

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

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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.

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

The screenshot shows the ServiceNow user management interface for a user named 'alice p'. The form is titled 'User - alice p' and includes fields for User ID, First name, Last name, Title, Department, Email, Language, Calendar integration, Time zone, Date format, Business phone, Mobile phone, and Photo. The 'User ID' field is highlighted with a red box. The 'First name' field contains 'alice' and the 'Last name' field contains 'p'. The 'Email' field contains 'alice@gmail.com'. The 'Language' field is set to 'None'. The 'Calendar integration' field is set to 'Outlook'. The 'Time zone' field is set to 'System (America/Los Angeles)'. The 'Date format' field is set to 'System (yyyy-MM-dd)'. The 'Business phone' and 'Mobile phone' fields are empty. The 'Photo' field has a 'Click to add...' link. The 'Active' checkbox is checked. The 'Password needs reset', 'Locked out', 'Web service access only', and 'Internal Integration User' checkboxes are unchecked. The 'Update', 'Set Password', and 'Delete' buttons are visible at the bottom of the form. The left sidebar shows the 'Users' menu item selected. The bottom status bar shows the date and time as 11:56 on 04-11-2024.

Create one more user:

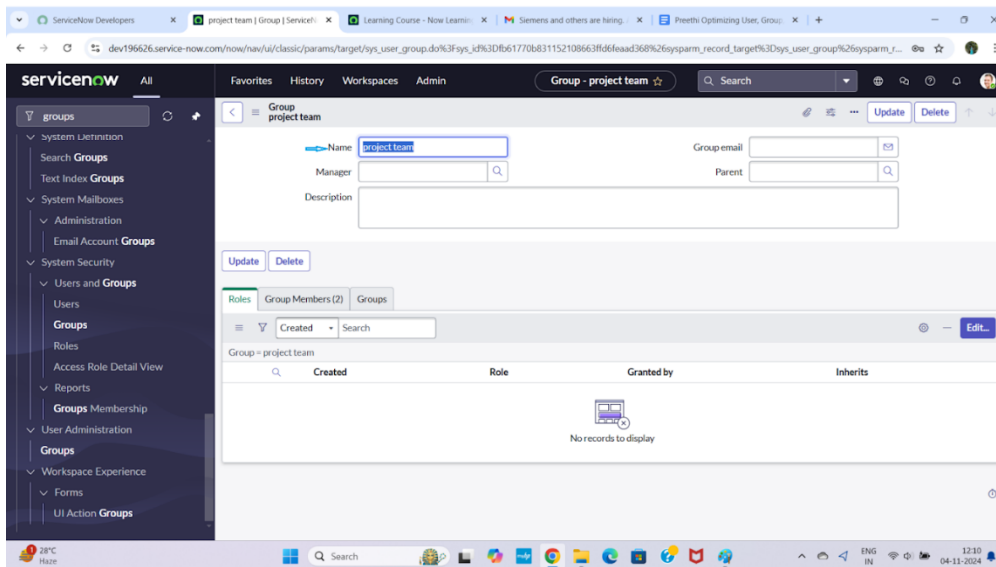
7. Create another user with the following details
8. Click on submit

The screenshot shows the ServiceNow user management interface for a user named 'Bob p'. The form is titled 'User - Bob p' and includes fields for User ID, First name, Last name, Title, Department, Email, Language, Calendar integration, Time zone, Date format, Business phone, Mobile phone, and Photo. The 'User ID' field is highlighted with a red box. The 'First name' field contains 'Bob' and the 'Last name' field contains 'p'. The 'Email' field contains 'bob@gmail.com'. The 'Language' field is set to 'None'. The 'Calendar integration' field is set to 'Outlook'. The 'Time zone' field is set to 'System (America/Los Angeles)'. The 'Date format' field is set to 'System (yyyy-MM-dd)'. The 'Business phone' and 'Mobile phone' fields are empty. The 'Photo' field has a 'Click to add...' link. The 'Active' checkbox is checked. The 'Password needs reset', 'Locked out', 'Web service access only', and 'Internal Integration User' checkboxes are unchecked. The 'Update', 'Set Password', and 'Delete' buttons are visible at the bottom of the form. The left sidebar shows the 'Users' menu item selected. The bottom status bar shows the date and time as 12:07 on 04-11-2024.

