

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

Team Id: **NM2025TMID15647**

Team Members: **4**

Team Leader: **ANNAMALAI .V**

Team Member 1: **ARAVIND. S**

Team Member 2: **ARUN. M**

Team Member 3: **ARUN KUMAR. A**

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.

Objective:

- 1. Define User Roles Clearly: Establish distinct roles for Alice (Project Manager) and Bob (Team Member) to ensure clarity in responsibilities and access rights within the project management tool.
- 2. Implement Access Control Mechanisms: Create a system that restricts Bob's access to project creation and editing features while allowing him to view and update his assigned tasks, thereby preventing unauthorized changes.
- 3. Streamline Workflow Processes.

Skills:

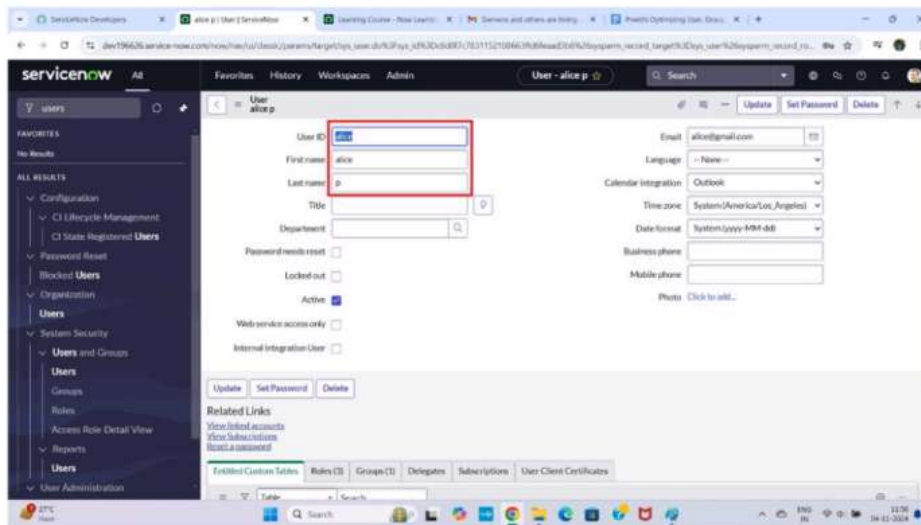
Users, Groups, Roles, Tables, Access Control List, Flow Designer

TASK INITIATION

Milestone 1 : Users

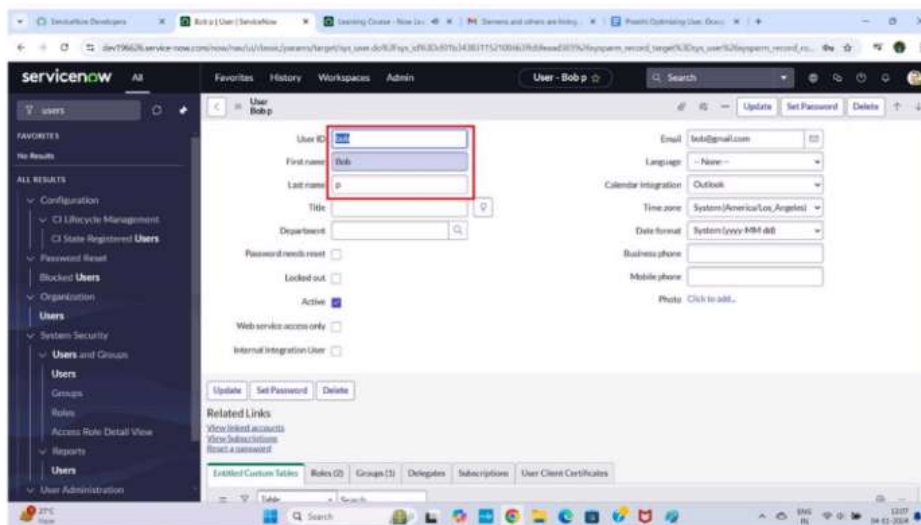
Activity 1 : Create Users

- 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



Create one more user :

