

M.A.M COLLEGE OF ENGINEERING

Project Name :Optimizing User, Group, and Role Management with Access Control and Workflows.

Team members:

1.KALAIVANI.V

2.POOVIZHI.G

3.SORUBA.P.G

4.VAISHNAVI.K

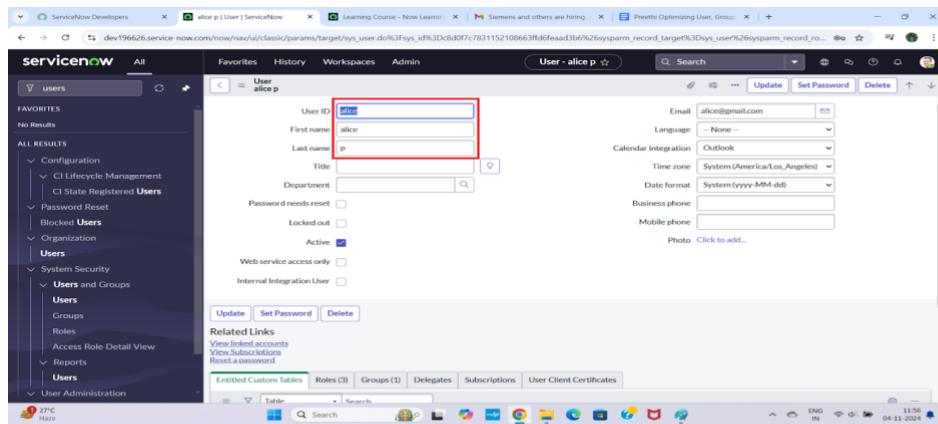
Optimizing User, Group, and Role Management with Access Control and Workflows

Problem Statement:

In a small project management team consisting of a Project Manager (Alice) and a Team Member (Bob), there is a need to efficiently manage project tasks and ensure accountability throughout the project lifecycle. The current system lacks clear role definitions, access controls, and a structured workflow, leading to confusion regarding task assignments and progress tracking.

Create User

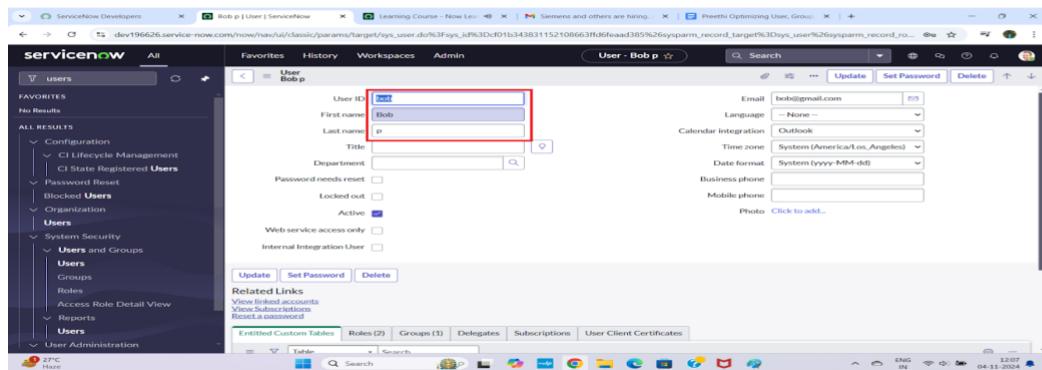
- 1.Open service now
- 2.Click on All >> search for users
- 3.Select Users under system security
- 4.Click on new
- 5.Fill the following details to create a new user



- 6.Click on submit

8.Create one more user:

9.Create another user with the following details click on submit.



The screenshot shows the ServiceNow User creation interface. The 'User ID' field contains 'bob'. The 'First name' field is highlighted with a red box and contains 'Bob'. The 'Last name' field contains 'P'. Other fields include 'Email' (bob@gmail.com), 'Language' (None), 'Calendar integration' (Outlook), 'Time zone' (System (America/Los_Angeles)), 'Date format' (System (yyyy-MM-dd)), 'Business phone' (empty), 'Mobile phone' (empty), and 'Photo' (Click to add...). Buttons for 'Update', 'Set Password', and 'Delete' are visible at the bottom left. A sidebar on the left lists various system categories like Configuration, CI Lifecycle Management, and System Security.

Create Groups

1.Open service now.

