

TITLE

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

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TEAM SIZE	: 4
TEAM LEADER	: Rama Krishnan R
TEAM MEMBER 1	: Thamesh S
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ProblemStatement :

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 :

The objective of this project is to streamline user, group, and role management in ServiceNow for improved security and efficiency. It aims to implement Access Control Lists (ACLs) to enforce role-based permissions and protect sensitive data. Automated workflows will be designed to handle onboarding, role assignment, and deprovisioning processes. The project focuses on reducing manual effort, minimizing errors, and ensuring compliance with organizational policies. Ultimately, it seeks to deliver a scalable and secure access management framework.

Skills :

This project enhances skills in configuring User, Group, and Role management within ServiceNow.

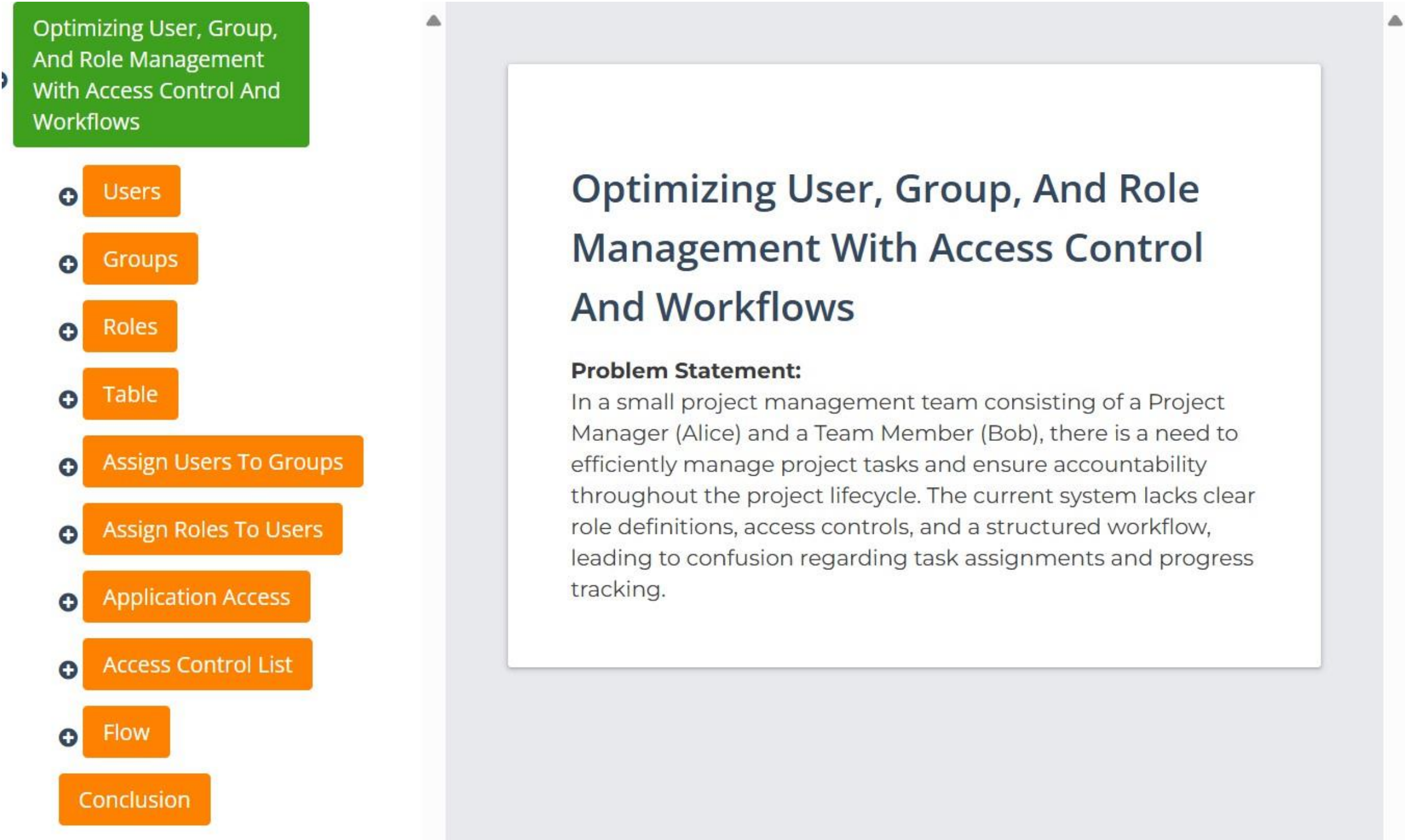
It develops expertise in creating and applying Access Control Lists (ACLs) for secure data access.

Hands-on experience is gained in designing automated workflows for user provisioning and approvals.

It strengthens problem-solving and analytical skills for optimizing security and efficiency.

The project also builds documentation and project management skills for effective implementation.

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



USER

STEPS :

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 displays the ServiceNow User Administration interface. The left sidebar shows the navigation menu with 'Users' selected under 'System Security'. The main content area shows the 'New User' form for a user named 'alice p'. The form fields are as follows:

- User ID:
- First name:
- Last name:
- Title:
- Department:
- Password needs reset: ☐
- Locked out: ☐
- Active: ☒
- Web service access only: ☐
- Internal Integration User: ☐
- Email:
- Language:
- Calendar integration:
- Time zone:
- Date format:
- Business phone:
- Mobile phone:
- Photo: [Click to add...](#)

Buttons at the top right: Update, Set Password, Delete. Buttons at the bottom: Update, Set Password, Delete.

Related Links: [View linked accounts](#), [View Subscriptions](#), [Reset a password](#).

Entitled Custom Tables: Roles (3), Groups (1), Delegates, Subscriptions, User Client Certificates.

Create one more user:

7. Create another user with the following details

8. Click on submit

The screenshot displays the ServiceNow User Administration interface for creating a new user. The left sidebar shows the navigation menu with 'Users' selected. The main content area shows the 'User - Bob p' form. The form fields are as follows:

Field	Value
User ID	bob
First name	Bob
Last name	p
Title	
Department	
Password needs reset	<input type="checkbox"/>
Locked out	<input type="checkbox"/>
Active	<input checked="" type="checkbox"/>
Web service access only	<input type="checkbox"/>
Internal Integration User	<input type="checkbox"/>
Email	bob@gmail.com
Language	-- None --
Calendar integration	Outlook
Time zone	System (America/Los Angeles)
Date format	System (yyyy-MM-dd)
Business phone	
Mobile phone	
Photo	Click to add...

Buttons at the top right: Update, Set Password, Delete.

Buttons at the bottom: Update, Set Password, Delete.

