Project Design Phase - II

Data Flow Diagram & User Stories
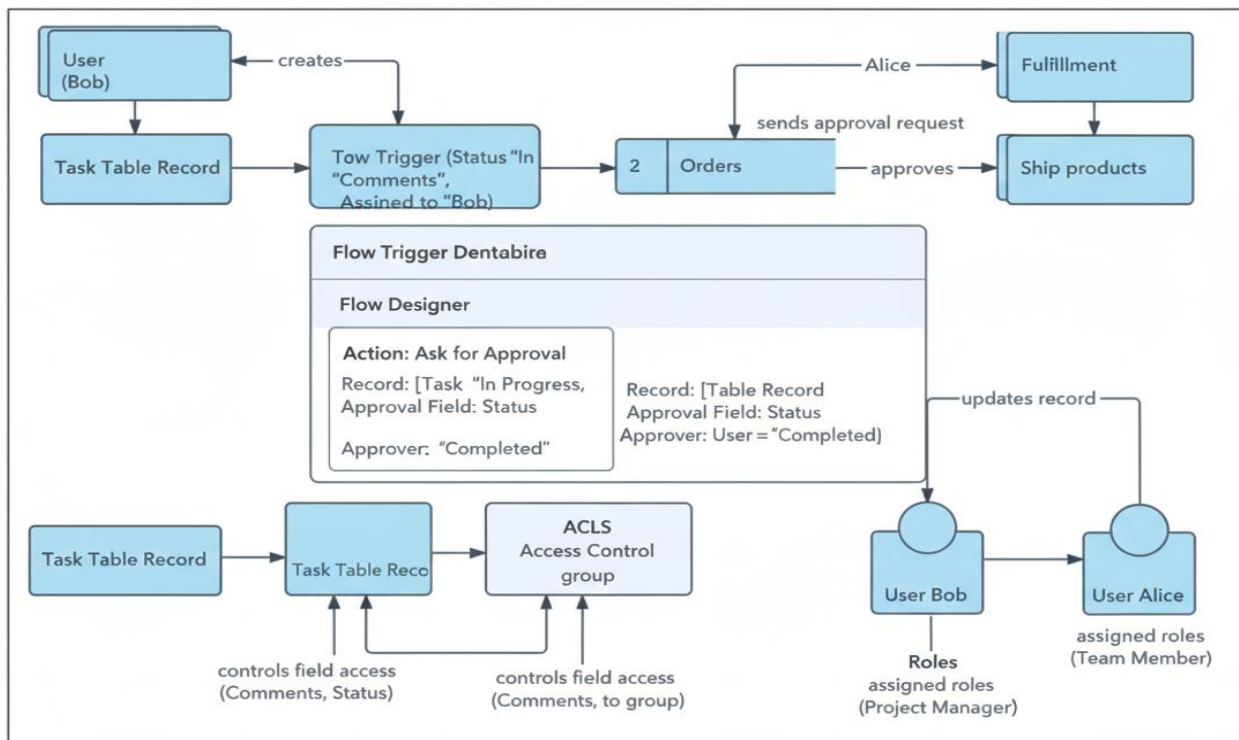
Date	02 November 2025
Team ID	NM2025TMID05884
Project Name	Optimizing User, Group, and Role Management with Access Control and Workflows
Maximum Marks	4 Marks

Data Flow Diagram:

A Data Flow Diagram (DFD) is a graphical representation that shows how information moves through a system — including processes, data stores, inputs, and outputs. In this project, the DFD demonstrates how users, groups, and roles interact within the ServiceNow platform to maintain secure and efficient project management operations.
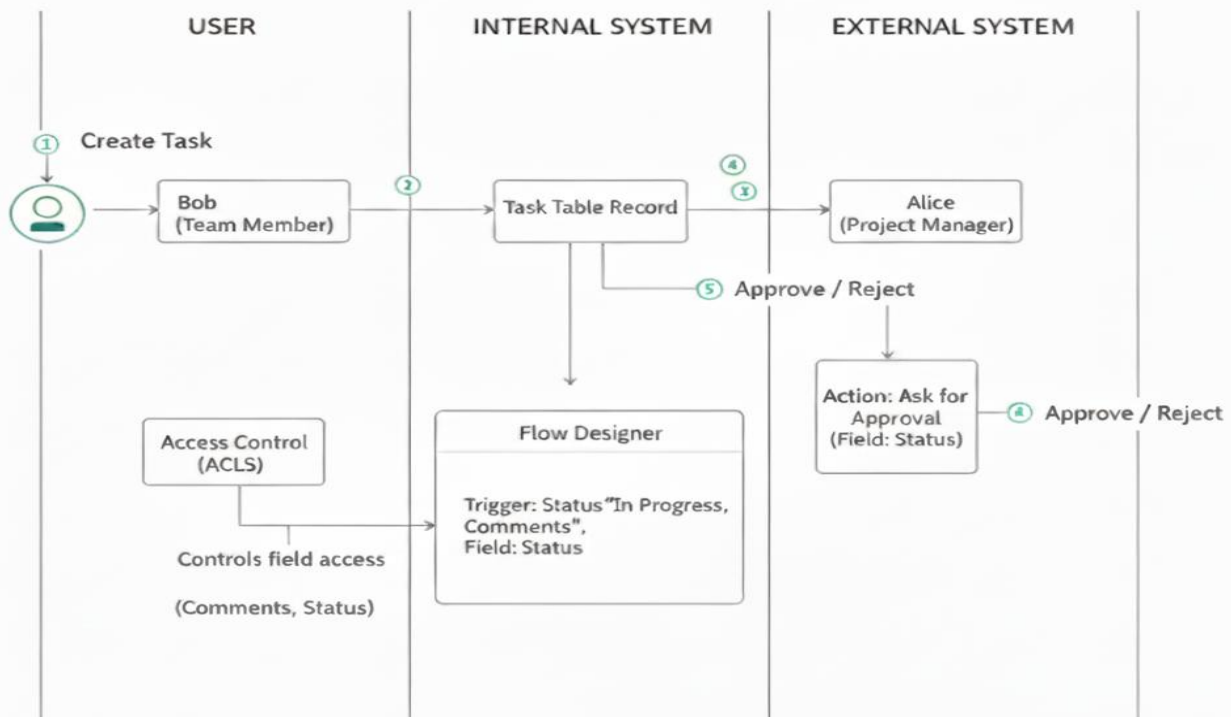
In the project "Optimizing User, Group, and Role Management with Access Control and Workflows", DFDs illustrate how user creation, role assignment, access control, and automated workflows are managed to ensure accountability and data integrity across the project management process.

Example flow:

The DFD demonstrates the interactions between the **Administrator**, **Project Manager (Alice)**, **Team Member (Bob)**, **User/Group/Role Tables**, **Access Control Lists (ACLs)**, and the **Flow Designer Workflow** components.

It illustrates how the **Administrator** creates and assigns users, groups, and roles; how **ACLs** control data access within the **Task Table**; and how the **Flow Designer** automates approval workflows when tasks are updated by team members, ensuring structured permissions, accountability, and seamless task management in the ServiceNow environment.

1. Bob creates a new task in the Task Table.
2. Flow Designer is triggered based on task status, Comments" and data file.
3. Flow sends text for approval request or Alices to "Completed")" based the approval outcome.

User Story:

User stories describe functional requirements from the perspective of different system users. They outline how ServiceNow's user, role, and workflow management features support accountability and structured task flow in the project.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release (Sprint)
Administrator	User and Role Management	USN-1	As an admin, I want to create users, groups, and roles so that team members can be assigned with proper responsibilities.	The system should allow new users and roles to be created and linked successfully.	High	Sprint-1
Administrator	Access Control Configuration	US-2	As an admin, I want to define ACLs for task tables so that only authorized users can view or edit specific fields.	ACLs restrict unauthorized access; only users with assigned roles can update comments or status fields.	High	Sprint-1
Project Manager (Alice)	Workflow Approval	USN-3	As a project manager, I want to approve tasks automatically assigned through workflow when a team member updates task status or comments.	When Bob updates a task to "In Progress" or adds feedback, an approval request is triggered for Alice.	High	Sprint-2
Team Member (Bob)	Task Update & Access	USN-4	As a team member, I want to update my assigned tasks and provide comments, ensuring visibility to the project manager.	Bob can view and edit task table fields as per ACL permissions.	Medium	Sprint-2
System (Flow Designer)	Automated Approval Flow	USN-5	As a system, I must trigger an approval flow when a task meets specific conditions (e.g., status: In Progress, comments: Feedback).	Workflow automatically routes approval requests to Alice and updates task status to "Completed" after approval.	High	Sprint-3