

LAPTOP REQUEST

CATALOG ITEM

REQUIREMENT ANALYSIS

Team ID: NM2025TMID06464

Team Size: 4

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Requirement Analysis Phase:

The Requirement Analysis Phase focused on understanding and documenting all the functional, non-functional, and system requirements necessary to implement the Laptop Request Catalog Item in ServiceNow. This phase ensured that the design and development align with user needs, organizational policies, and ServiceNow platform capabilities.

Objective:

The main goal of this phase was to identify what the system should do, how it should behave under different conditions, and what constraints it must operate within. Gathering accurate requirements helped ensure a smooth transition from planning to implementation.

Data Flow Diagram:

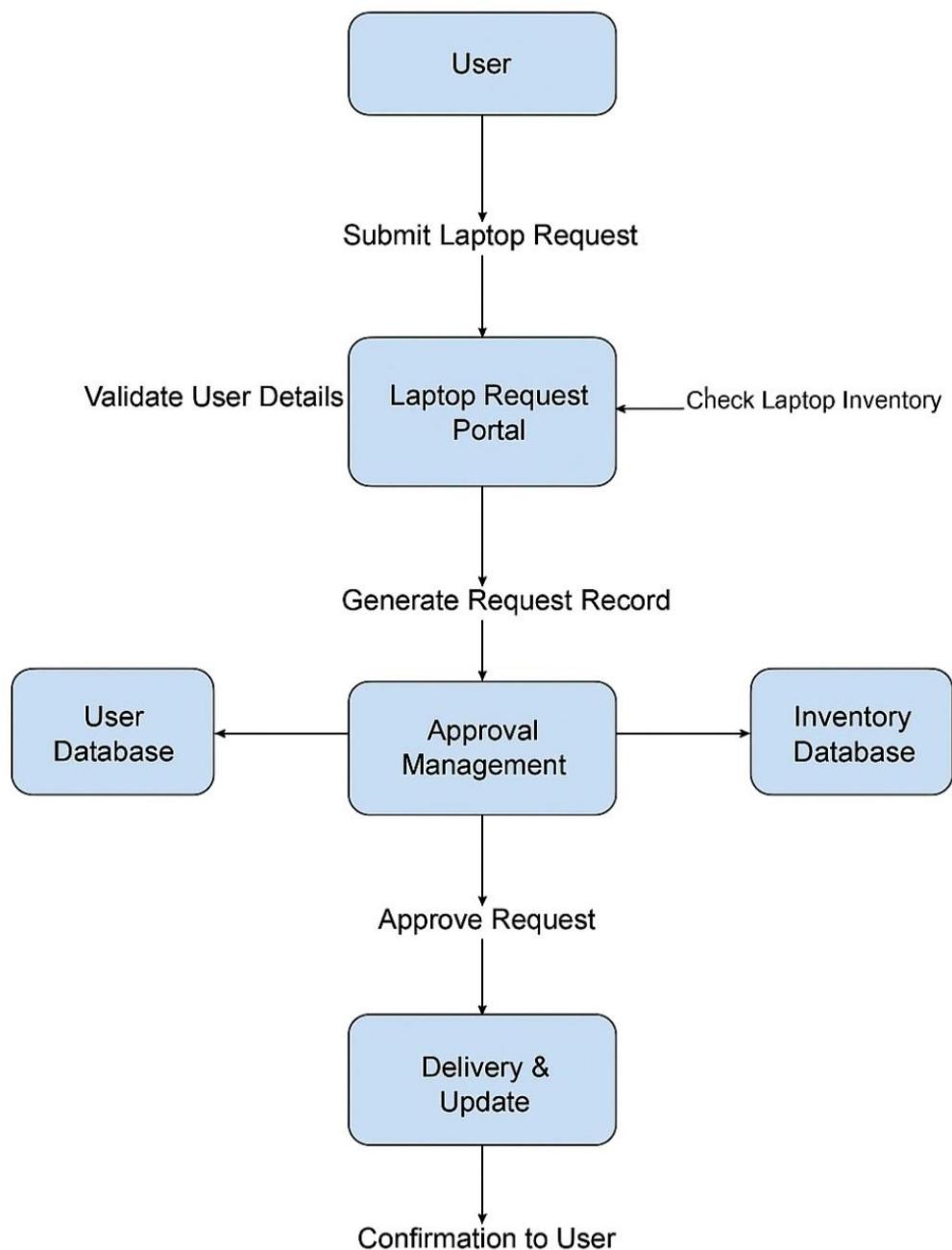
The Data Flow Diagram (DFD) for the *Laptop Request Catalog Item* represents the logical flow of data within the system when a user raises a laptop request through the service catalog. It highlights how information moves between users, databases, and system components to ensure an efficient and transparent approval process.