Related Links: View linked accounts, View Subscriptions, Reset a password.

Entitled Custom Tables: Roles (2), Groups (1), Delegates, Subscriptions, User Client Certificates.

GROUPS

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

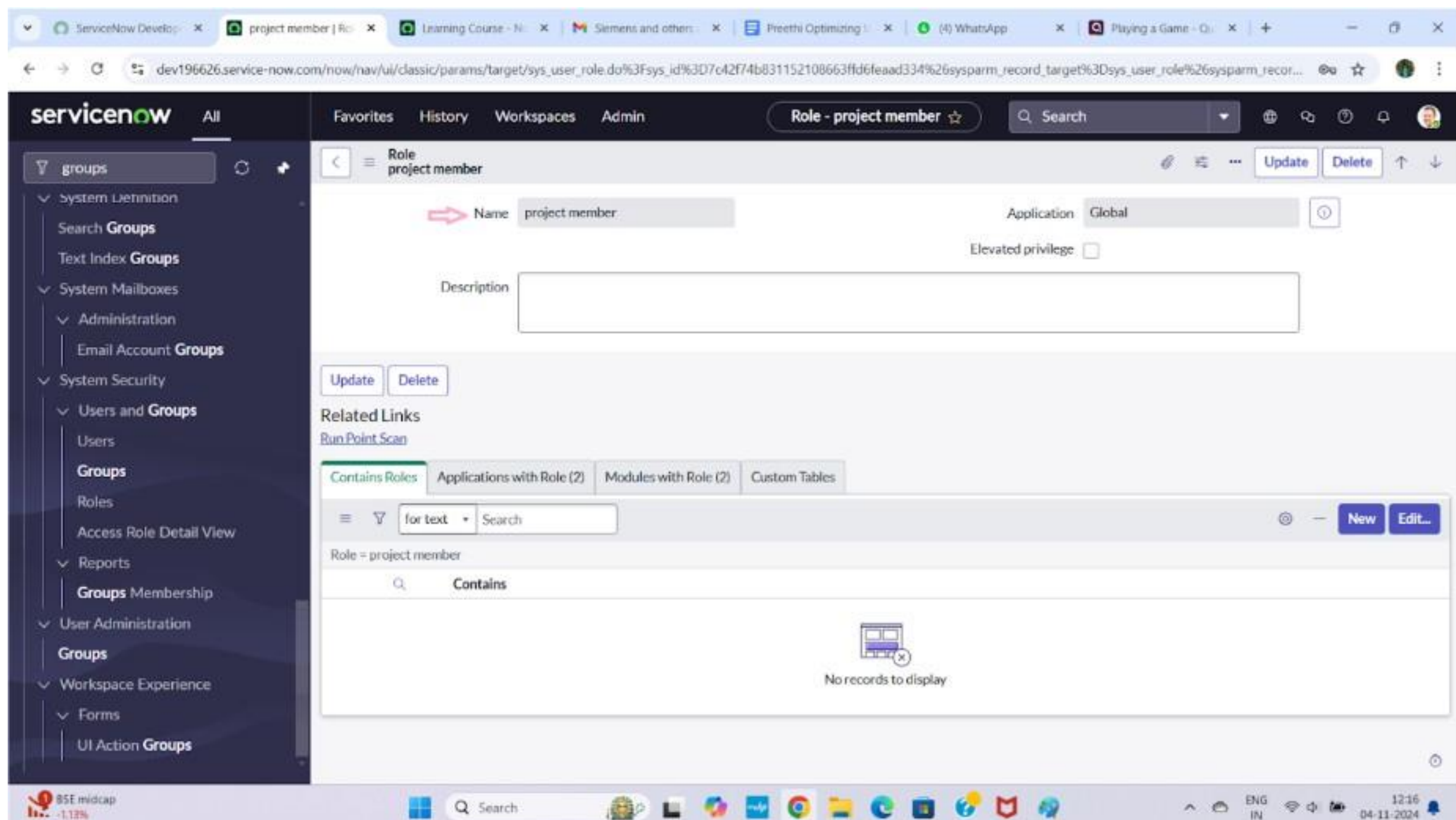
The screenshot shows the ServiceNow interface for creating a new group. The left sidebar contains a navigation menu with categories like System Definition, System Mailboxes, Administration, System Security, Users and Groups, Reports, User Administration, Workspace Experience, and Forms. The main content area is titled 'Group - project team' and contains a form with the following fields: Name (filled with 'project team'), Manager (empty), Description (empty), Group email (empty), and Parent (empty). Below the form are 'Update' and 'Delete' buttons. A tabbed interface shows 'Roles', 'Group Members (2)', and 'Groups'. The 'Groups' tab is active, displaying a table with columns: Created, Role, Granted by, and Inherits. The table is currently empty, showing 'No records to display'.