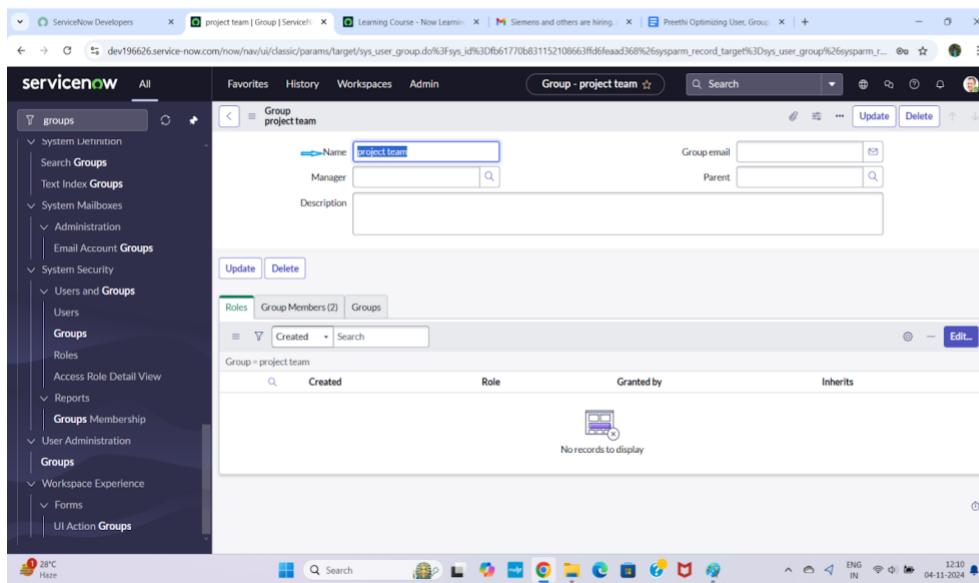
2.Click on All >> search for groups

3.Select groups under system security

4.Click on new

5.Fill the following details to create a new group

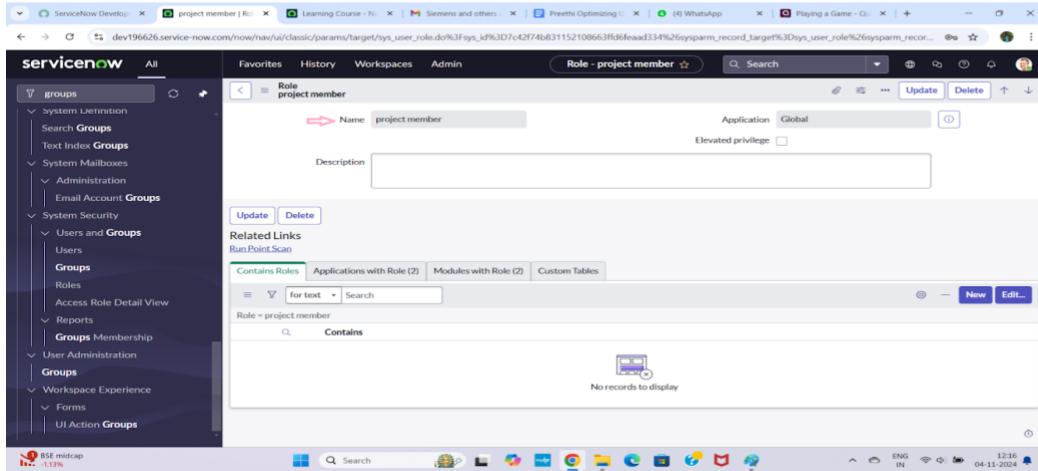
6.Click on submit



The screenshot shows the ServiceNow Group creation interface. The 'Name' field is filled with 'project team'. Other fields include 'Manager' (empty), 'Group email' (empty), and 'Parent' (empty). A 'Description' field is present but empty. Below the main form, there is a 'Roles' section showing 'Group Members (2)' and a 'Groups' section showing 'Group - project team'. A table at the bottom lists 'Created', 'Role', 'Granted by', and 'Inherits' columns, all currently empty. Buttons for 'Update' and 'Delete' are visible at the bottom left. A sidebar on the left lists categories like System Definition, Administration, and User and Groups.

Create Roles

1. Open service now.
2. Click on All >> search for roles
3. Select roles under system security
4. Click on new
5. Fill the following details to create a new role
6. Click on submit



Create one more role:

- 7.Create another role with the following details
- 8.Click on submit

Assign roles to alice user

- 1.Open servicenow Click on All >> search for user

2. Select tables under system definition
3. Select the project manager user
4. Under project manager
5. Click on edit
6. Select project member and save
7. Click on edit add project table role and task table role
8. Click on save and update the form.