When a user submits a laptop request, the Laptop Request Portal receives the details and validates the user's information against the User Database. The system then checks the Inventory Database to confirm the availability of laptops. Once the user's details and inventory status are verified, the portal generates a Request Record that is forwarded to the Approval Management process.

The Approval Management component evaluates the request based on organizational policies and either approves or rejects it. Upon approval, the Delivery & Update process is triggered, where the fulfillment team assigns a laptop

and updates the request status in the system. Finally, a confirmation message is sent to the user, completing the process.

This DFD ensures that every step — from request initiation to delivery — maintains accuracy, accountability, and data integrity, preventing errors and delays in laptop allocation.



Functional Requirements:

These define the essential operations and behaviours the catalog item must perform.

<i>ID</i>	<i>Requirement Description</i>
<i>FR1</i>	The system should allow employees to submit laptop requests through the Service Catalog.
<i>FR2</i>	The catalog form must include fields such as Employee Name, Employee ID, Department, Laptop Type, and Purpose.
<i>FR3</i>	The form should display or hide fields dynamically based on the user's selection (e.g., showing justification for Advanced laptops).
<i>FR4</i>	The system must have a Reset button to clear all form inputs without reloading the page.
<i>FR5</i>	Upon submission, the request should automatically be routed to the employee's manager for approval.
<i>FR6</i>	Approved requests must generate a task for the IT department to process and fulfill.
<i>FR7</i>	Notification emails must be sent to the requester, manager, and IT team at each stage.
<i>FR8</i>	All catalog item configurations and updates must be tracked for governance and auditing.

Non-Functional Requirements:

These define the system's quality attributes and performance expectations.

<i>ID</i>	<i>Requirement Description</i>
<i>NFR1</i>	The form should load and submit within 3 seconds under normal network.
<i>NFR2</i>	The catalog item must be compatible with desktop, tablet, and mobile views.
<i>NFR3</i>	All user data must be validated and stored securely within ServiceNow's database.
<i>NFR4</i>	The workflow process must handle multiple simultaneous requests efficiently.
<i>NFR5</i>	The system must maintain an audit trail for every change in configuration or request status.
<i>NFR6</i>	The catalog item should have a user-friendly interface with clear instructions.

System Requirements:

These specify the platform and configuration needs for implementation.

Type	Description
Platform	ServiceNow (Orlando release or higher)
Access	Catalog Builder and Workflow Designer permissions
Scripts Used	Catalog Client Script, UI Policy, and Notification Script
Storage	ServiceNow internal database
Integration	Notification via ServiceNow Email Service

User Requirements:

These describe what the end-users (employees and managers) expect from the system.

- ❖ The request form should be easy to understand and quick to fill.
- ❖ Users should receive instant feedback or error messages if required fields are missing.
- ❖ Managers should be able to approve or reject requests in one click.
- ❖ Employees should receive automatic notifications on request status updates.
- ❖ IT staff should have a clear task list showing pending laptop allocations.

Outcome:

The requirement analysis phase provided a clear and detailed understanding of what the system must deliver. These requirements served as the foundation for the **Project Design Phase** and ensured that all functional, performance, and governance goals were aligned with user expectations and organizational needs.