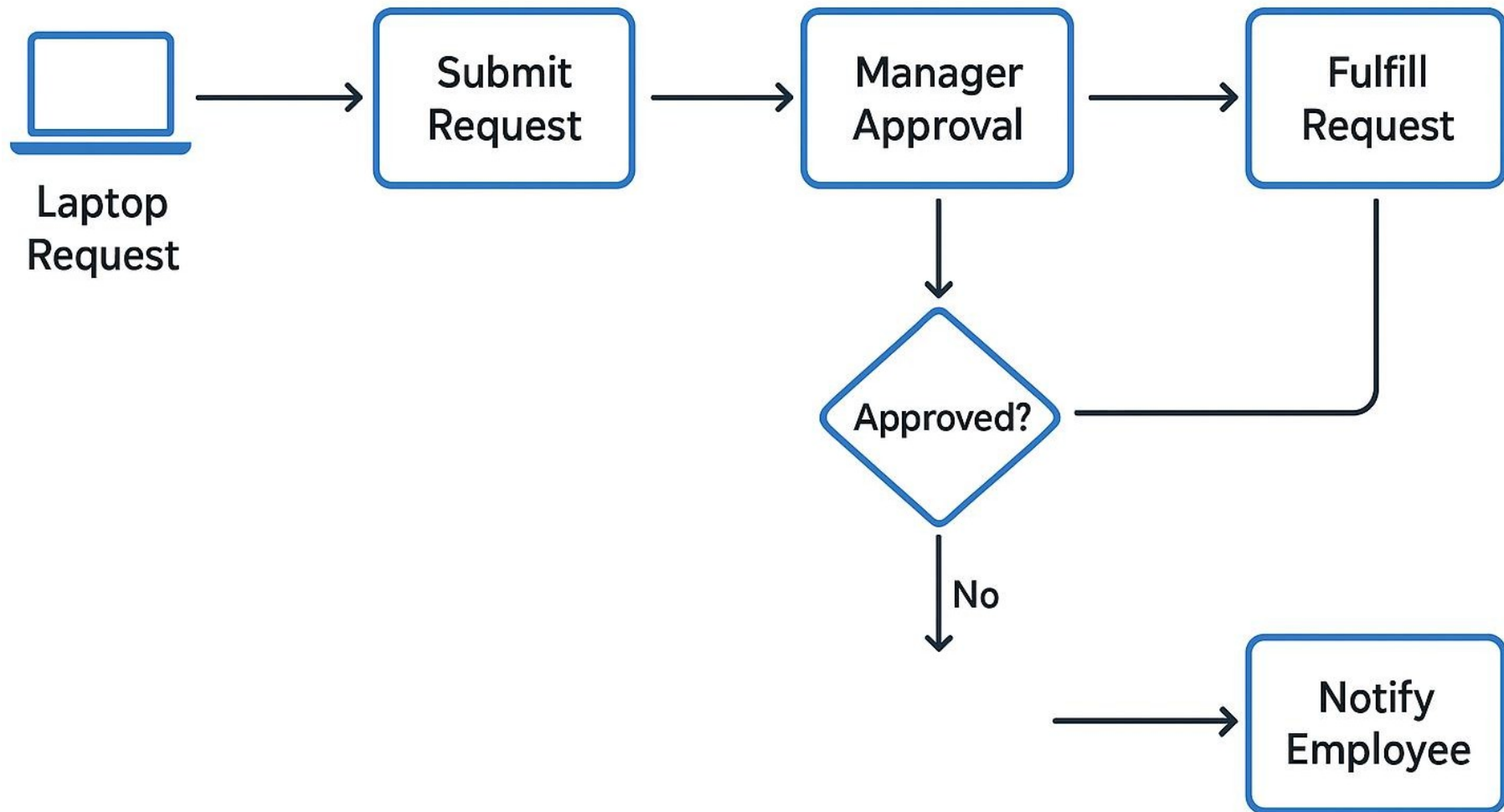| Date | 1 NOVEMBER 2025 |
|---|---|
| Team ID | NM2025TMID02762 |
| Project Name | Laptop Request Catalog Item |
| Maximum Marks | 4 Marks |

## Data Flow Diagrams:

A **Data Flow Diagram (DFD)** is a graphical representation of the flow of information within the laptop request management system. It helps visualize how data moves through various modules such as request submission, approval, and fulfillment.

The DFD for the *Laptop Request Catalog Item* system illustrates:

- How a request is **submitted by an employee** through the ServiceNow catalog form.

- How it moves through **managerial approval** and **IT department fulfillment** stages.

- How **asset data** is updated in the **CMDB (Configuration Management Database)**.

- Notifications sent back to the employee at every key stag

```
                    ┌──────────┐         ┌──────────┐        ┌──────────┐
   ▭                │  Submit  │         │ Manager  │        │  Fulfill │
  Laptop    ───────▶│ Request  │───────▶ │ Approval │──────▶ │ Request  │
  Request           └──────────┘         └──────────┘        └──────────┘
                                              │                    │
                                              ▼                    │
                                           ◇ Approved? ◇───────────┘
                                              │
                                              │ No
                                              ▼
                                                        ┌──────────┐
                                              ─────────▶│  Notify  │
                                                        │ Employee │
                                                        └──────────┘
```

**Laptop Request**

Submit Request → Manager Approval → Fulfill Request

Manager Approval → Approved?

Approved? → (yes) Fulfill Request

Approved? → No → Notify Employee

## User Stories:

Use the below template to list all the user stories for the product.

| User Type | Functional Requirement (Epic) | User Story Number | User Story / Task | Acceptance Criteria | Priority | Release |
|---|---|---|---|---|---|---|
| **Employee (Requester)** | ServiceNow Setup | USN-1 | As a developer, I can set up a Personal Developer Instance of ServiceNow for catalog configuration. | Instance is active and accessible for catalog creation. | High | Sprint- 1 |
| **Employee (Requester)** | Catalog Item Creation | USN-2 | As a developer, I can create a Laptop Request Catalog Item with required fields like model, justification, and urgency. | Catalog Item is visible under Service Catalog > Hardware Requests. | High | Sprint- 1 |
| **Manager / Approver** | Workflow Configuration | USN-3 | As a developer, I can configure an approval workflow for managers when a laptop request is submitted. | Approval request triggers automatically and notifies the approver. | High | Sprint- 1 |
| **IT Support Staff** | Fulfillment Process | USN-4 | As a developer, I can create fulfillment tasks assigned to the IT team upon approval. | Tasks generate automatically after manager approval. | High | Sprint- 2 |
| **Asset Manager** | CMDB Integration | USN-5 | As a developer, I can integrate the workflow with Asset Management and CMDB tables. | Laptop assignment is updated in the CMDB when fulfilled. | Medium | Sprint- 2 |
| **Employee (Requester)** | Notification Setup | USN-6 | As a user, I can receive email notifications on request submission, approval, and fulfillment. | Notifications trigger correctly for all workflow stages. | Medium | Sprint- 2 |

| User Type | Functional Requirement (Epic) | User Story Number | User Story / Task | Acceptance Criteria | Priority | Release |
|---|---|---|---|---|---|---|
| **IT Support Staff** | Business Rule Automation | USN-7 | As a developer, I can configure business rules to auto-update status fields. | Status changes automatically to "Approved," "In Progress," and "Delivered." | Medium | Sprint- 3 |
| **Manager / Approver** | Reporting | USN-8 | As a manager, I can view reports on total laptop requests and approval times. | Reports show accurate data grouped by department or user. | Low | Sprint- 3 |