The screenshot shows the ServiceNow User interface. The left sidebar is collapsed, and the main area displays the details for user 'alice p'. The 'Roles' tab is selected, showing three roles assigned to the user:

Role	State	Inherited	Inheritance Count
u_task_table_2_user	Active	false	
project member	Active	false	
u_project_table_user	Active	false	

Assign roles to bob user

1. Open servicenow.Click on All >> search for user
2. Select tables under system definition
3. Select the bob p user
4. Under team member
5. Click on edit
6. Select team member and give table role and save
7. Click on profile icon Impersonate user to bob

8. We can see the task table2.

	Role	State	Inherited	Inheritance Count
<input type="checkbox"/>	u_task_table_2_user	Active	false	1

Assign table access to application

1. while creating a table it automatically create a application and module for that table
2. Go to application navigator search for search project table application
3. Click on edit module
4. Give project member roles to that application
5. Search for task table2 and click on edit application.
6. Give the project member and team member role for task table 2 application

Application	Roles
project table	u_task_table_2_user, project member, team member
task table 2	u_task_table_2_user, project member, team member

Create ACL

1. Open service now.
2. Click on All >> search for ACL
3. Select Access Control(ACL) under system security
4. Click on elevate role
5. Click on new
6. Fill the following details to create a new ACL
7. Scroll down under requires role

The screenshot shows the 'Access Control - New Record' page in ServiceNow. The 'Type' is set to 'record' and 'Operation' to 'write'. The 'Decision Type' is 'Allow If'. The 'Applies To' section shows 'task table 2 [u_task_table_2]' selected. A warning message at the top says: 'Warning: A role, security attribute, data condition, or script is required to properly secure access with this ACL.'

8. Double click on insert a new row
9. Give task table and team member role
10. Click on submit
11. Similarly create 4 acl for the following fClick on profile on top right side

Name	Decision Type	Operation	Type	Active	Updated by	Updated
u_leave_request	Allow If	delete	record	true	admin	2024-10-22 02:27:59
u_leave_request	Allow If	create	record	true	admin	2024-10-22 02:27:59
u_task_table	Allow If	read	record	true	admin	2024-10-22 04:21:28
u_task_table	Allow If	write	record	true	admin	2024-10-22 04:20:15
u_task_table.u_assigned_to	Allow If	write	record	true	admin	2024-10-22 04:33:53
u_task_table.u_due_date	Allow If	write	record	true	admin	2024-10-22 04:33:14
u_task_table.u_task_id	Allow If	write	record	true	admin	2024-10-22 04:27:47
u_task_table.u_task_name	Allow If	write	record	true	admin	2024-10-22 04:31:14
u_task_table_2	Allow If	write	record	true	admin	2024-10-22 21:05:07
u_task_table_2	Allow If	read	record	true	admin	2024-10-22 21:26:57
u_task_table_2	Allow If	read	record	true	admin	2024-10-22 21:05:07
u_task_table_2	Allow If	write	record	true	admin	2024-10-22 21:28:27
u_task_table_2	Allow If	create	record	true	admin	2024-10-22 21:05:06
u_task_table_2	Allow If	delete	record	true	admin	2024-10-22 21:05:07
u_task_table_2.u_assigned_to	Allow If	write	record	true	admin	2024-10-22 21:31:20

12. Click on profile on top right side
13. Click on impersonate user
14. Select bob user
15. Go to all and select task table2 in the application menu bar
16. Comment and status fields are have the edit access

The screenshot shows a ServiceNow web interface for creating a new record in 'task table 2'. The page title is 'task table 2 - Create Created'. There are several input fields: 'task id' (disabled), 'task name' (disabled), 'status' (dropdown menu showing 'None'), 'assigned to' (text input set to 'bob'), 'comments' (text input), and 'due date' (disabled). At the bottom left is a 'Submit' button.

Create a Flow to Assign operations ticket to group Open service now.

1. Click on All >> search for Flow Designer
2. Click on Flow Designer under Process Automation.
3. After opening Flow Designer Click on new and select Flow.
4. Under Flow properties Give Flow Name as “ task table”.
5. Application should be Global.
6. Click build flow.

The screenshot shows a ServiceNow record page for 'task table 2'. The record was created on 2024-10-22. The 'assigned to' field is set to 'bob'. The URL in the address bar is 'https://dev196626.service-now.com/\$flow-designer.do?sysparm_nostack=true'. The page includes a sidebar with 'Process Automation' and 'Workflow Studio' sections.

