Project Design Phase-II
Data Flow Diagram & User Stories

Date	01 Nov 2025
TeamID	NM2025TMID09058
Project Name	Optimizing User Group and Role Management with Access Control and Workflows
Maximum Marks	4Marks

Data Flow Diagrams (DFDs)

A Data Flow Diagram (DFD) is a structured visual representation of how information moves within a system. It helps identify how data is input, processed, and stored, and how it flows between users and system components.

In the project **"Optimizing User Group and Role Management with Access Control and Workflows,"** the DFD illustrates how role or group management requests are initiated, validated, approved, and updated within the Service Now platform.

The diagram shows the interaction between the Admin**,** System (Flow Designer & ACLs)**,** and the User and Role Tables to ensure that all access changes are secure and compliant. When a user or group update request is made:

1. The **Admin** submits a role or group change request via the Service Now Web UI**.**
2. The **Flow Designer** workflow is triggered to perform validations and route the request for manager approval.
3. The **System** (using **GlideRecord scripts**) checks if the request meets all access control conditions.
4. If approved, the system updates the relevant **sys_user**, **sys_user_role**, and **sys_user_group** tables.
5. If unauthorized or conflicting, the system **blocks the update** and sends a **notification** to the admin.

This DFD ensures **data integrity**, **access compliance**, and **auditability** across all user and role management activities, minimizing the risk of unauthorized access and ensuring controlled, traceable updates to organizational roles.

User Stories:

User stories define what different users need from the system in simple, goal-focused language.
In this project, they ensure **role and group management** is optimized, access is securely controlled, and unauthorized changes are automatically blocked.

UserType	Functional Requirement (Epic)	UserStory Number	UserStory/ Task	Acceptancecriteria	Priority	Release
Administrator	User & Group Manageme nt	USN-1	As an admin, I want to create and manage users, groups, and role assignments within ServiceNow.	The system should allow role/group creation, editing, and deletion only if it complies with ACL policies.	High	Sprint-1
System(Auto-check)	Role Validation Workflow	USN-2	As a system, I must automatically validate access privileges before approving or rejecting role assignments	The system verifies using GlideRecord and ACLs; only approved, compliant role updates proceed.	High	Sprint-1
Manage r (Approv er)	Role Approval Process	USN-3	As a manager, I want to approve or reject role or group change requests through a workflow	Role/group updates proceed only after manager approval in Flow Designer	Medium	Sprint-2