Created	Role	Granted by	Inherits
No records to display			

ROLES

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



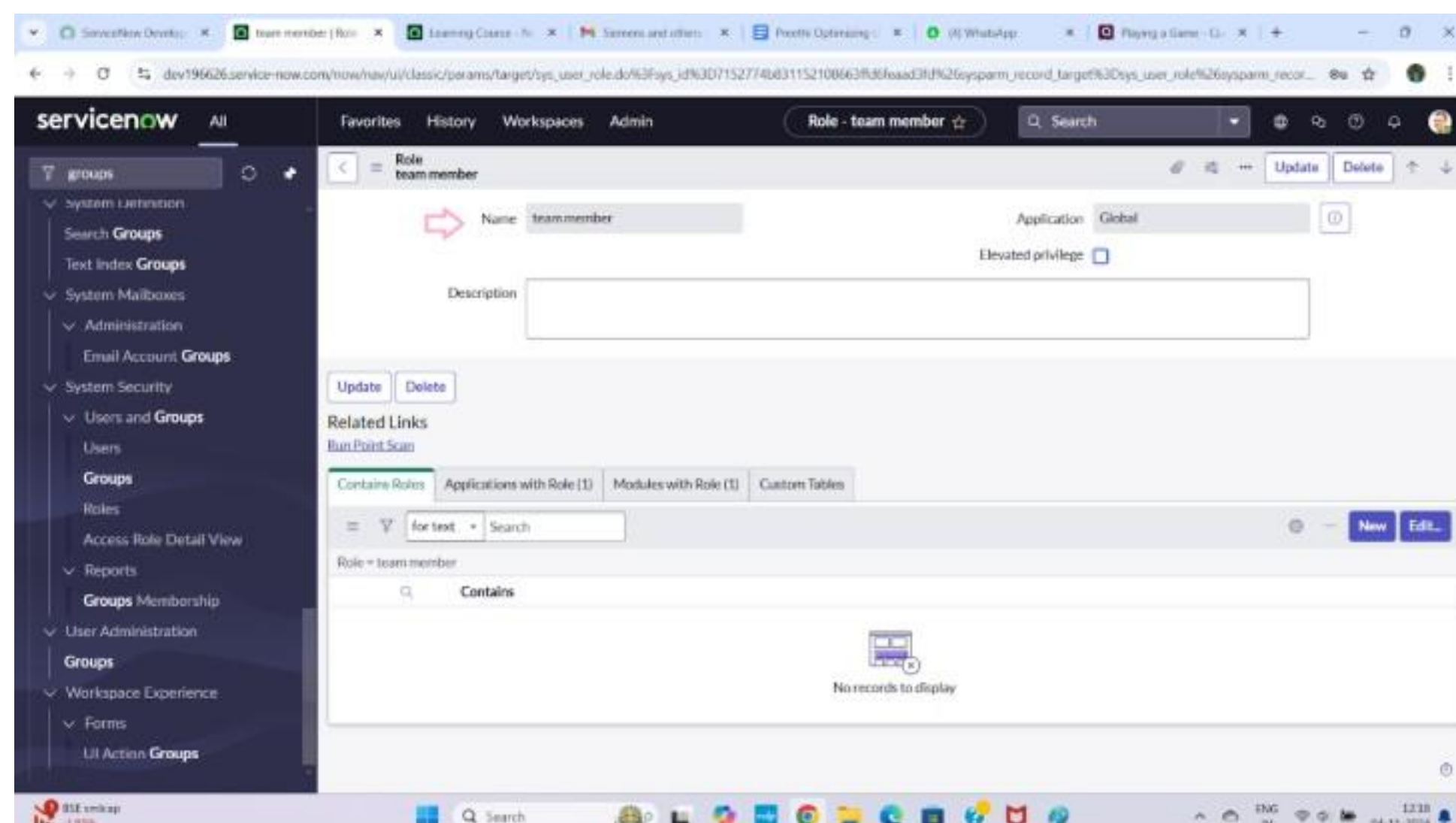
Create one more role:

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

TABLE

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

Table - New Record

* Name:

Extends table:

Create module: ☒

Create mobile module: ☒

Add module to menu:

New menu name:

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.

Table - task table 2

Table Columns: for text | Search

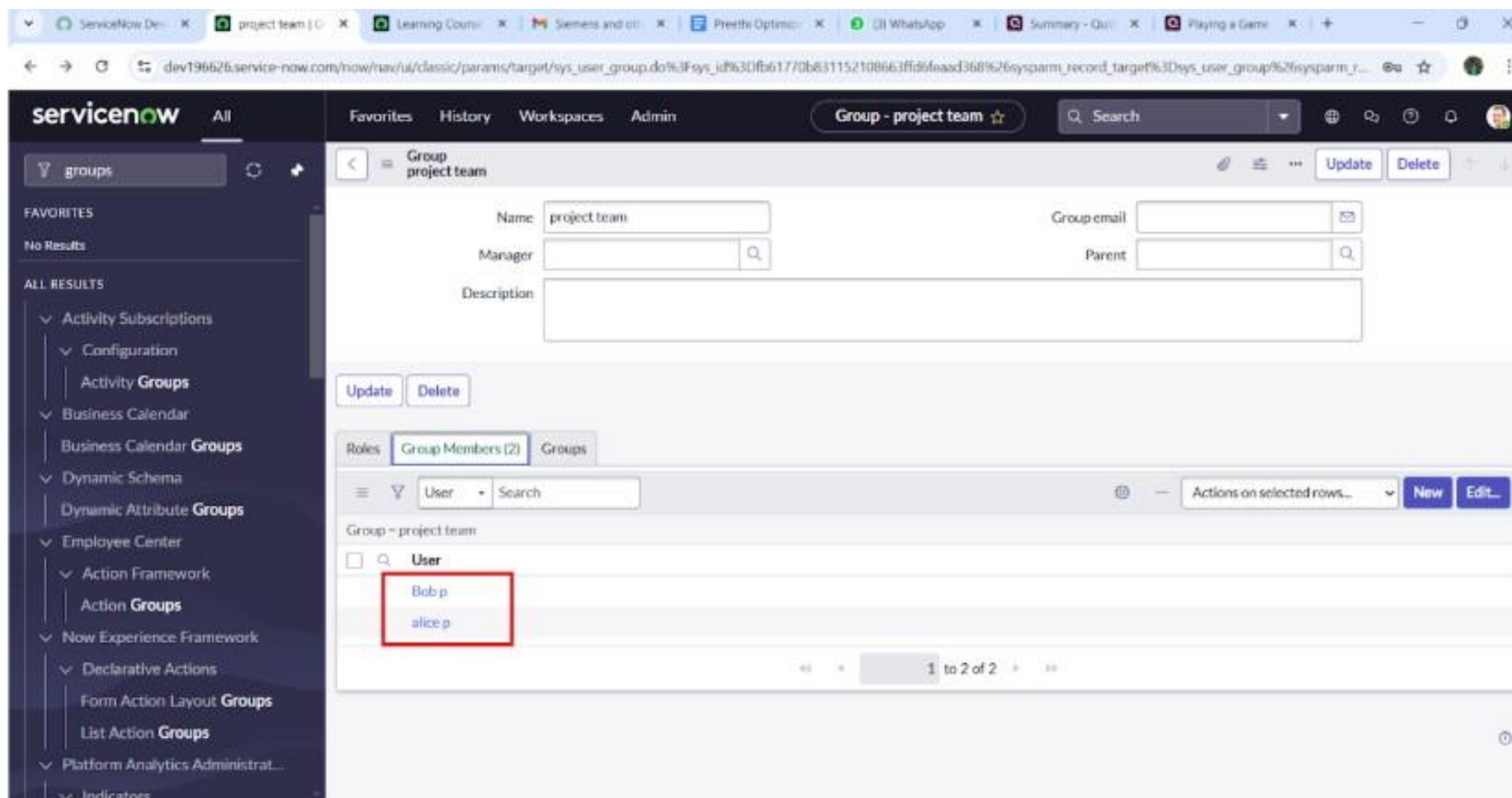
Column label	Type	Reference	Max length	Default value	Display
Updated by	String	(empty)	40		false
Updates	Integer	(empty)	40		false
Updated	Date/Time	(empty)	40		false
Sys ID	Sys ID (GUID)	(empty)	32		false
Created by	String	(empty)	40		false
Created	Date/Time	(empty)	40		false
task Id	Integer				false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