Milestone 2: Groups

Activity 1: Create Groups

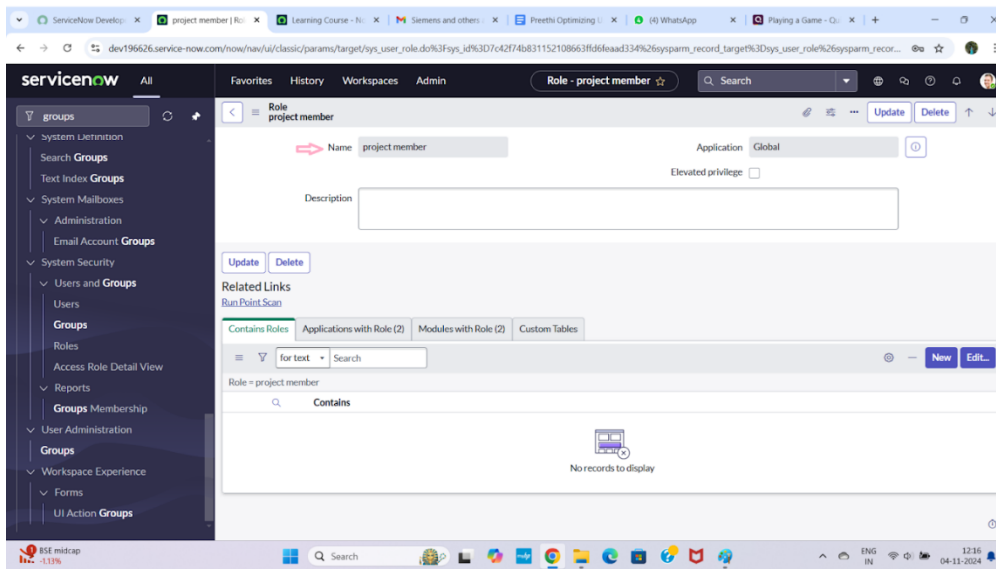
1. Open service now.
2. Click on All >> search for groups
3. Select groups under system security
4. Click on new
5. Fill the following details to create a new group
6. Click on submit



Milestone 3: 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
6. Click on submit



Create one more role:

7. Create another role with the following details : Team member
8. Click on submit

Milestone 4: Table

Activity 1: Create Table

1. Open service now.
2. Click on All >> search for tables
3. Select tables under system definition
4. Click on new
5. Fill the following details to create a new table
Label : project table
Check the boxes Create module & Create mobile module
6. Under new menu name : project table
7. Under table columns give the columns
8. Click on submit

ServiceNow UI: Table - New Record

Name: Create module: ☒ Create mobile module: ☒ Add module to menu: New menu name:

Extends table:

Columns Controls Application Access

Table Columns: for text Search

Column label	Type	Reference	Max length	Default value	Display
project id	Integer				false
project name	String				false
project manger	String				false
start date	Date				false
end date	Date				false
status	Choice				false
description	String				false

Create one more table:

