

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

Date	27 June 2025
Team ID	LTVIP2025TMID1101198
Project Name	Laptop Request Catalog Item
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

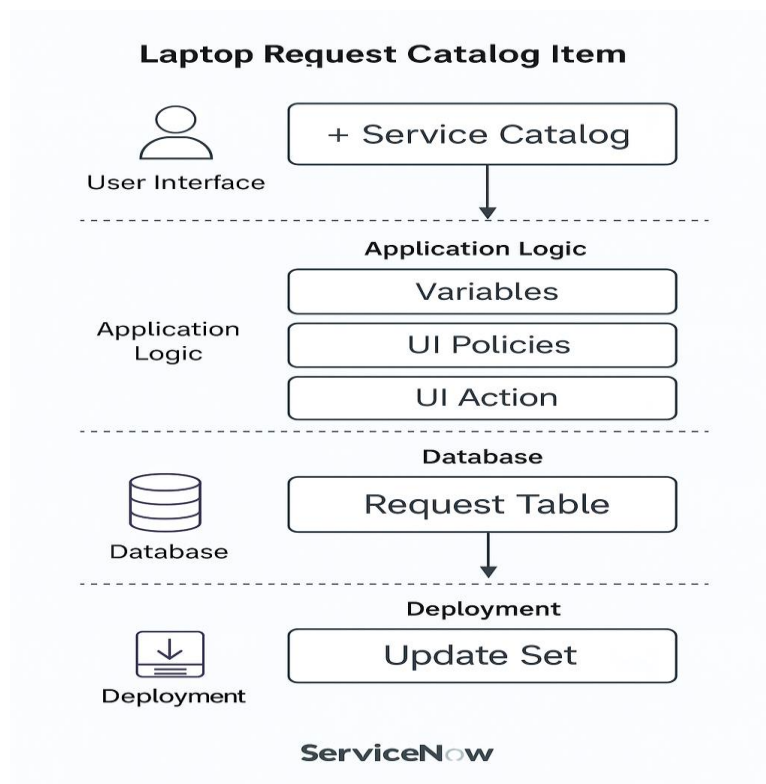


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web UI for form-based laptop requests	ServiceNow Service Catalog UI
2.	Application Logic-1	Dynamic variable behavior via Catalog UI Policies	ServiceNow Catalog UI Policies
3.	Application Logic-2	Reset form functionality	ServiceNow UI Actions (JavaScript)
4.	Application Logic-3	Form validation and visibility	ServiceNow Client Scripts
5.	Database	Stores request data in catalog request tables	ServiceNow Tables (sc_req_item etc.)
6.	Cloud Database	Cloud-hosted relational backend	ServiceNow internal CMDB/DB
7.	File Storage	Not applicable	-
8.	External API-1	Not applicable	-
9.	External API-2	Not applicable	-
10.	Machine Learning Model	Not applicable	-
11.	Infrastructure (Server / Cloud)	Cloud platform to host and deploy ServiceNow applications	ServiceNow (Cloud-based)

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Not applicable (ServiceNow is proprietary)	-
2.	Security Implementations	Role-based access control, ACLs, and scoped apps	ServiceNow ACLs, RBAC
3.	Scalable Architecture	JCloud-hosted architecture that supports multi-instance deployments	ServiceNow SaaS Platform

S.No	Characteristics	Description	Technology
4.	Availability	High availability ensured by ServiceNow with global data centers	Load-balanced Cloud Instances
5.	Performance	Optimized catalog form with minimal client-side scripts	Lightweight Catalog Scripts