1 to 6 of 6 | New

ASSIGN USER TO GROUPS

Assign users to project team group

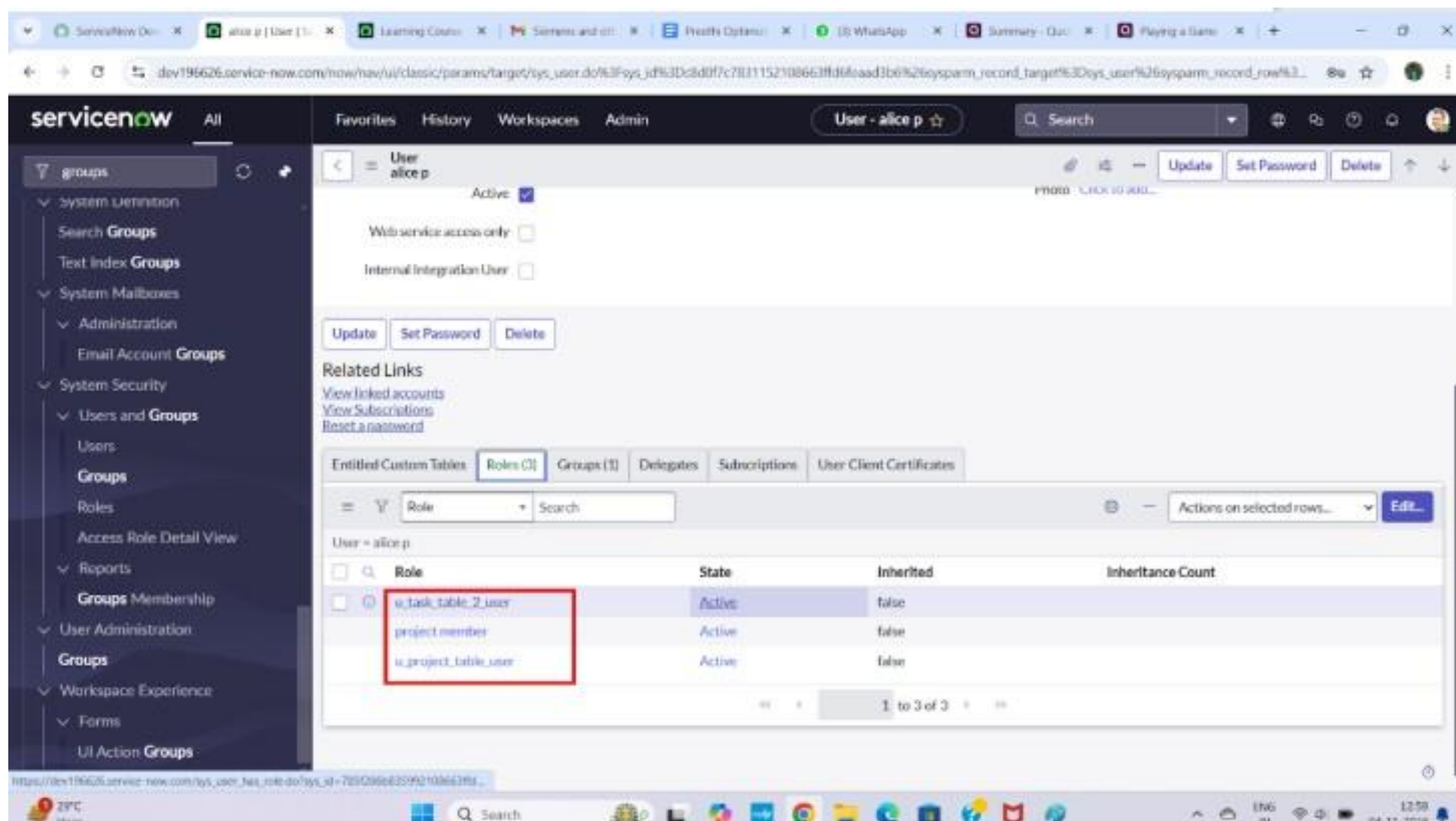
1. Open service now.
2. Click on All >>search for groups
3. Select tables under system definition
4. Select the project team group
5. Under group members
6. Click on edit
7. Select alice p and bob p and save



ASSIGN ROLES TO USERS

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.



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
7. We can see the task table2.

The screenshot shows the ServiceNow user profile page for 'Bob p'. The left sidebar contains a navigation menu with categories like 'System Definition', 'System Mailboxes', 'Administration', 'System Security', 'Users and Groups', 'Reports', 'Groups Membership', 'User Administration', 'Workspace Experience', and 'Forms'. The main content area displays the user's profile with a warning: 'Prevent user from accessing UI, and require a SOAP role to make API protocol calls (such as SOAP and WSDL requests)'. Below this, there are checkboxes for 'Web service access only' and 'Internal Integration User'. The 'Roles' tab is selected, showing a table of roles assigned to the user. The role 'u_task_table_2_user' is highlighted with a red box. The table has columns for 'Role', 'State', 'Inherited', and 'Inheritance Count'.

Role	State	Inherited	Inheritance Count
u_task_table_2_user	Active	false	
team member	Active	false	

APPLICATIONACCESS

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 ServiceNow web interface for configuring an application menu. The browser tabs include 'Copy of template - Google Doc', 'project on users groups roles', 'ServiceNow Developers', and 'project table | Application Men'. The URL is 'dev196626.service-now.com/now/nav/ui/classic/params/target/sys_app_application.do%3Fsys_id%3D9705334f831152108663ffd6feaad362'. The page title is 'Application Menu - project table'. The breadcrumb is 'Application Menu > project table'. The page contains several sections with input fields and buttons:

- Title:** 'project table' (input field)
- Application:** 'Global' (dropdown menu)
- Active:** ☒ (checkbox)
- Roles:** (input field with a pencil icon)
- Category:** 'Custom Applications' (input field with a search icon and an information icon)
- Hint:** (input field)
- Description:** (input field)

At the bottom, there are 'Update' and 'Delete' buttons. A watermark 'Activate Windows Go to Settings to activate Windows.' is visible in the bottom right corner.

Copy of template - Google | ServiceNow Developers | project table | Application M | task table 2 | Application M | ChatGPT

dev196626.service-now.com/now/nav/ui/classic/params/target/sys_app_application.do%3Fsys_id%3D114bece3835992108663ffd6fead3dc

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

Application Menu task table 2 | Update | Delete

True

Application

Order

Active ☒

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

Roles

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

Category

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 | Actions on selected rows... | New

ACCESS CONTROL LIST

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 --

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 All Favorites History Workspaces Access Controls Search

Access Controls Name Search Actions on selected rows...