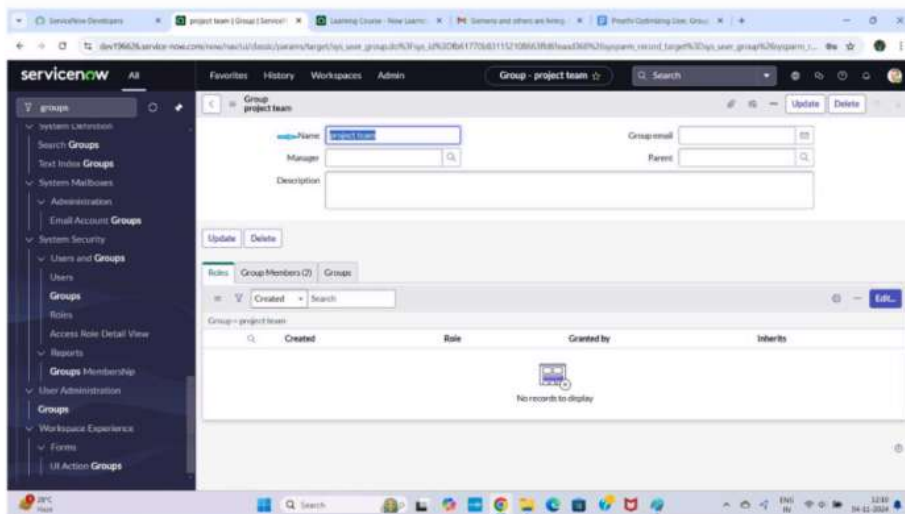
- v. Create another user with the following details
- Λ. Click on submit



Milestone 2 : Groups

Activity 1 : 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

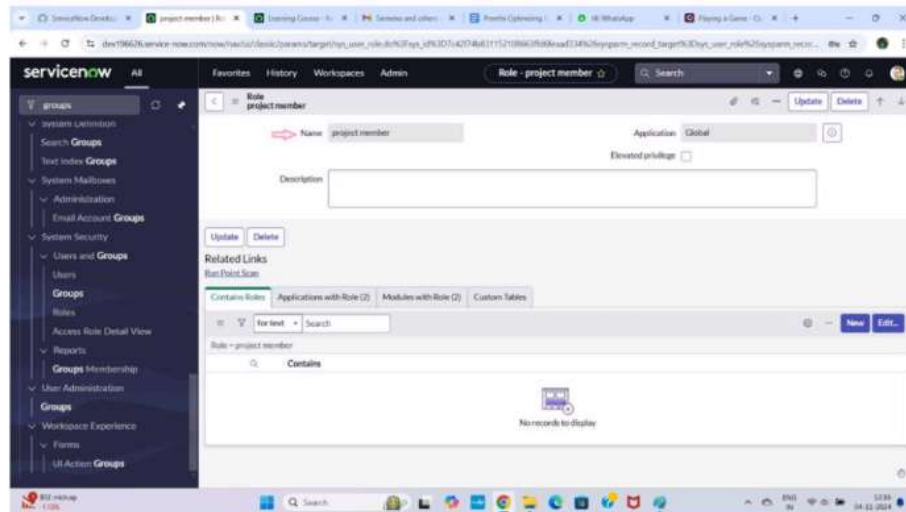


Milestone 2 : Roles

Activity 1 : 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

٦. Click on submit



Create one more role :

٧. Create another role with the following details

٨. Click on submit

Milestone ٤ : Table

Activity ١ : Create Table

١. Open service now.

٢. Click on All << search for tables

٣. Select tables under system definition

٤. Click on new

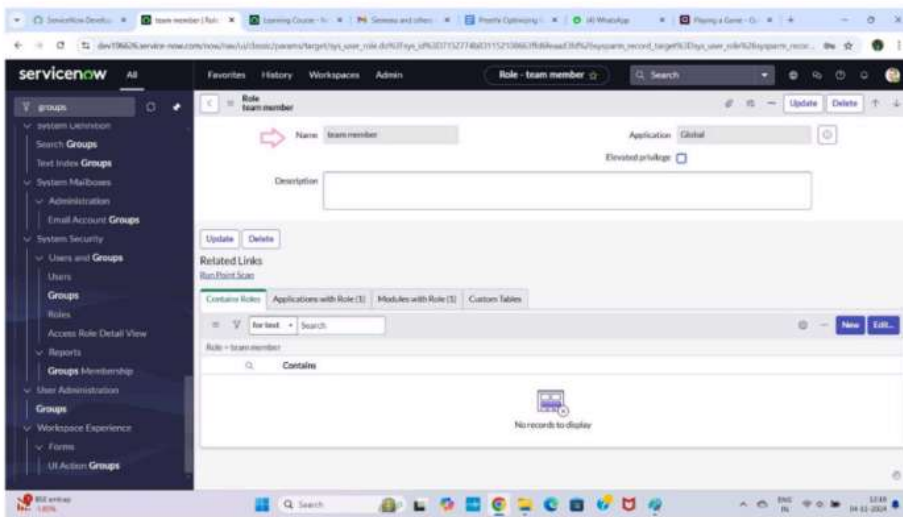
٥. Fill the following details to create a new table