9. Create another table as: task table 2 and fill with following details.
10. Click on submit.

ServiceNow UI: Table - task table 2

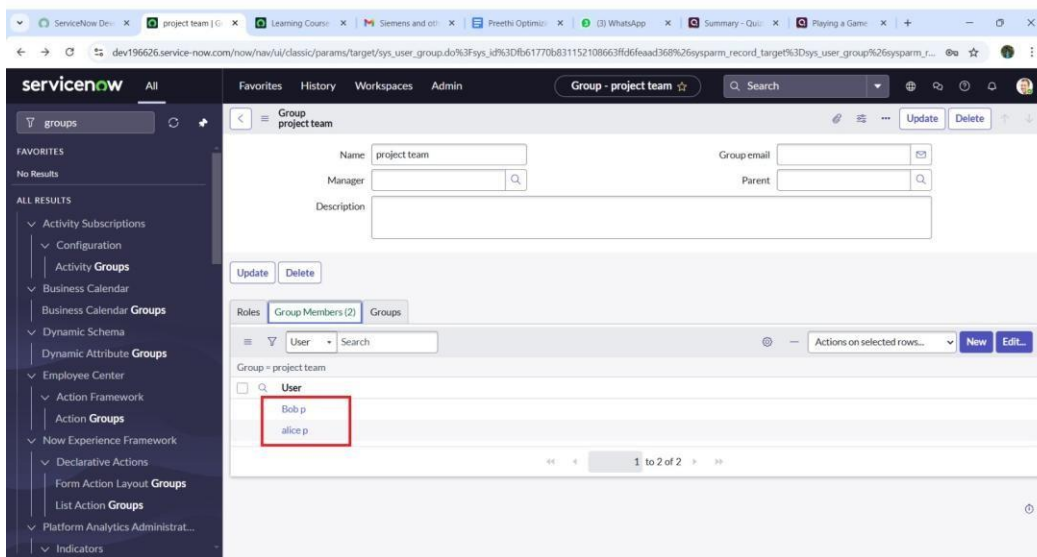
Table Columns: for text Search

Column label	Type	Reference	Max length	Default value	Display
Updated by	String	(empty)	40		false
Updates	Integer	(empty)	40		false
Updated	Date/Time	(empty)	40		false
Sys ID	Sys ID (GUID)	(empty)	32		false
Created by	String	(empty)	40		false
Created	Date/Time	(empty)	40		false
task id	Integer				false
task name	String				false
assigned to	String				false
due date	Date				false
status	Choice				false
comments	String				false
Insert a new row...					

Milestone 5: Assign User to Groups

Activity 1: Assign user to project Team Groups

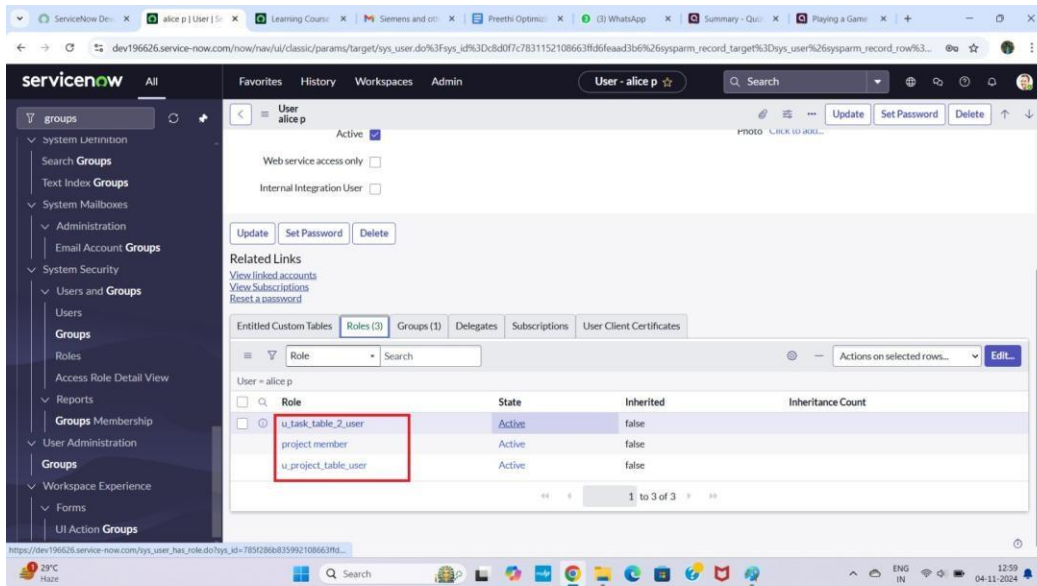
1. Open servicenow.
2. Click on All >> search for groups
3. Select tables under system definition
4. Select the project team group
5. Under group members
6. Click on edit
7. Select alice p and bob p and save