All > Created on Today

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

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 All Favorites History task table 2 - Create Created

task table 2 New record Submit

task id assigned to

task name comments

status -- None -- due date

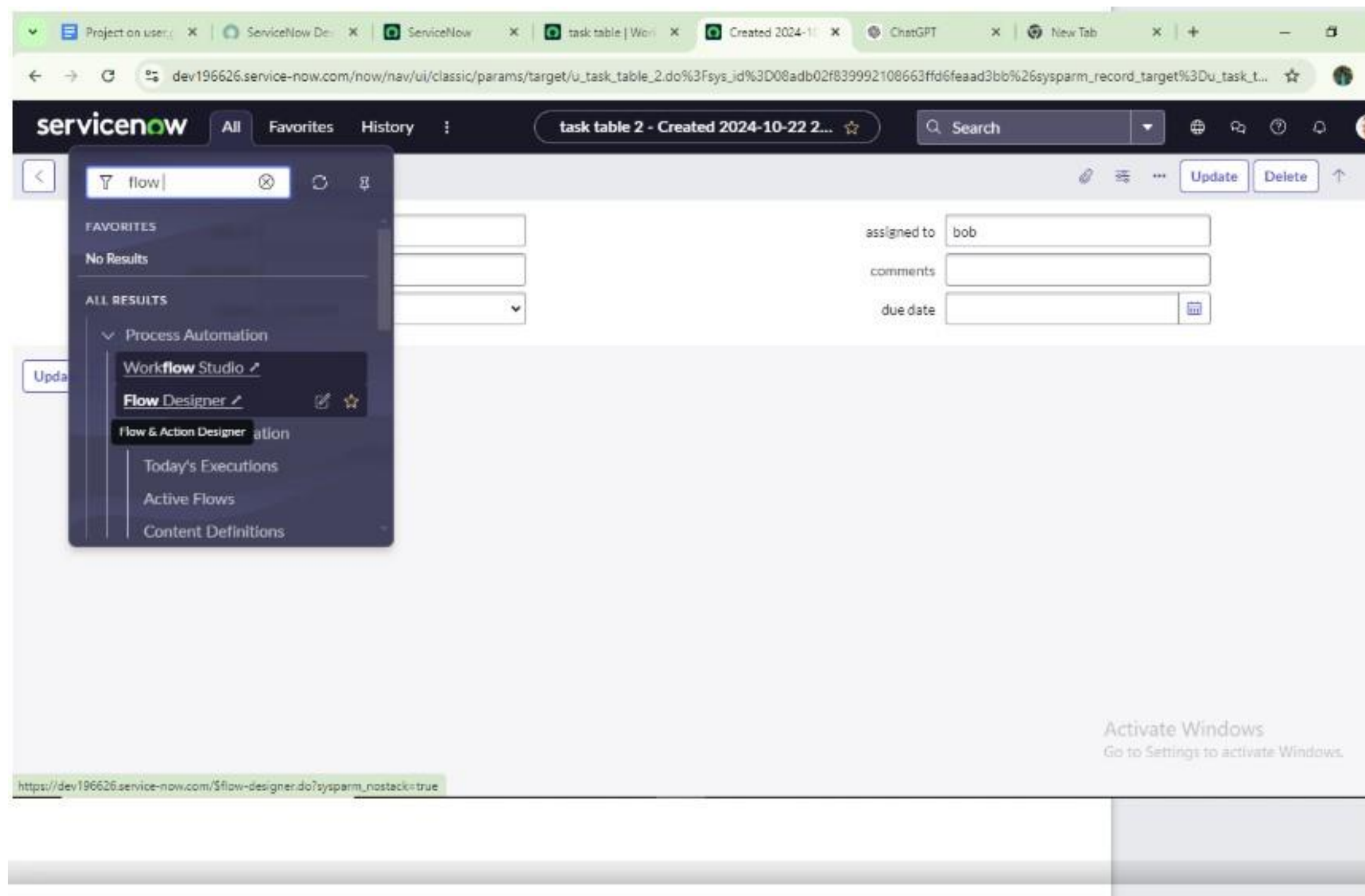
Submit

Activate Windows
Go to Settings to activate Windows.

FLOW

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.



Project on user...ServiceNow Dev...ServiceNow...Homepage - Fl...Created 2024-1...ChatGPT...New Tab

dev196626.service-now.com/now/workflow-studio/home/flow

Workflow Studiotask tableFlow

HomepageOperationsIntegrations

PlaybooksFlowsSubflowsActionsDecision tables

Flows39

Last refreshed just now

Name

Benchmark Recommendation Evaluator

Benchmarks Spoke

Published

true

2024-09

Name

Business process approval flow

Global

Published

true

2020-09

Name

Change - Cloud Infrastructure - Authorize

Global

Published

true

2020-11-11 07:08:05

Name

Change - Emergency - Authorize

Global

Published

true

2020-10-06 05:39:49

Name

Change - Emergency - Implement

Global

Published

true

2020-09-23 05:06:26

Name

Change - Emergency - Review

Global

Published

true

2020-10-27 04:18:08

Name

Change - Normal - Assess

Global

Published

true

2020-10-06 05:37:05

Name

Change - Normal - Authorize

Global

Published

true

2020-10-06 05:38:35

Name

Change - Normal - Implement

Global

Published

true

2020-09-23 04:23:59

New

Playbook

Flow

Subflow

Action

Decision table

Pick up where you left off

task table

Last updated: 14 min. ago by Syst...

Create Flow Data

Last updated: 5 months ago by Sy...

Steps

Last updated: 5 months ago by Sy...

Latest updates

System Administrator modified task table

14 min. ago

System Administrator modified Create Flow Data

5 months ago

System Administrator modified Steps

Settings to activate Windows.

5 months ago

Custom Administrator modified

Project on user...ServiceNow Dev...ServiceNow...New Flow | Wor...Created 2024-1...ChatGPT...New Tab

dev196626.service-now.com/now/workflow-studio/builder?typeSysId=2d85e527439231106c4bb0117fb8f208&sysId=-1

Workflow Studiotask tableFlowNew Flow

Let's get the details for your flow

Flow name *

task table

Description

Describe your flow.