Label : project table

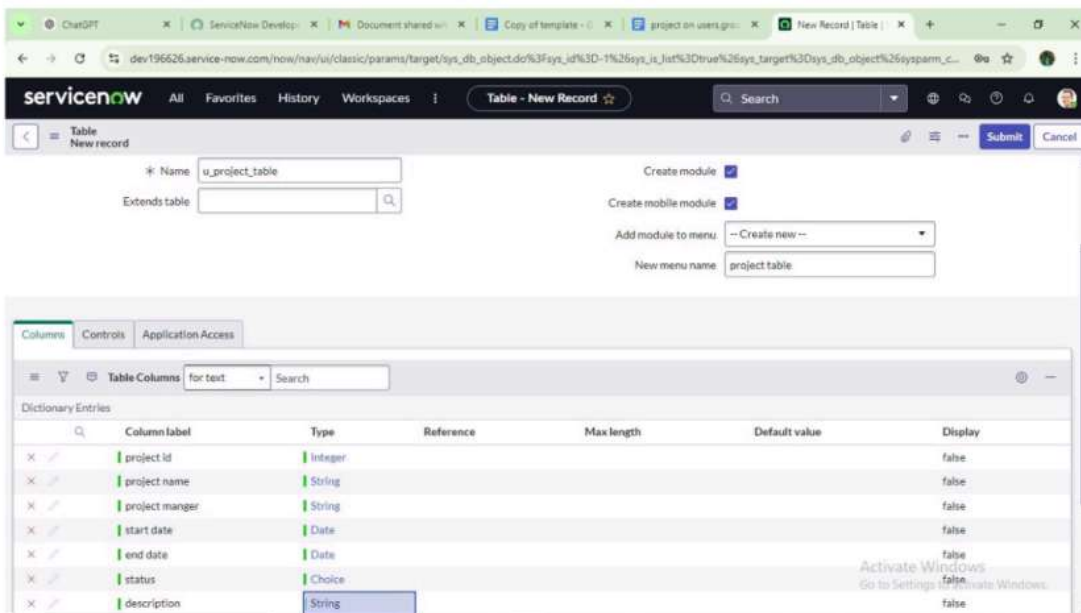
Check the boxes Create module & Create mobile module

٦. Under new menu name : project table

٧. Under table columns give the columns



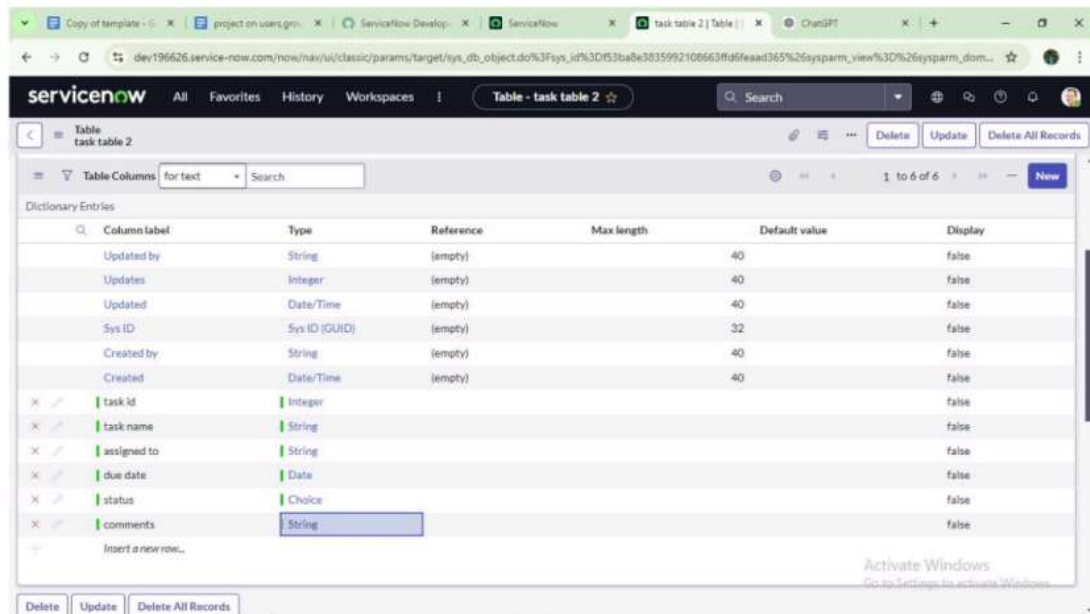
Λ. Click on submit



Create one more table :

Λ. Create another table as : task table and fill with following details .

