Requirement Analysis

Technology Stack

Date	02/11/2025
Team ID	NM2025TMID03478
Project Name	Laptop Request Catalog Item
Maximum Marks	4Marks

Technology Stack

1. Frontend (User Interface Layer)

Component	Description
Service Catalog Form (ServiceNow)	Used to create the Laptop Request form where users input their details.
UI Policies & Client Scripts	Define dynamic form behaviors (show/hide fields, validation, etc.).
HTML/CSS (within ServiceNow)	For form layout customization and styling.
JavaScript (ServiceNow Client Scripts)	Used for form logic, validation, and interactivity.

2. Backend (Server-Side Layer)

Component	Description
ServiceNow Platform (Glide System)	Core backend environment that handles business logic, workflows, and data storage.
Business Rules	Automate actions such as request routing and approvals.
Workflows / Flow Designer	Manages the request approval and notification processes.
Server-side Scripts (GlideRecord API)	Used for querying and updating ServiceNow database tables.

3. Database Layer

Component : ServiceNow Tables

Description:
Store all records related to catalog items, requests, approvals, and updates.

Key Tables:
- `sc_catalog` → Catalog details
- `sc_cat_item` → Laptop Request item

Component : ServiceNow Tables

Description:

Store all records related to catalog items, requests, approvals, and updates.

- `sc_request` → Request records
- `sys_user` → Employee and manager details
- `sys_update_set` → Tracks configuration changes

4. Integration Layer

Component	Description
Update Sets	Used to package and migrate configurations between instances.
REST / SOAP APIs (Optional)	For integration with external inventory or asset management systems.

5. Tools & Platforms

Tool / Platform	Purpose
ServiceNow	Main development and deployment platform.
Microsoft Word / Excel	For documentation and reporting.
Email (ServiceNow Notifications)	To send status updates and approval notifications.
Version Control (Update Sets)	Track and manage configuration changes.

6. Deployment & Testing

Component	Description
ServiceNow Dev Instance	For creating and testing the catalog item.
ServiceNow Test Instance	Used to validate functionality before production deployment.
Production Instance	Final live environment for end-users.
Testing Tools (Manual / Automated)	To validate UI policies, workflows, and form submission accuracy.

Frontend (User Interface Layer)	**Service Catalog Form (ServiceNow)** UI Policies & Client Scripts
Backend (Server–Side Layer)	**ServiceNow Platform (Glide System)** Business Rules Workflows / Flow Designer
Database Layer	**ServiceNow Tables**
Integration Layer	**Update Sets** REST / SOAP APIs