Milestone 6: Assign Roles to Users

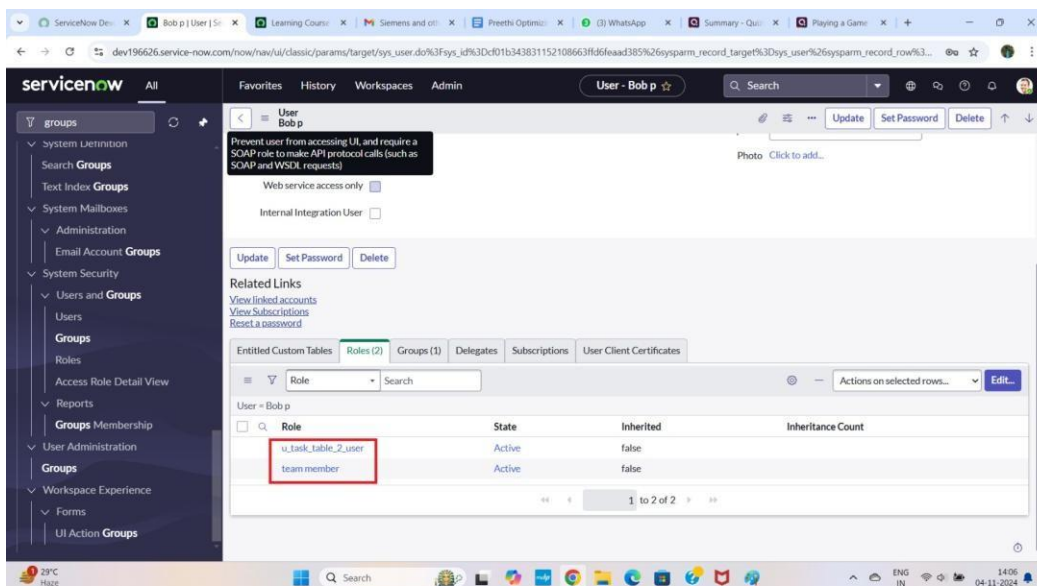
Activity 1: Assign Roles to Alice User

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 2: 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.



Milestone 7: 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 table2 and click on edit application.
6. Give the project member and team member role for task table 2 application

The screenshot shows the 'Application Menu - project table' configuration page in ServiceNow. The page has a dark header with the ServiceNow logo and navigation links. The main content area is light blue and contains the following fields and sections:

- Title:** project table
- Application:** Global
- Active:** ☒
- Roles:** project member
- Category:** Custom Applications
- Hint:** (empty text box)
- Description:** (empty text box)

At the bottom of the form are 'Update' and 'Delete' buttons. A watermark 'Activate Windows' is visible in the bottom right corner.

The screenshot shows the 'Application Menu - task table 2' configuration page in ServiceNow. The page has a dark header with the ServiceNow logo and navigation links. The main content area is light blue and contains the following fields and sections:

- Title:** task table 2
- Application:** Global
- Active:** ☒
- Roles:** u_task_table_2_user, project member, team member
- Category:** Custom Applications
- Hint:** (empty text box)
- Description:** (empty text box)

At the bottom of the form are 'Update' and 'Delete' buttons. A watermark 'Activate Windows' is visible in the bottom right corner. Below the form, there is a 'Modules' section with a search bar and a 'New' button.

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
6. Fill the following details to create a new ACL

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 condition: 1

Add Filter Condition Add "OR" Clause

-- choose field -- -- oper -- -- value --

Conditions

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

7. Scroll down under requires role
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 fields

dev196626.service-now.com/now/nav/ui/classic/params/target/sys_security_acl_list.do%3Fsysparm_query%3Dsys_created_onONToday%40javascript%3Ags.beginningOfToday...

servicenow Access Controls

All > Created on Today

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

1 to 20 of 23

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

dev196626.service-now.com/now/nav/ui/classic/params/target/u_task_table_2.do%3Fsys_id%3D-1%26sys_is_list%3Dtrue%26sys_target%3Du_task_table_2%26sysparm_check...

