Project Design Phase II
Data Flow Diagram & User Stories

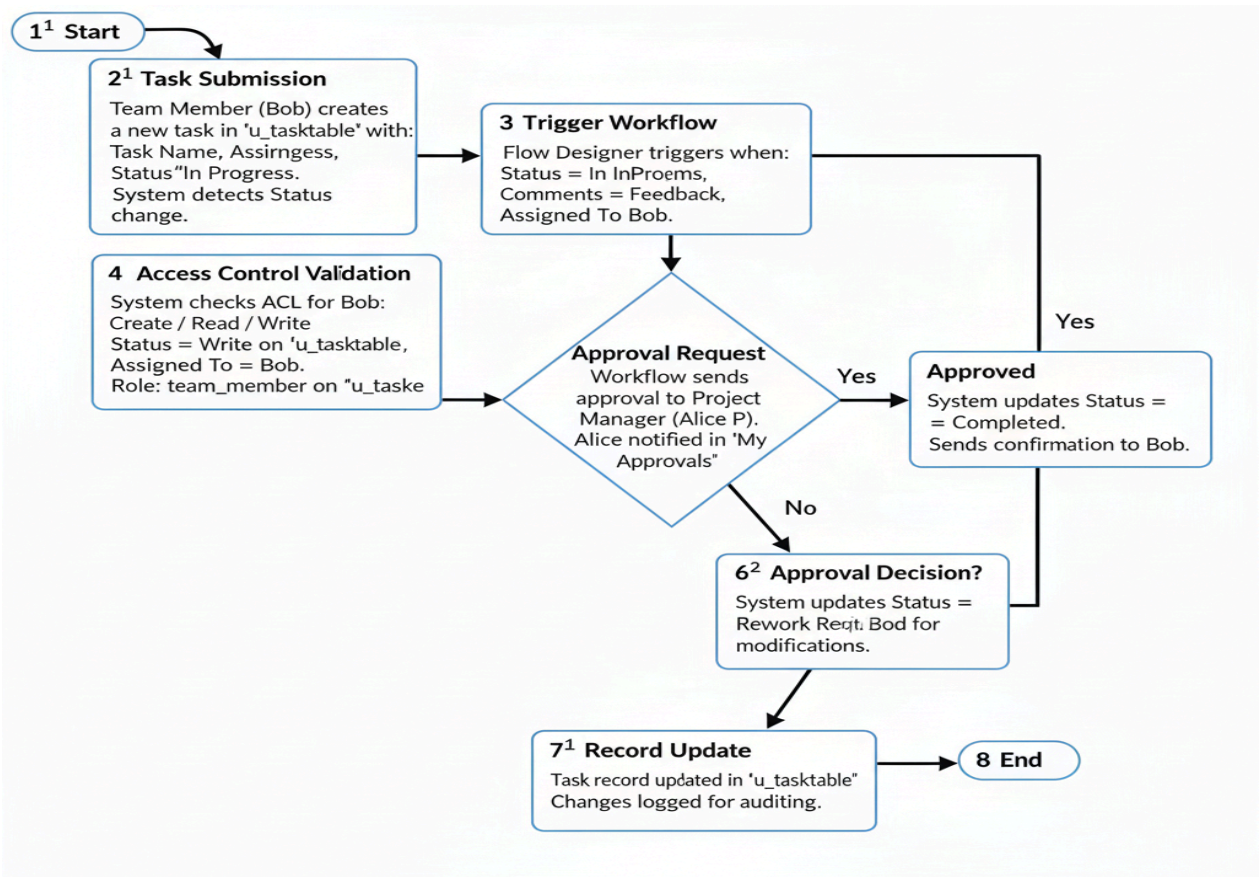| Date	01 November 2025
Team ID	NM2025TMID06932
Project Name	Optimizing User, Group and Role Management with Access Control and Workflows
Maximum Marks	4 Marks

Dataflow Diagram :

- A Data Flow Diagram (DFD) represents how information moves between users, groups, roles and workflows within the ServiceNow system.
- It visually explains how access control requests are created, validated and approved through automated processes.
- The diagram ensures a clear understanding of how data flows across different user levels (Admin, Project Member, Team Member) and how each interacts with the role management system.

In the project **"Optimizing User, Group, and Role Management with Access Control and Workflows,"** the DFD illustrates how users request role assignments, how the system validates permissions, and how approvals are automated via workflows.

When a user (e.g., Bob) creates or updates a record, the system automatically routes approval to a designated approver (e.g., Alice). Once approved, changes are updated and reflected in the database, ensuring both accountability and security.

Flow Diagram :

DFD Flow:

1. User submits a task or role request.
2. System validates access control rules.
3. Workflow triggers approval request to the approver.
4. Approver (e.g., project manager) reviews and approves/rejects.
5. System updates the record and notifies users.

User Stories:

- User stories define the needs and actions of different users within the access control and workflow system.
- Each story ensures that automation, security, and usability are properly addressed across all ServiceNow roles.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Administrator	User and Role Management	USN-1	As an admin, I want to create and assign roles to users so that access control is maintained across the project.	Roles are assigned correctly and reflected in the user profile.	High	Sprint-1
System (Workflow Engine)	Automated Approval Process	USN-2	As a system, I must automatically trigger approvals when a user submits a task or project update.	Workflow is triggered and approval request sent to the approver.	High	Sprint-1
Project Manager (Approver)	Review and Approval	USN-3	As a project manager, I want to approve or reject task updates to ensure authorized changes.	Approval status updates correctly and notifies the requester.	High	Sprint-2
Team Member (User)	Task Submission	USN-4	As a team member, I want to create and update tasks to keep the project progress up to date.	Tasks are created successfully and visible to the approver.	Medium	Sprint-2
System (Access Control Validation)	Security and Role Validation	USN-5	As a system, I must verify user roles and permissions before allowing access to task or project data.	Unauthorized users cannot view or edit restricted tables.	High	Sprint-2