

Project Design Phase - II

Data Flow Diagram & User Stories

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Team ID: NM2025TMID04060

Project Name: Laptop Request Catalog Item

Data Flow Diagrams:

A **Data Flow Diagram (DFD)** visually represents how data moves within a system — showing the flow of information between users, processes, and databases. In this project, the DFD for the *Laptop Request Catalog Item* demonstrates how a laptop request is created, approved, and fulfilled through the ServiceNow platform.

The process begins when an **employee** submits a laptop request through the **Service Catalog**. The request data is captured and stored in the **Request (REQ) table**. The **workflow engine** then routes the request automatically to the **manager** for approval. Once approved, the request is passed to the **IT Asset Management (ITAM)** team, which verifies laptop availability in the **Asset Inventory (alm_asset)** table.

If the requested laptop is available, the IT team allocates the asset, updates inventory records, and sends a **notification** to the employee confirming fulfillment. If stock is unavailable, the system triggers an alert to procurement for restocking. This data flow ensures transparency, efficient communication, and accurate record-keeping.

Example:

DFD showing the flow between Employee → Catalog Item → Workflow → Manager Approval → IT Asset Allocation → Notification.

User Stories:

User stories describe the system's functionality from the perspective of different users, focusing on goals, actions, and expected outcomes. For this project, they ensure that all roles — employees, managers, and IT administrators — interact efficiently with the Laptop Request Catalog Item.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Employee	Laptop Request Creation	USN-1	As an employee, I want to request a laptop through a catalog form	The form should capture all details and submit successfully to the	High	Sprint-1

			specifying model and justification.	approval workflow.		
Manager	Approval Workflow	USN-2	As a manager, I want to review and approve laptop requests submitted by my team members.	The system should display pending requests and allow one-click approval or rejection.	High	Sprint-1
IT Asset Team	Laptop Allocation	USN-3	As an IT admin, I want to allocate approved laptops and update inventory automatically.	Allocation should reflect in the asset module, and employees should receive confirmation.	Medium	Sprint-2
System	Notification	USN-4	As a system, I want to notify the employee and manager once the request is fulfilled.	Notification emails should be automatically triggered after allocation.	Medium	Sprint-2

Summary:

The DFD and User Stories for the *Laptop Request Catalog Item* clearly illustrate the end-to-end process of requesting, approving, and allocating laptops. The structured workflow ensures smooth coordination between departments, minimizes manual tracking, and maintains accurate asset records within the ServiceNow platform.