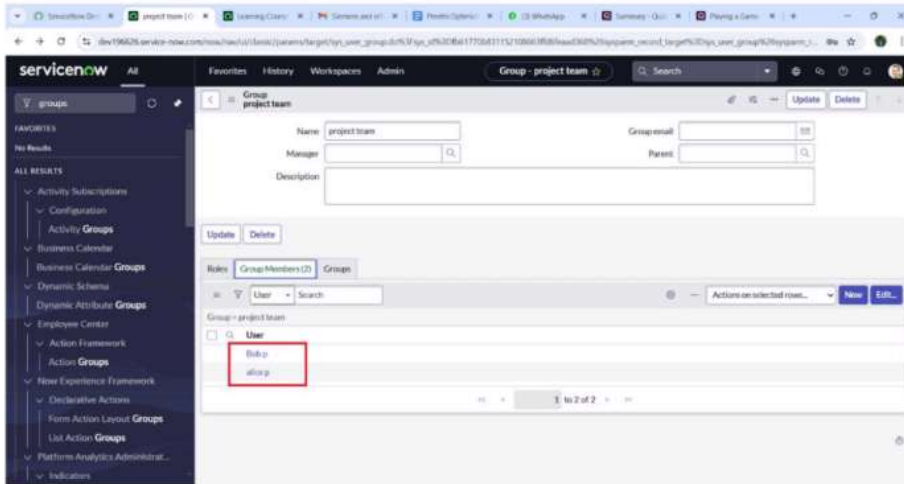
Λ. Click on submit .



Milestone 8 : Assign users to groups

Activity 1 : Assign users to project team group

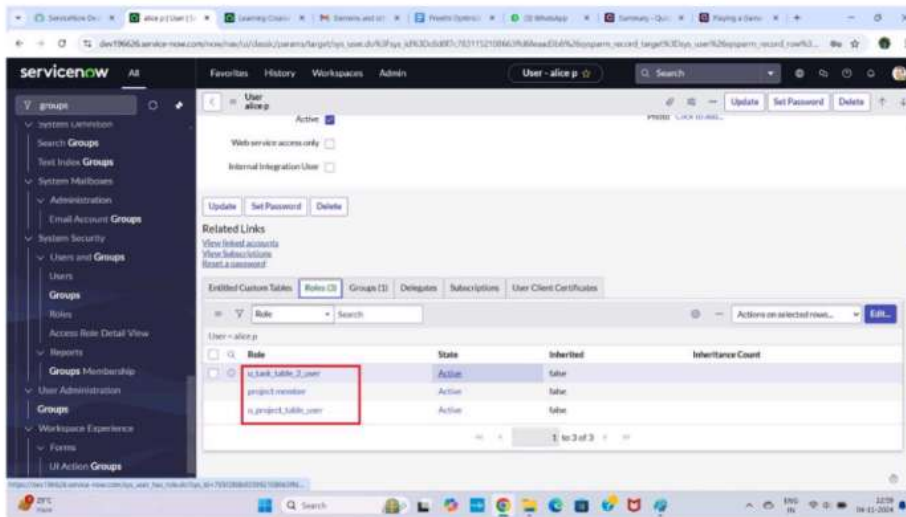
1. Open service now .
2. Click on All << search for groups
3. Select tables under system definition
4. Select the project team group
5. Under group members
6. Click on edit
7. Select alice p and bob p and save



Milestone 1 : Assign roles to users

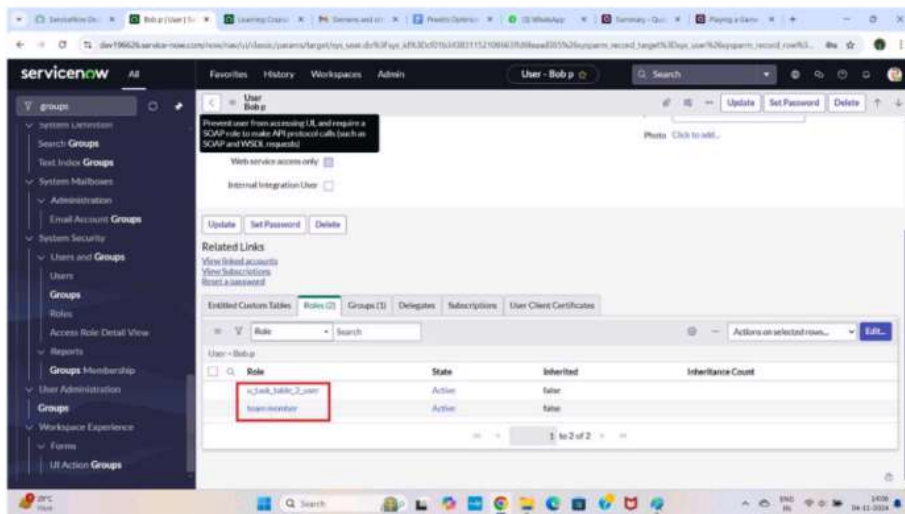
Activity 1 : Assign roles to alice user

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 u__project__table role and u__task__table role
8. click on save and update the form .



Activity 1: 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 table.



Milestone √ : Application access

Activity 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 table and click on edit application.
6. Give the project member and team member role for task table application

servicenow All Favorites History Admin | Application Menu - project table Search

Application Menu
project table Update Delete

An application menu is a group of modules in the application navigator. Choose the roles that are required to access the application and add or remove modules in the related list below. [More Info](#)

Title project table Application Global Active

Restricts access to the specified roles. Otherwise, all users can view the application menu when it is active.