servicenow task table 2 - Create Created

task table 2
New record

task id

task name

status -- None --

assigned to

comments

due date

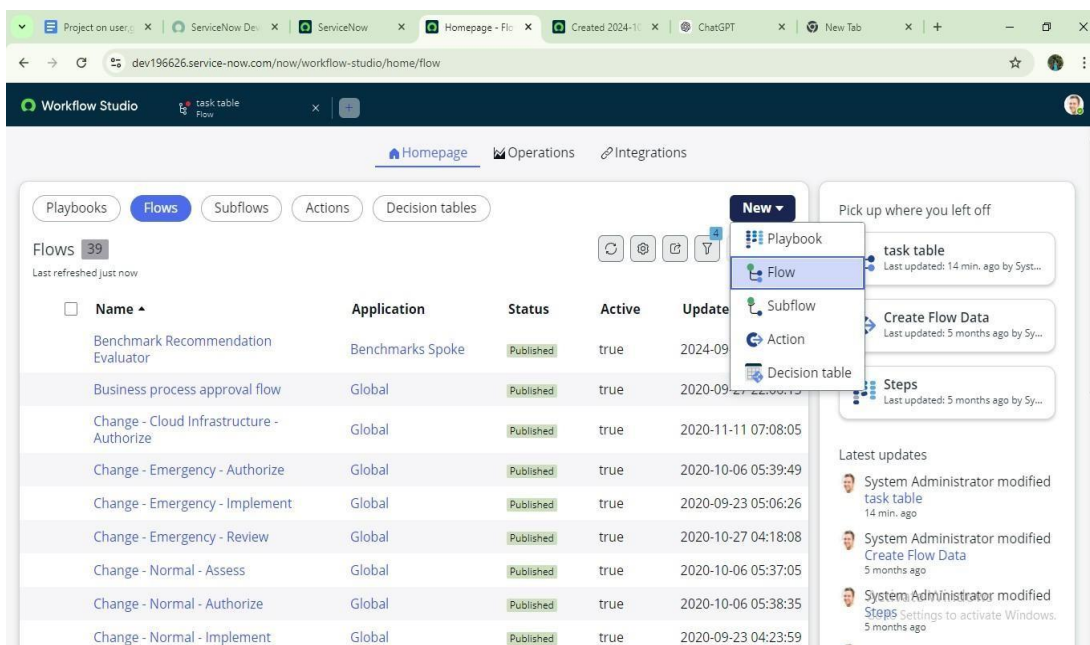
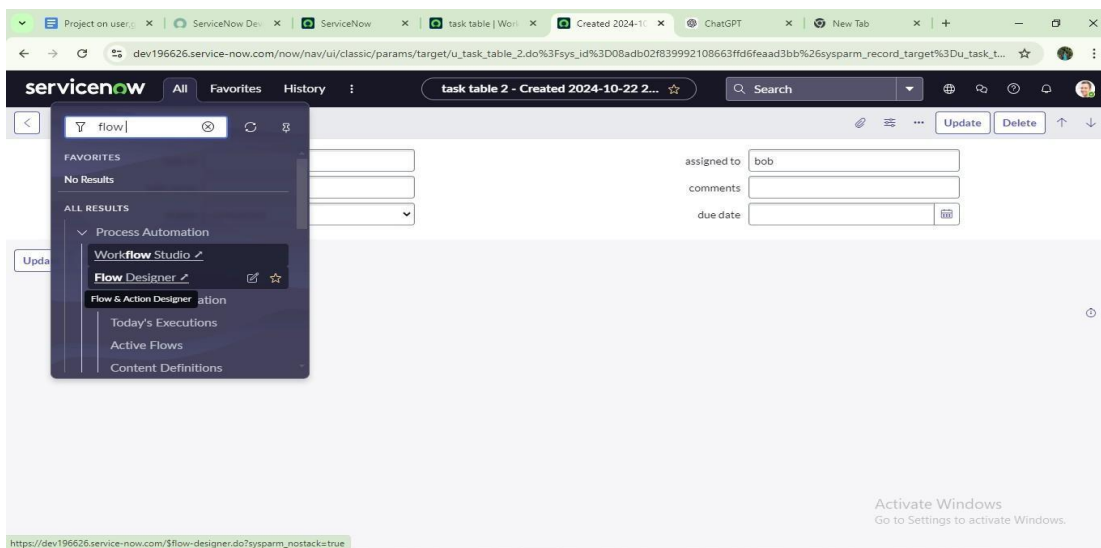
Submit