Application *

Global

> Show additional properties

Activate Windows

Go to Settings to activate Windows

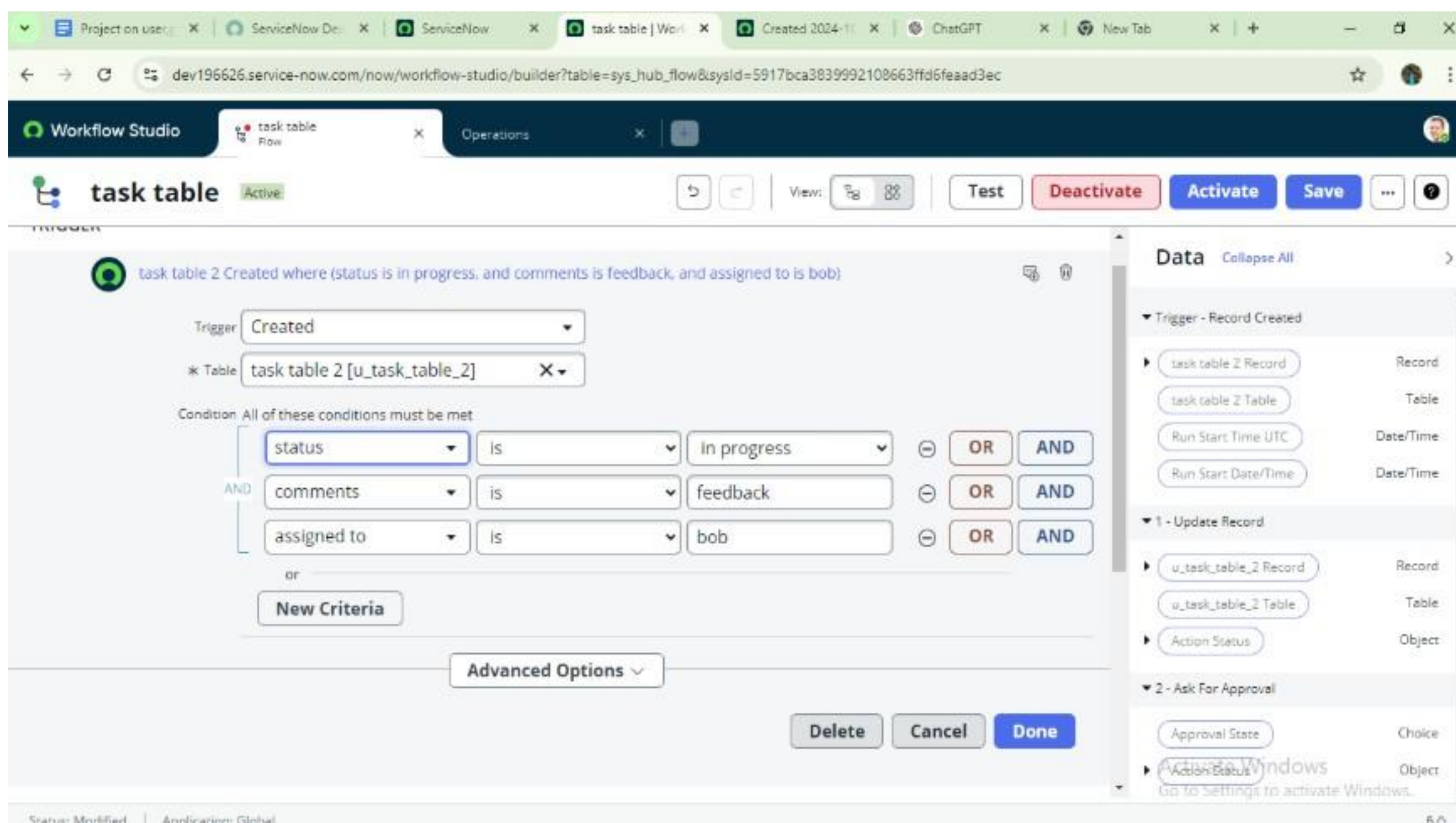
Cancel

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

