

## Project Design Phase-II Data Flow Diagram & User Stories

Date	02 Nov 2025
Team ID	NM2025TMID04960
Project Name	Optimizing User, Group, and Role Management with Access Control and Workflows
Maximum Marks	4 Marks

### Data Flow Diagram (DFD) – Project Overview

The **Data Flow Diagram (DFD)** provides a clear view of how data moves within the ServiceNow Role and Access Management System. It demonstrates the interaction between **users (Project Manager and Team Members)**, the **system processes (user creation, task management, and access validation)**, and the **data stores (user, task, and audit databases)**. This helps visualize how actions are performed, permissions are verified, and information is recorded in the system.

#### Key Components of the DFD:

##### 1. External Entities

- Project Manager:** Initiates tasks, assigns team members, and reviews task progress.
- Team Member:** Receives and updates tasks assigned by the manager.

##### 2. Processes

- User & Role Setup:** Creates users and assigns them to specific roles or groups.
- Task Workflow:** Manages task creation, updates, and completion tracking.
- Access Verification:** Ensures that only users with the required roles can perform certain actions.
- Approval Workflow:** Handles status approvals when tasks are marked completed.
- Audit & Reporting:** Logs user actions and generates progress reports for management.

##### 3. Data Stores

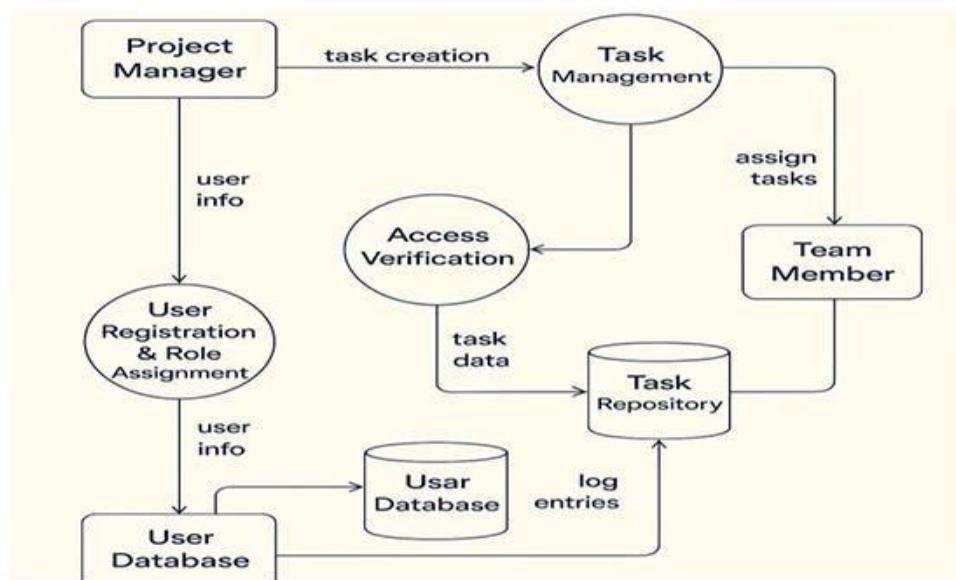
- User Database:** Stores user profiles, assigned roles, and group memberships.
- Task Database:** Maintains records of task details, status, and assignees.
- Audit Logs:** Capture every role change, status update, or workflow trigger for accountability.

##### 4. Data Flows

- User data flows from registration → role assignment → access validation.
- Task data moves between the Project Manager and Team Member through workflows.
- Approval status and reports are generated dynamically and stored in audit logs.

This DFD provides a clear visual summary of your system's logic and data movement. If you'd like, I can help sketch it out or convert it into a presentation slide for easier sharing.

### Example:



## User Stories for Role-Based Access Control System:

User Type	Functional Requirement (Epic)	User Story No.	User Story / Task	Acceptance Criteria	Priority	Release
Administrator	User & Role Management	USN-1	As an admin, I can create users and assign them specific roles (Project Manager, Team Member).	Roles are stored and linked to users successfully.	High	Sprint 1
Administrator	Access Control	USN-2	As an admin, I can configure ACLs for tables to control data access.	Users can view/edit only the records allowed for their role.	High	Sprint 1
Project Manager	Task Assignment	USN-3	As a Project Manager, I can create and assign tasks to team members.	Tasks are visible only to assigned users.	Medium	Sprint 1
Team Member	Task Updates	USN-4	As a Team Member, I can update task progress and mark tasks as completed.	Task status is updated and visible to the manager.	Medium	Sprint 2
Project Manager	Approval Workflow	USN-5	As a Project Manager, I receive approval requests when a task is marked completed.	Approval request triggers automatically.	Medium	Sprint 2
Administrator / Project Manager	Reporting & Analytics	USN-6	As an admin or manager, I can view task reports and user activity logs.	Reports display progress and user activity correctly.	Low	Sprint 2
Administrator	Audit & Monitoring	USN-7	As an admin, I can view change history for user roles and task modifications.	Logs capture every update accurately.	Low	Sprint 3