The screenshot shows the ServiceNow Workflow Studio interface. The top navigation bar includes tabs for Project on user, ServiceNow Dev, ServiceNow, Homepage, Created 2024-1, ChatGPT, and New Tab. The main area is titled 'Workflow Studio' with a 'Flows' tab selected. A search bar at the top right contains the text 'task table'. Below the search bar, there are tabs for Playbooks, Flows, Subflows, Actions, and Decision tables. A 'New' button with a dropdown menu is visible. The main content area displays a list of flows, with one flow named 'task table' highlighted. To the right of the list, a sidebar titled 'Pick up where you left off' shows recent updates for various objects like Playbook, Flow, Subflow, Action, Decision table, and Steps. A 'Latest updates' section shows modifications made by 'System Administrator'.

This screenshot shows the 'New Flow' builder interface. The title bar says 'New Flow | Work' and 'Created 2024-1'. The main area has a heading 'Let's get the details for your flow'. It includes fields for 'Flow name *' (set to 'task table'), 'Description' (with placeholder 'Describe your flow.'), and 'Application *' (set to 'Global'). On the left, there is a preview area showing a simple flow diagram with two parallel steps. At the bottom right, there are buttons for 'Activate Windows', 'Go to Settings', 'Cancel', and a prominent blue 'Build flow' button.

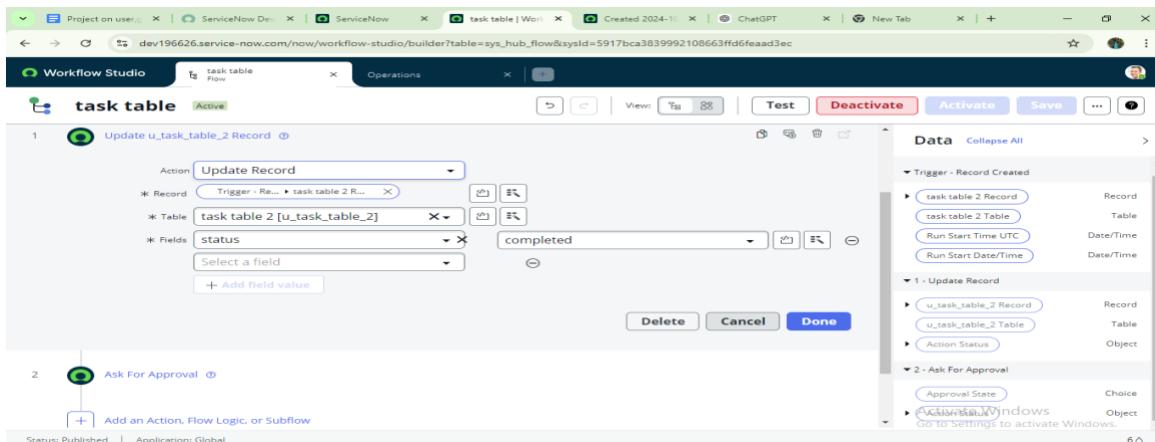
next step:

1. Click on Add a trigger
2. Select the trigger in that Search for “create record” and select that.
3. Give the table name as “ task table ”.
4. Give the Condition as Field : status Operator :is Value : in progress
Field : comments Operator :is Value : feedback
Field : assigned to Operator :is Value : bob
5. After that click on Done.

This screenshot shows the configuration of a trigger for the 'task table' flow. The top navigation bar is identical to the previous screenshots. The main area shows the 'task table' flow configuration. The 'Trigger' dropdown is set to 'Created'. The 'Table' dropdown is set to 'task table 2 [u_task_table_2]'. Below these, a 'Condition' section is expanded, showing three conditions connected by AND: 'status' is 'in progress', 'comments' is 'feedback', and 'assigned to' is 'bob'. There are also 'OR' and 'Advanced Options' buttons. To the right, a 'Data' panel is open, showing a tree structure of triggers and actions. Triggers include 'task table 2 Record' and 'task table 2 Table'. Actions include 'Update Record' (with sub-options for 'u_task_table_2 Record' and 'u_task_table_2 Table') and 'Ask For Approval' (with sub-options for 'Approval State' and 'Windows OS To SETTINGS to activate Windows').