Roles project member

Specifies the `menuCategory`, which defines the navigation menu style. The default value is Custom Applications.

Category Custom Applications

The text that appears in a tooltip when a user points to this application menu

Hint

Description

Update Delete

Activate Windows
Go to Settings to activate Windows.

servicenow All Favorites History Admin | Application Menu - task table 2 Search

Application Menu
task table 2 Update Delete

Title task table 2 Application Global Active

Restricts access to the specified roles. Otherwise, all users can view the application menu when it is active.

Roles u_task_table_2_user, project member, team member

Specifies the `menuCategory`, which defines the navigation menu style. The default value is Custom Applications.

Category Custom Applications

The text that appears in a tooltip when a user points to this application menu

Hint

Description

Update Delete

Modules Order Search Actions on selected rows New

Activate Windows
Go to Settings to activate Windows.

Milestone 8 : Access control list

Activity 1 : 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

Warning: A role, security attribute, data condition, or script is required to properly secure access with this ACL.

* Type: record ⓘ

* Operation: write ⓘ

Decision Type: Allow if

Application: Global ⓘ

Active: ☒

Advanced: ☐

Admin overrides: ☒

Protection policy: -- None --

* Name: task table 2 [u_task_table_2] status

Description:

Applies To: No. of records matching the conditions: 1 ⓘ

Add Filter Condition Add "OR" Clause

-- choose field -- -- op -- -- value --

Conditions

Activate Windows
Go to Settings to activate Windows.

Access Control Rules have two decision types, and these types will behave differently depending on conditions.

6. Fill the following details to create a new ACL
7. Scroll down under requires role
8. Doubleclick on insert a new row
9. Give task table and team member role
10. Click on submit
11. Similarly create 3 acl for the following fields

The screenshot shows the ServiceNow Access Controls interface. The table lists access rules with columns: Name, Decision Type, Operation, Type, Active, Updated by, and Updated. The first five rows are highlighted with a red box, and a red arrow points to the 'u_task_table,2u_assigned_to' rule.

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,2u_assigned_to	Allow If	write	record	true	admin	2024-10-22 21:31:20

۱۲. Click on profile on top right side
۱۳. Click on impersonate user
۱۴. Select bob user
۱۵. Go to all and select task table in the application menu bar
۱۶. Comment and status fields are have the edit access

task id

task name

status -- None --

assigned to

comments

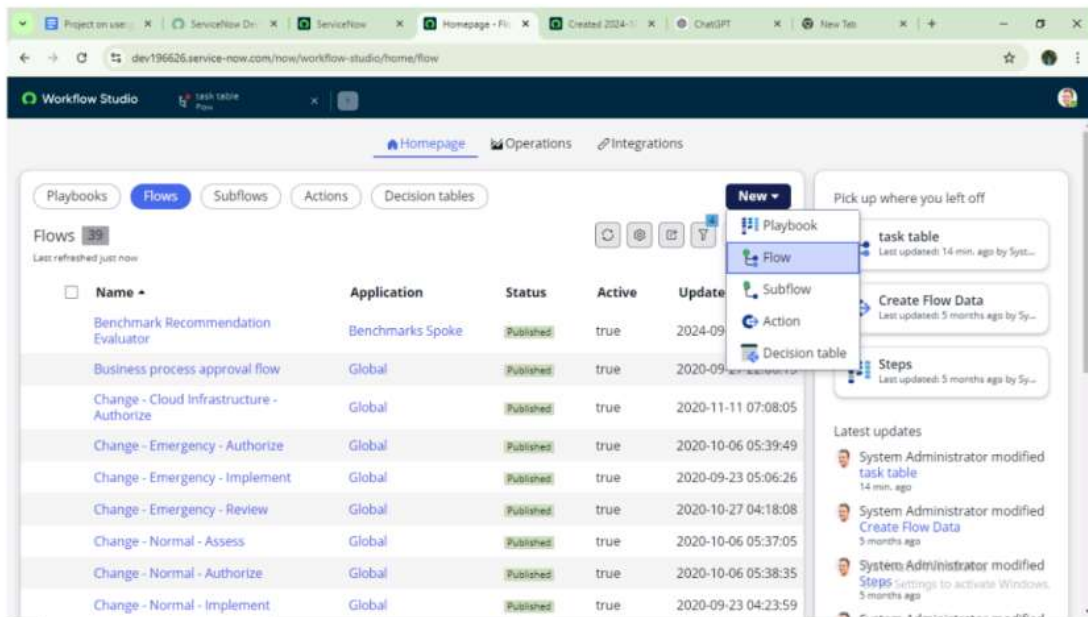
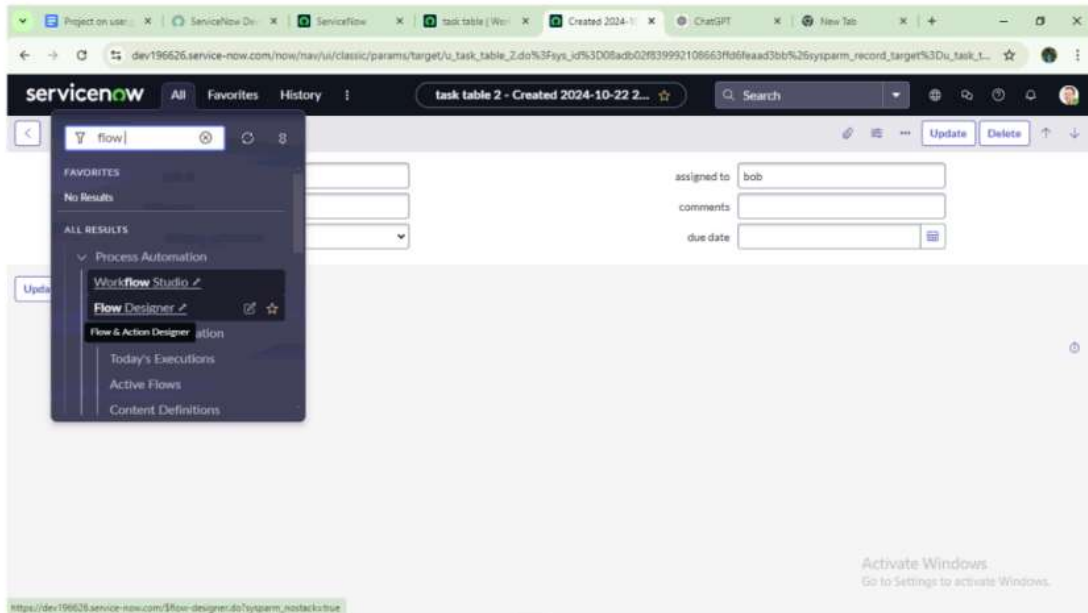
due date