0. After that click on Done.

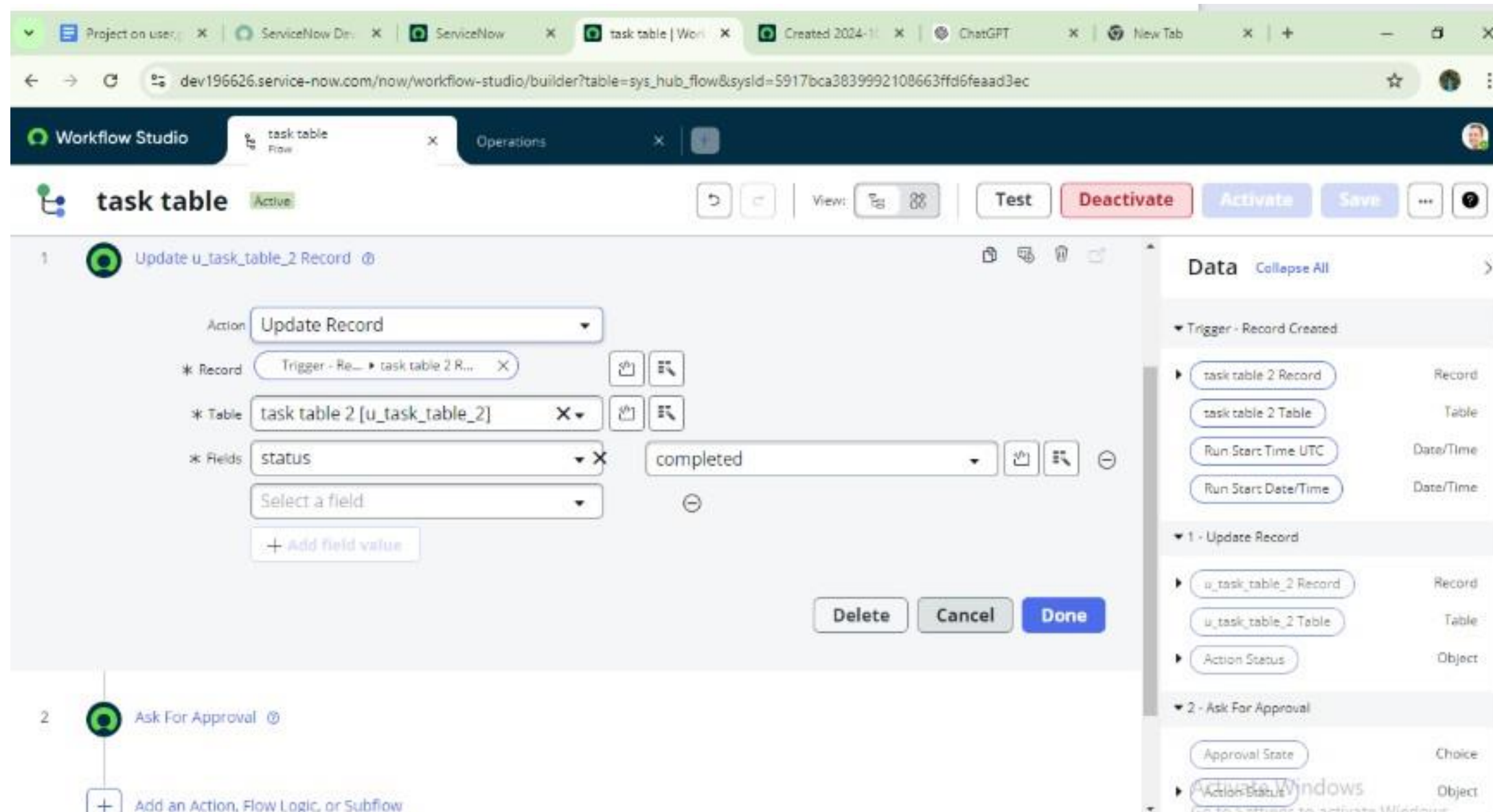


Next step:

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

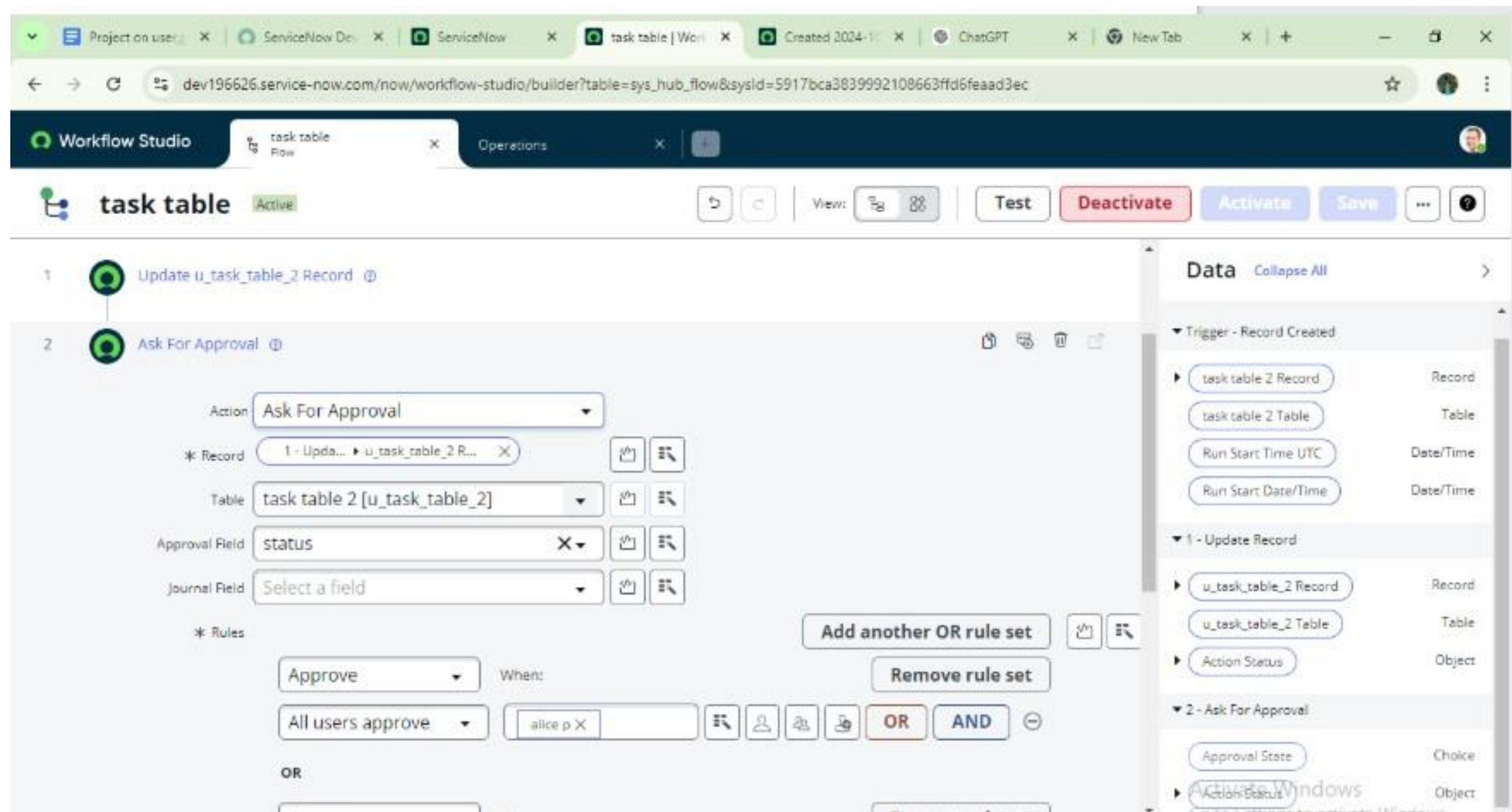
5. Add fields as “status” and value as “completed”