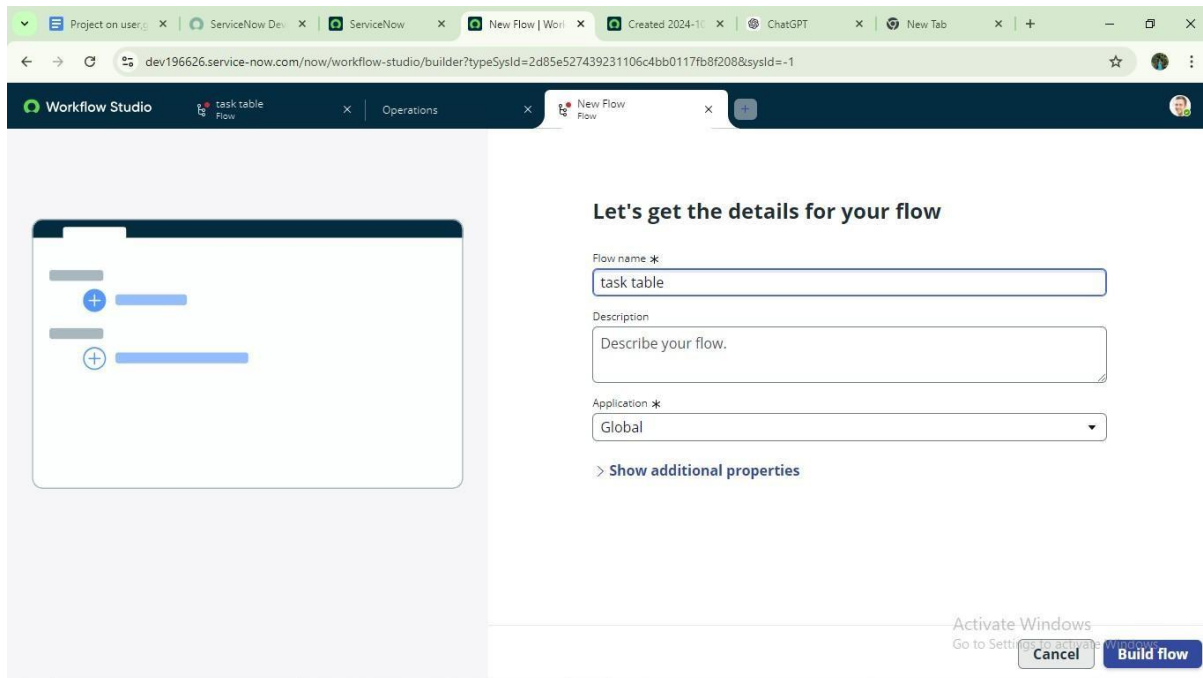
Activate Windows
Go to Settings to activate Windows.

Milestone 9: Flow

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

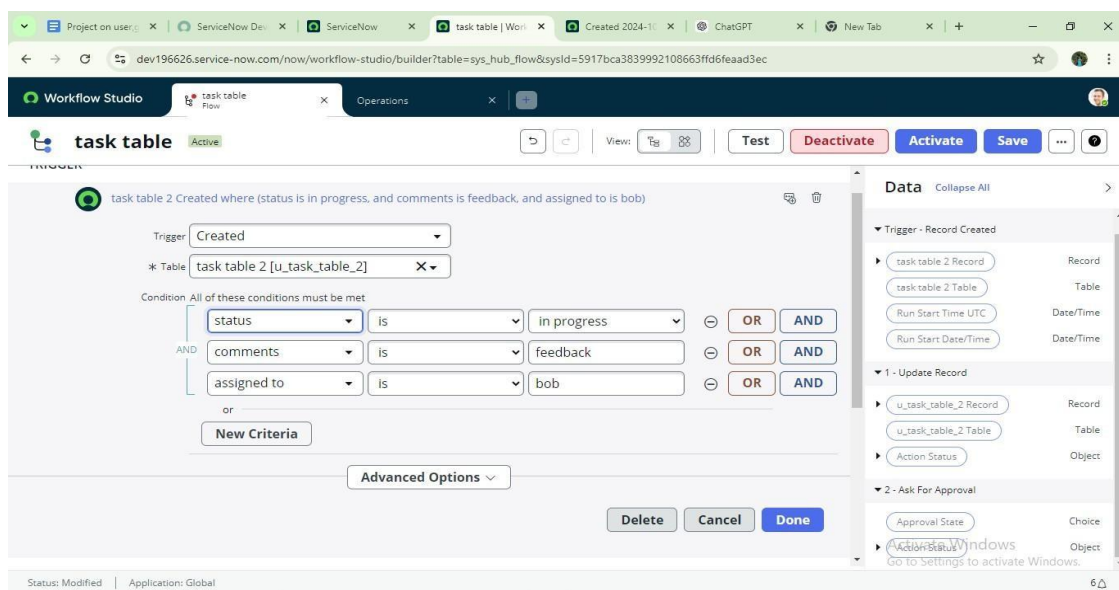
1. Open service now.
2. Click on All >> search for Flow Designer
3. Click on Flow Designer under Process Automation.
4. After opening Flow Designer Click on new and select Flow.
5. Under Flow properties Give Flow Name as “ task table”.
6. Application should be Global.
7. Click build flow.





