notifications & Approvals – Integrated via ServiceNow Notification system.
    - CMDB Integration – To link laptop assets and manage inventory.
6. Deployment & Version Control:
    - Update Sets (XML) – Used to migrate configurations and customizations between instances (e.g., Dev → Test → Prod).
7. Testing & Monitoring:
    - ServiceNow Test Management / Manual Testing – To validate form behavior and workflow automation.
    - Performance Analytics (optional) – To monitor request trends and fulfillment times.