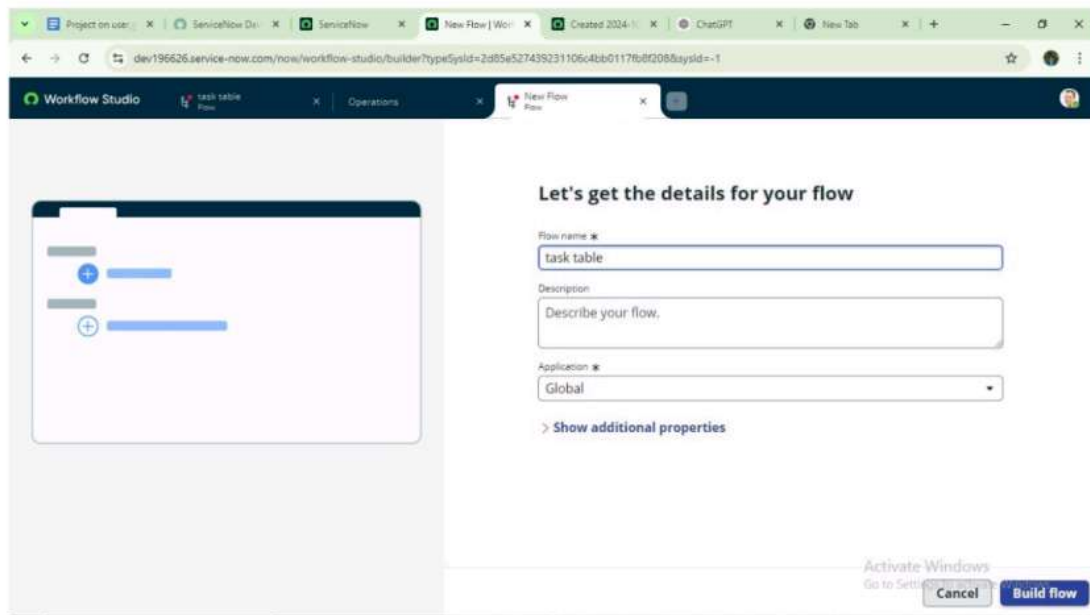
Submit

Milestone 4 : Flow

Activity 1 : Create a Flow to Assign operations ticket to group

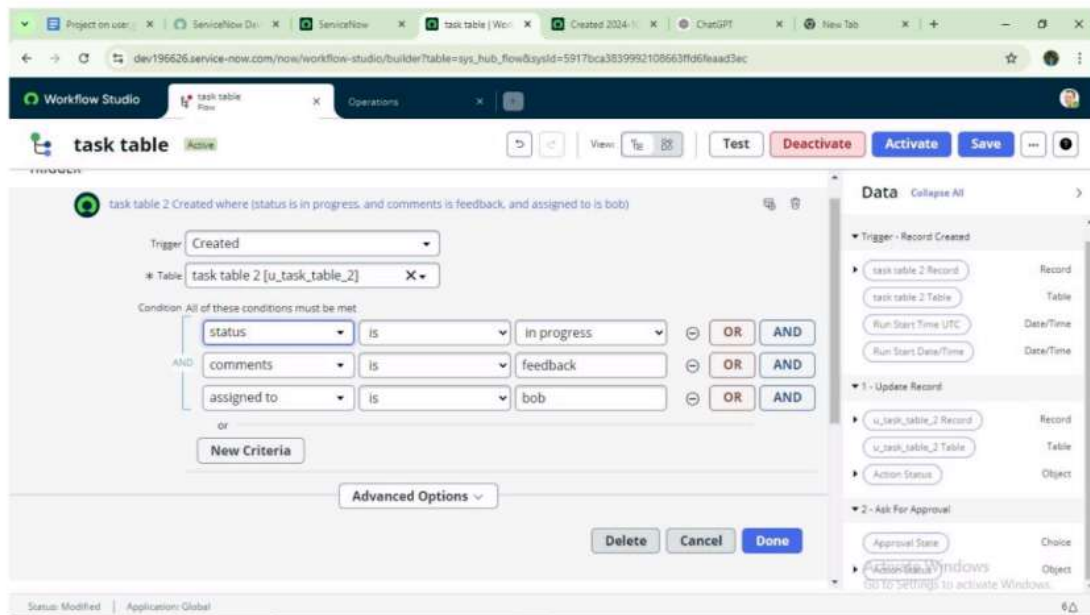
1. Open service now.
2. Click on All << search for Flow Designer
3. Click on Flow Designer under Process Automation .
4. After opening Flow Designer Click on new and select Flow .
5. Under Flow properties Give Flow Name as " task table" .
6. Application should be Global .
7. Click build flow .





