

# Requirement Analysis

## Technology Stack

|               |                             |
|---------------|-----------------------------|
| Date          | 01 November 2025            |
| Team ID       | NM2025TMID05296             |
| Project Name  | Laptop Request Catalog Item |
| Maximum Marks | 2 Marks                     |

### 1. Frontend (User Interface Layer)

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

### 2. Backend (Server-Side Layer)

| Component                                    | Description  |
|--|--|
| <b>ServiceNow Platform (Glide System)</b>    | Core backend environment that handles business logic, workflows, and data storage. |
| <b>Business Rules</b>                        | Automate actions such as request routing and approvals.                            |
| <b>Workflows / Flow Designer</b>             | Manages the request approval and notification processes.                           |
| <b>Server-side Scripts (GlideRecord API)</b> | 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
- `sc_request` → Request records
- `sys_user` → Employee and manager details

**Component :** ServiceNow Tables

**Description:**

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

- 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**