

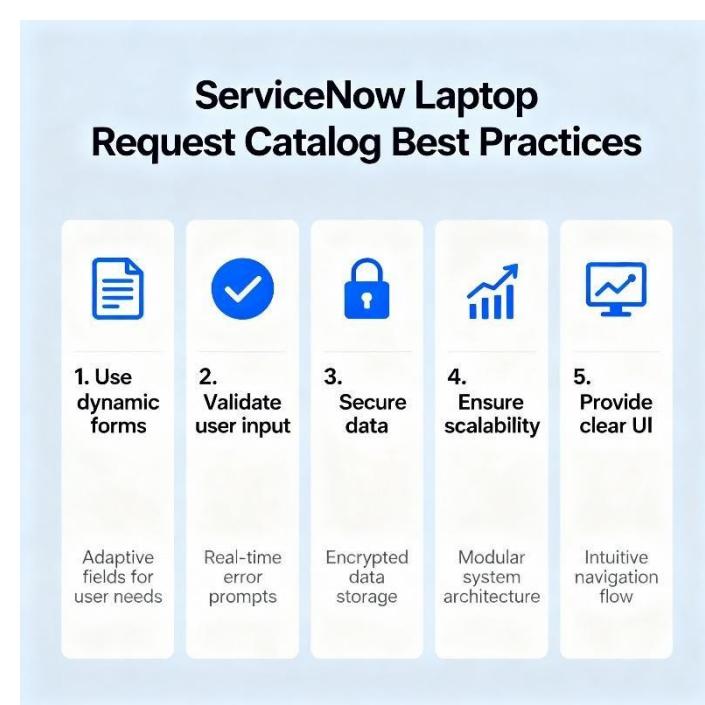
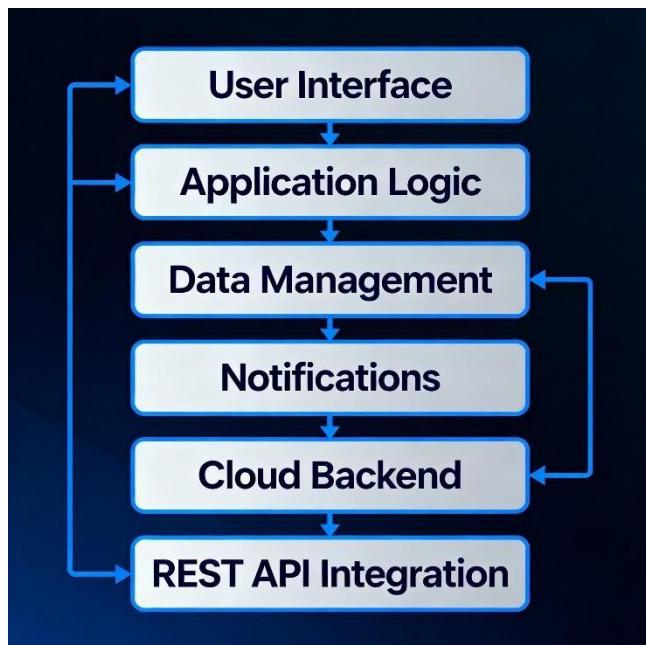
## Project Design Phase-II

### Technology Stack (Architecture & Stack)

|               |                             |
|---------------|-----------------------------|
| Date          | 01 November 2025            |
| Team ID       | NM2025TMID02757             |
| Project Name  | Laptop Request Catalog Item |
| Maximum Marks | 4 Marks                     |

#### Technical Architecture Overview

All components are hosted on the ServiceNow SaaS platform, integrated via ServiceNow-native tools and APIs. The solution uses proprietary ServiceNow modules for digital catalog item creation, process automation, security, and data management.



## **Components & Technologies**

| S.No | Component         | Description  | Technology                                    |
|------|-------------------|--|---|
| 1    | User Interface    | Employees and admins interact via ServiceNow web interface     | ServiceNow Web UI                             |
| 2    | Application Logic | Automates dynamic field logic, validates requests, stores data | Flow Designer, Client Scripts, Server Scripts |
| 3    | Data Management   | Tracks requests, user info, and assets                         | ServiceNow CMDB, Incident Tables              |
| 4    | Notifications     | Sends request and fulfillment updates                          | ServiceNow Notifications                      |
| 5    | Security          | Role-based access, ACLs, data protections                      | ServiceNow ACLs, Scoped Apps                  |
| 6    | Cloud Backend     | SaaS infrastructure for scalable, reliable hosting             | ServiceNow Cloud (Managed, Load-balanced)     |

|   |                      |  |                       |
|---|----------------------|--|-----------------------|
| 7 | External Integration | (Optional) HRMS or identity system for user verification | REST API (ServiceNow) |
|---|----------------------|--|-----------------------|

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### Application Characteristics

| S.No | Characteristic | Description                                     | Technology                      |
|------|----------------|---|---------------------------------|
| 1    | Security       | Access control enforced for all catalog actions | ACLs, Scoped Apps               |
| 2    | Scalability    | SaaS-based, handles hundreds of requests        | Cloud Architecture              |
| 3    | Availability   | 24/7 uptime with load balanced instances        | ServiceNow Hosting              |
| 4    | Performance    | Fast UI response, optimized, asynchronous flows | GlideRecord, Background Scripts |