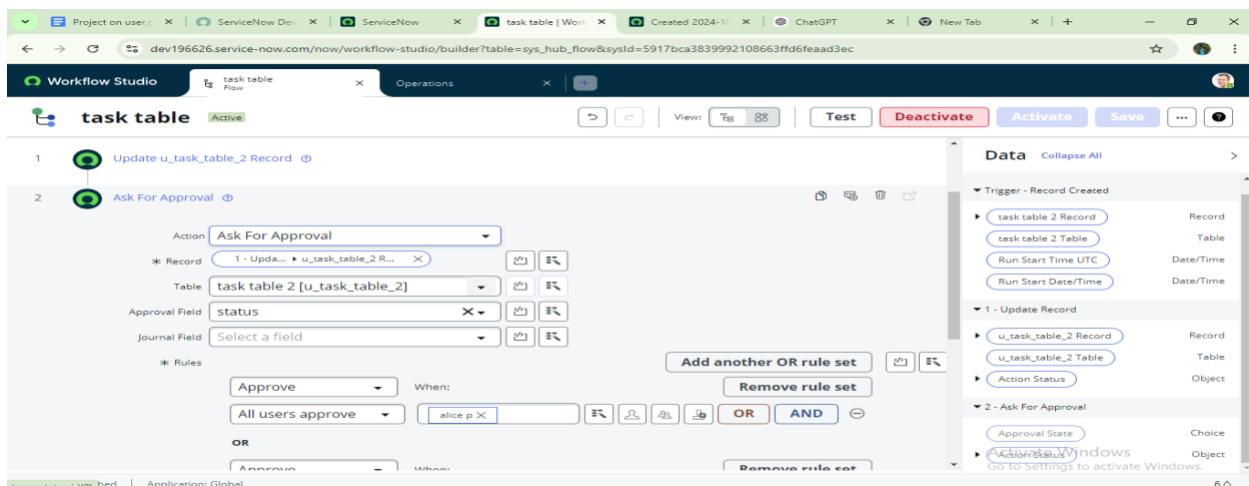
Next step:

1. Click on Add an action.
2. Select action in that ,search for “ update records”.
3. In Record field drag the fields from the data navigation from Right Side(Data pill)
4. Table will be auto assigned after that
5. Add fields as “status” and value as “completed”
6. Click on Done.



Next step:

1. Now under Actions.
2. Click on Add an action.
3. Select action in that ,search for “ ask for approval ”.
4. In Record field drag the fields from the data navigation from Right side
5. Table will be auto assigned after that
6. Give the approve field as “ status”
7. Give approver as alice p
8. Click on Done.



1. Go to application navigator search for task table.
2. It status field is updated to completed

The screenshot shows a ServiceNow task table edit screen. The URL is dev196626.service-now.com/nav/u_task_table_2.do?sysparm_target=u_task_table_2. The title bar says "task table 2 - Created 2024-10-22 22:25:18". The form fields include:

task id	<input type="text"/>	assigned to	<input type="text" value="bob"/>
task name	<input type="text"/>	comments	<input type="text"/>
status	<input type="text" value="completed"/>	due date	<input type="text"/>

Buttons at the bottom: Update, Delete.

1 .Go to application navigator and search for my approval

2.Click on my approval under the service desk.

3.Alice p got approval request then right click on requested then select approved

The screenshot shows a ServiceNow Approvals list screen. The URL is dev196626.service-now.com/nav/u_approval_approver_list.do?sysparm_query=3D%26sysparm_first_row%3D1%26sysparm_view%3D. The title bar says "Approvals". The table columns are:

State	Approver	Comments	Approval for	Created
Approved	alice p	(empty)		2024-09-01 12:19:33
Rejected	Fred Luddy	(empty)		2024-09-01 12:17:03
Requested	Fred Luddy	(empty)		2024-09-01 12:15:44
Requested	Howard Johnson	CHG0000096		2024-09-01 06:15:29
Requested	Ron Kettering	CHG0000096		2024-09-01 06:15:29
Requested	Luke Wilson	CHG0000096		2024-09-01 06:15:29
Requested	Christen Mitchell	CHG0000096		2024-09-01 06:15:29
Requested	Bernard Laboy	CHG0000096		2024-09-01 06:15:29
Requested	Howard Johnson	CHG0000095		2024-09-01 06:15:25
Requested	Ron Kettlering	CHG0000095		2024-09-01 06:15:25
Requested	Luke Wilson	CHG0000095		2024-09-01 06:15:25
Requested	Christen Mitchell	CHG0000095		2024-09-01 06:15:25
Requested	Bernard Laboy	CHG0000095		2024-09-01 06:15:25

Actions on selected rows... button.

Conclusion :

This scenario highlights a structured approach to project management, showcasing the roles of Alice and Bob within a defined workflow. With Alice's oversight and Bob's execution, the team effectively collaborates to ensure project success. The use of tables organizes key information, facilitating easy tracking of projects, tasks, and progress updates. Overall, this system promotes accountability, enhances communication, and leads to the successful completion of projects.