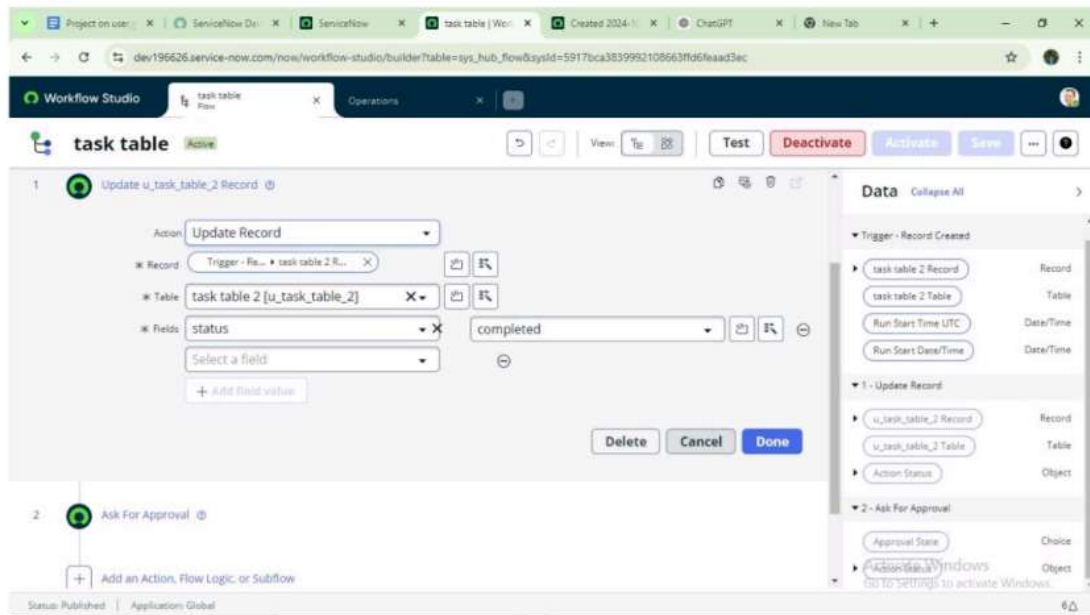
next step

1. Click on Add 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.



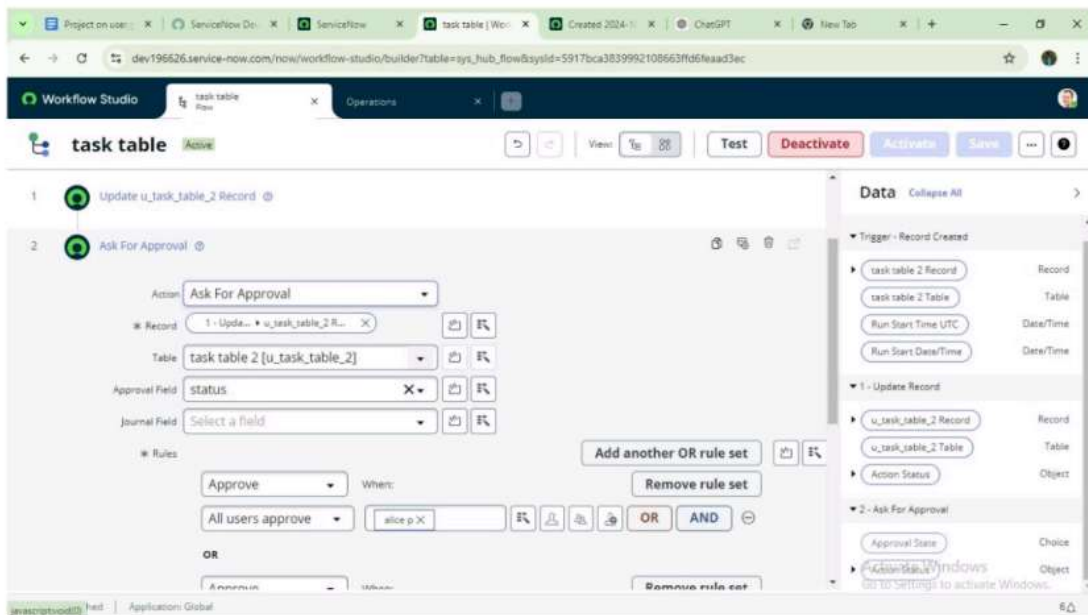
Next step:

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.



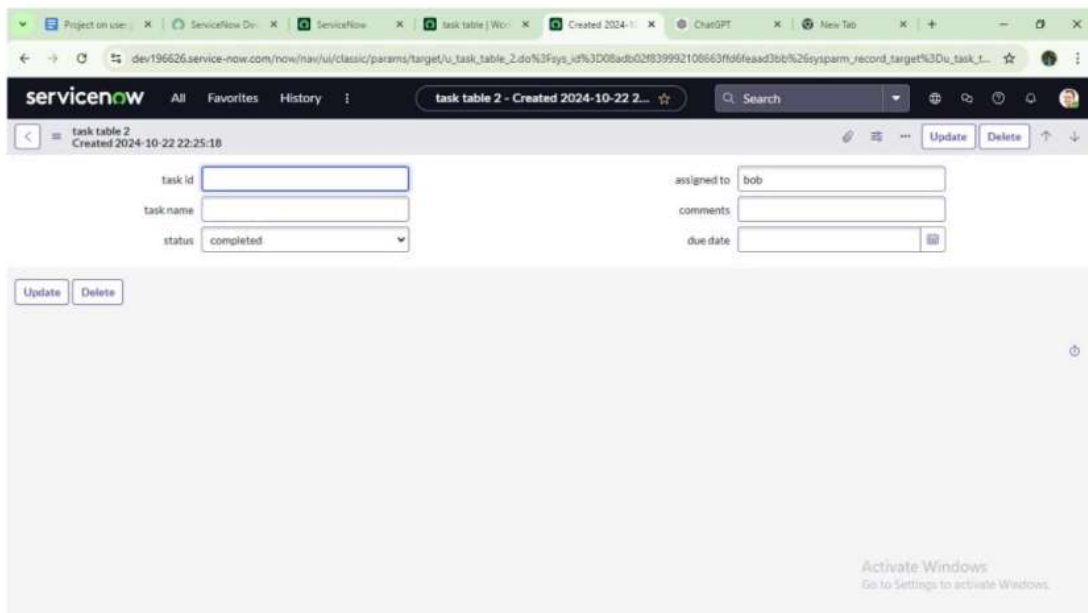
Next step:

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.



9. Go to application navigator search for task table.

10. Its status field is updated to completed



11. Go to application navigator and search for my approval
12. Click on my approval under the service desk.
13. Alice p got approval request then right click on requested then select approved

The screenshot shows the ServiceNow 'Approvals' page. The table lists various approval requests with columns for State, Approver, Comments, Approval for, and Created. The first row is highlighted in blue and marked as 'Approved'.

State	Approver	Comments	Approval for	Created
Approved	alice p		(empty)	2024-10-22 22:26:19
Rejected	Fred Luddy		(empty)	2024-09-01 12:19:33
Requested	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	Christan 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 Kettering		CHG0000095	2024-09-01 06:15:25
Requested	Luke Wilson		CHG0000095	2024-09-01 06:15:25
Requested	Christan Mitchell		CHG0000095	2024-09-01 06:15:25
Requested	Bernard Laboy		CHG0000095	2024-09-01 06:15:25

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.