6. Click on Done.



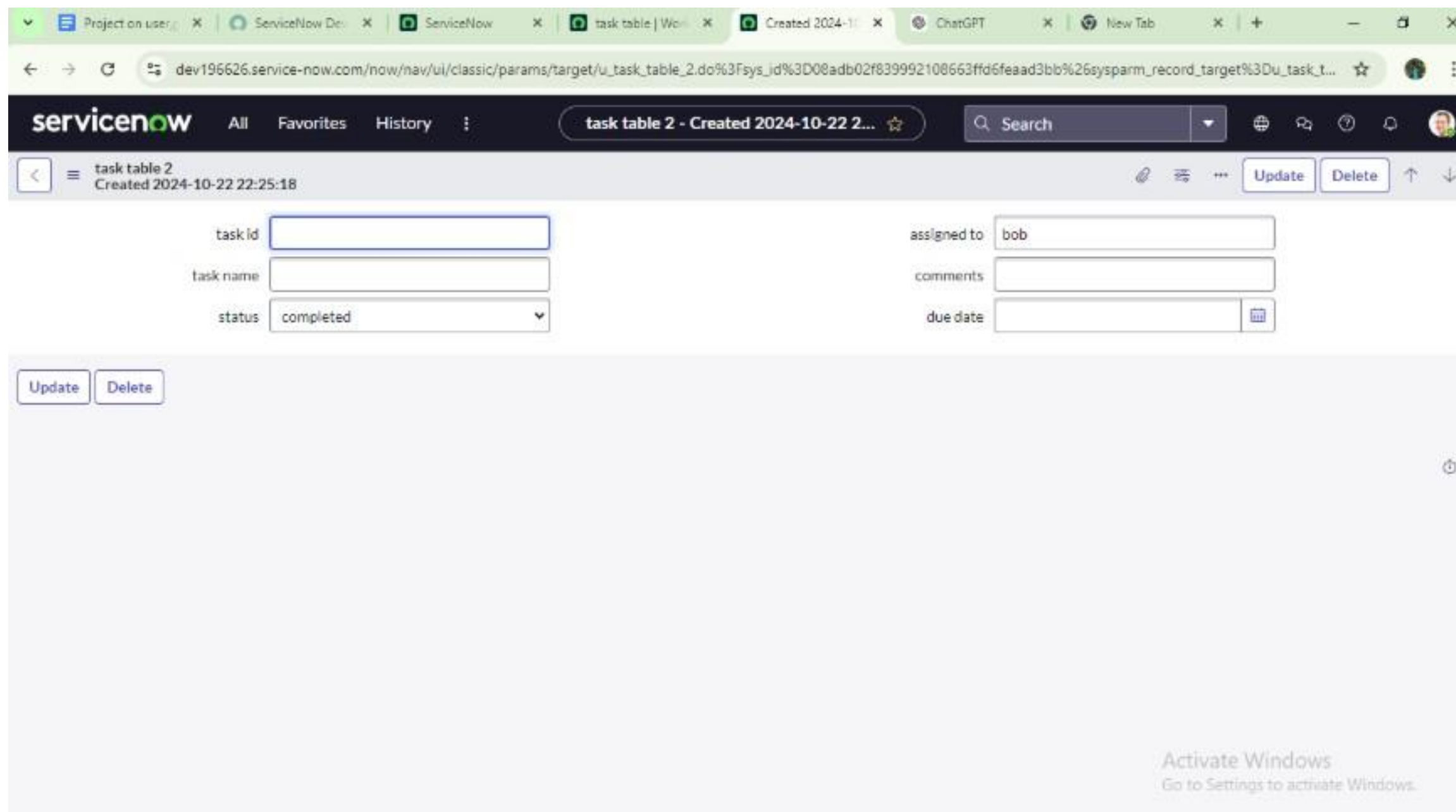
Next step:

- 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.**



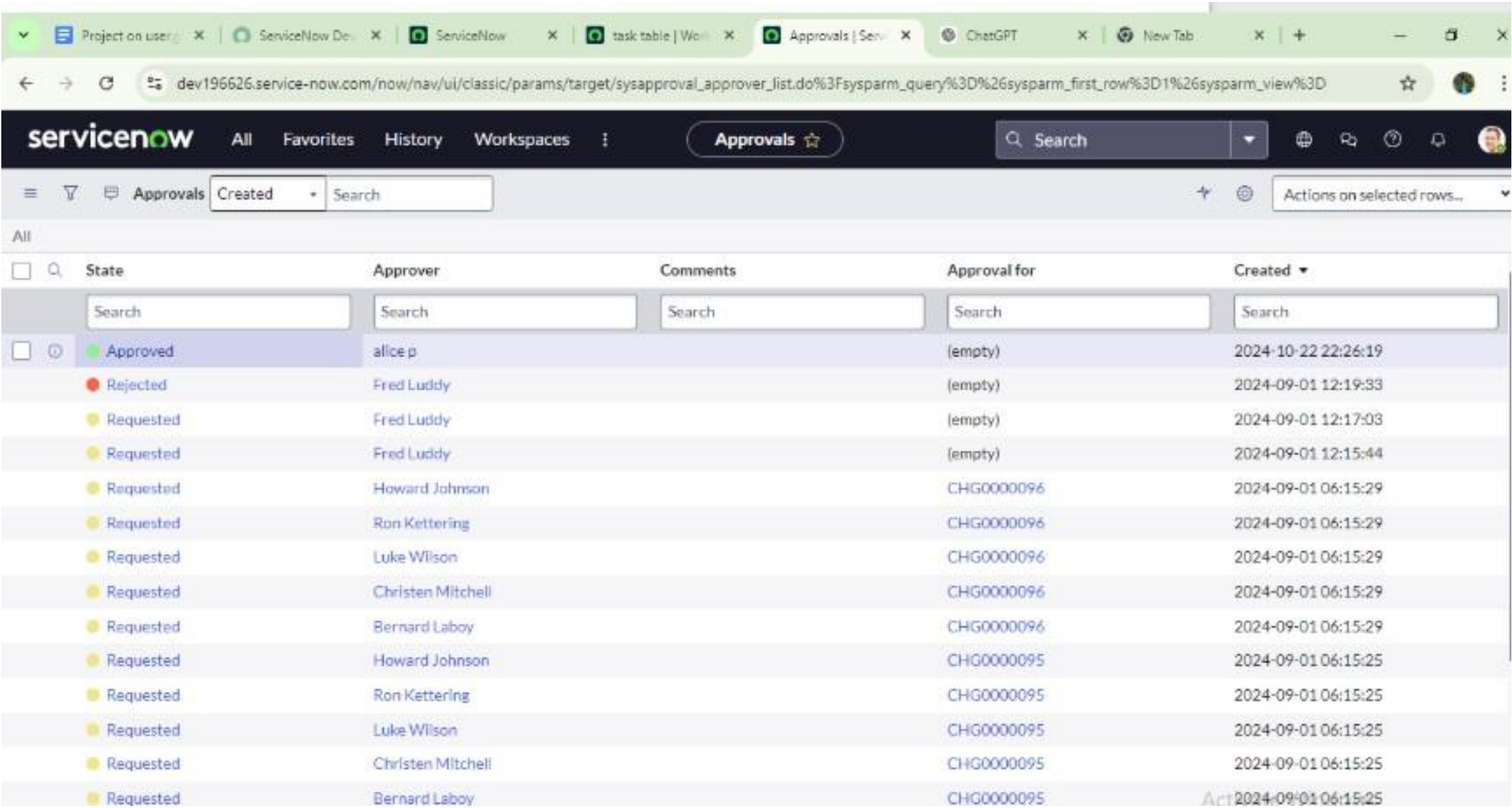
9. Go to application navigator search for task table.

10. It 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 as 'Approved' by 'alice p' on '2024-10-22 22:26:19'. Other rows are in 'Requested' or 'Rejected' states, mostly from 'Fred Luddy' and others, with creation dates around '2024-09-01'.

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

Drive Link:
https://drive.google.com/file/d/17_AfXCx6aKsWw5B_DcdIxGZU4doERLvL/view?usp=drive_sdk

Click Here To Watch Demo Video