# Data flow methodology and diagram

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**Project Title:** Optimizing User Group and Role Management with Access Control and Workflows

## 1. Methodology

The implementation of this project is carried out in several structured steps: Step 1: Creating Users

- Navigate to: All → Users → New
- Create users such as Alice P and Bob P.
- Assign them specific roles and save. Step 2: Creating Groups
- Navigate to: All → Groups → New
- Create groups:
    - Project Team
- Submit the groups. Step 3: Creating Roles
- Navigate to: All → Roles → New  Create roles:
    - Project Member ○

    Team Member
- Assign each role to its corresponding group. Step 4: Creating a Custom Table
- Go to: System Definition → Tables → New
- Label: Project table & Task Table 2  Check:
    - Create Module ○ Create Mobile Module Step 5:

    Assigning Users and Roles
- Assign Alice to the *project manager team* and give her *the following roles:*
    - *Project_Member*
    - *u_project_table*

- *u_task_table*

- Assign Bob to the *Team Member team* and give him the *following roles:*
    - *Team_Member*
    - *Table_role*

Step 6: Assigning Table Access to the Applications

- While creating a table, an application and module are automatically created.

- Navigate to: Application Navigator → Search “Project Table” application.
- Click Edit Module → Assign Project_Member role.
- Search Task Table 2 → Click Edit Application.
- Assign Project_Member and Team_Member roles.

Step 7: Setting Access Controls (ACLs)

- Navigate to: System Security → Access Control (ACL)  Create ACLs for the *Task Table.*
- Add the Team_Member role under *Requires Role.*
- Create four ACLs for the required fields.

Step 8: Designing the Flow

- Navigate to: Flow Designer → New Flow
- Create a flow “Task Table”
- Trigger: When a record is created in Operations Related
- Condition: Status is: In progress AND comments is feedback AND assigned to is bob
- Action: Update record → Status completed

## Architecture Diagram

Below is the workflow architecture of the automation system


User
Access Request
Workflow Engine
Approval
Role Assignment
Database Update