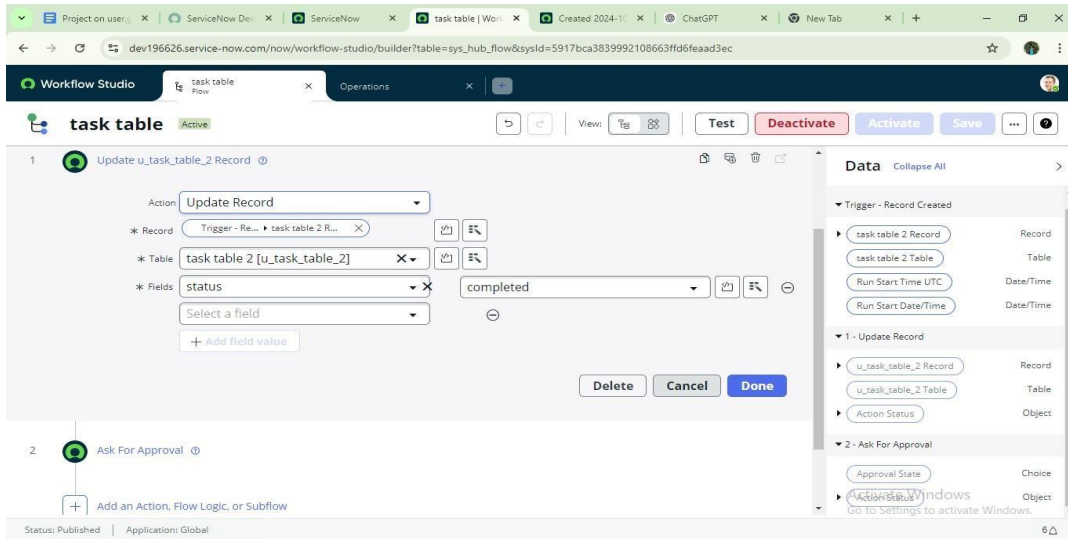
Next step:

1. Click on Add 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.



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.

Workflow Studio interface for "task table" (Active). The workflow consists of two steps:

- Update_u_task_table_2 Record
- Ask For Approval

The "Ask For Approval" step is configured with the following details:

- Action: Ask For Approval
- Record: 1 - Upda... u_task_table_2 R...
- Table: task table 2 [u_task_table_2]
- Approval Field: status
- Journal Field: Select a field
- Rules: Approve (When: All users approve, alice p X)

The Data pane on the right shows the following structure:

- Trigger - Record Created
 - task table 2 Record (Record)
 - task table 2 Table (Table)
 - Run Start Time UTC (Date/Time)
 - Run Start Date/Time (Date/Time)
- 1 - Update Record
 - u_task_table_2 Record (Record)
 - u_task_table_2 Table (Table)
 - Action Status (Object)
- 2 - Ask For Approval
 - Approval State (Choice)
 - Action Status (Object)

9. Go to application navigator search for task table.

10. It status field is updated to completed

ServiceNow application navigator view for "task table 2 - Created 2024-10-22 22:25:18". The task details are as follows:

Field	Value
task id	
task name	
status	completed
assigned to	bob
comments	
due date	

Buttons: Update, Delete

- 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

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	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 Kettering		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

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.