

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

## Introduction:

Effective management of users, groups, and roles is key to securing systems and ensuring efficient operations. By implementing access control strategies like Role-Based Access Control (RBAC) and automating workflows, organizations can grant the right access at the right time, minimize security risks, and streamline administrative tasks. This guide explores how to optimize user management with best practices for access control and workflow automation, balancing security and efficiency.

## Milestones:

1. USERS
2. GROUPS
3. ROLES
4. ASSIGN USERS TO GROUPS
5. ASSIGN ROLES TO USERS
6. APPLICATION ACCESS
7. ACCESS CONTROL LIST
8. FLOW

**TEAM NAME: TECH TITANS**

**Team ID : NM2025TMID18056**

**Team Leader : STEPHEN BENO R**

**Team member : EUGINE I**

**Team member : VISHNU MOORTHY V**

**Team member : ANTO FRANKLIN XAVIER S**

## 1. USERS:

**Activity: 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

The screenshot shows the ServiceNow user creation interface. The browser address bar displays a URL with a long alphanumeric string. The ServiceNow header includes navigation tabs (All, Favorites, History, Workspaces) and a search bar. The page title is 'User - alice p'. The form contains the following fields and options:

- User ID:** Alice
- First name:** alice
- Last name:** p
- Title:** (empty)
- Department:** (empty)
- Email:** alice@gmail.com
- Identity type:** Human
- Language:** -- None --
- Calendar integration:** Outlook
- Time zone:** System (America/Los\_Angeles)
- Date format:** System (yyyy-MM-dd)
- Business phone:** (empty)
- Mobile phone:** (empty)
- Photo:** Click to add...
- Active:** ☒
- Internal Integration User:** ☐
- Password needs reset:** ☐
- Locked out:** ☐

Buttons at the bottom of the form include 'Update', 'Set Password', and 'Delete'. Below the form, there are 'Related Links' for 'View linked accounts', 'View Subscriptions', and 'Reset a password'.

## Create one more user:

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

ServiceNow Developers | bob p | User | ServiceNow | - Student | 85rSWsAAAAAGSURBVAMA... | (1) WhatsApp

dev339347.service-now.com/now/nav/ui/classic/params/target/sys\_user.do%3Fsys\_id%3Dbb09c4d1c3b72210ed217405e401314b%26sysparm\_record\_target%3Ds...

serviceNow All Favorites History Workspaces User - bob p Search Update Set Password Delete

User ID: Bob (highlighted with a red box and arrow)  
First name: bob  
Last name: p  
Title:   
Department:   
Password needs reset: ☐  
Locked out: ☐  
Active: ☒  
Internal Integration User: ☐  
Email: bob@gmail.com  
Identity type: Human  
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...](#)

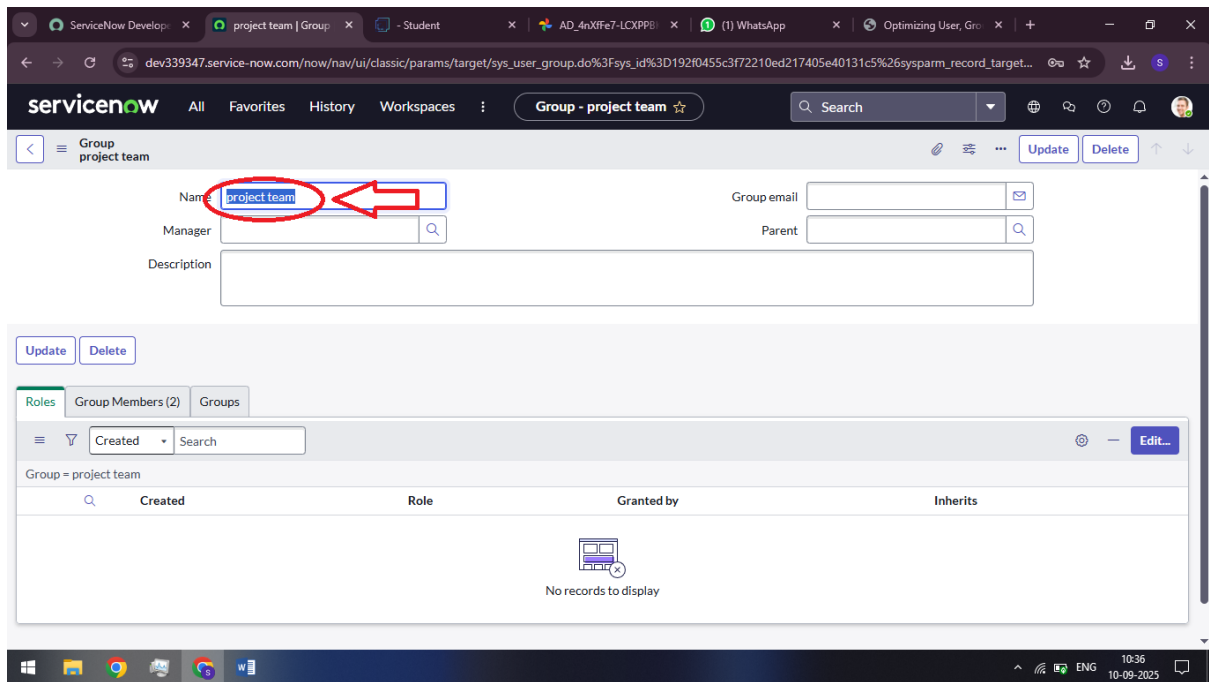
Update Set Password Delete

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

## 2. GROUPS:

### Activity: Create groups

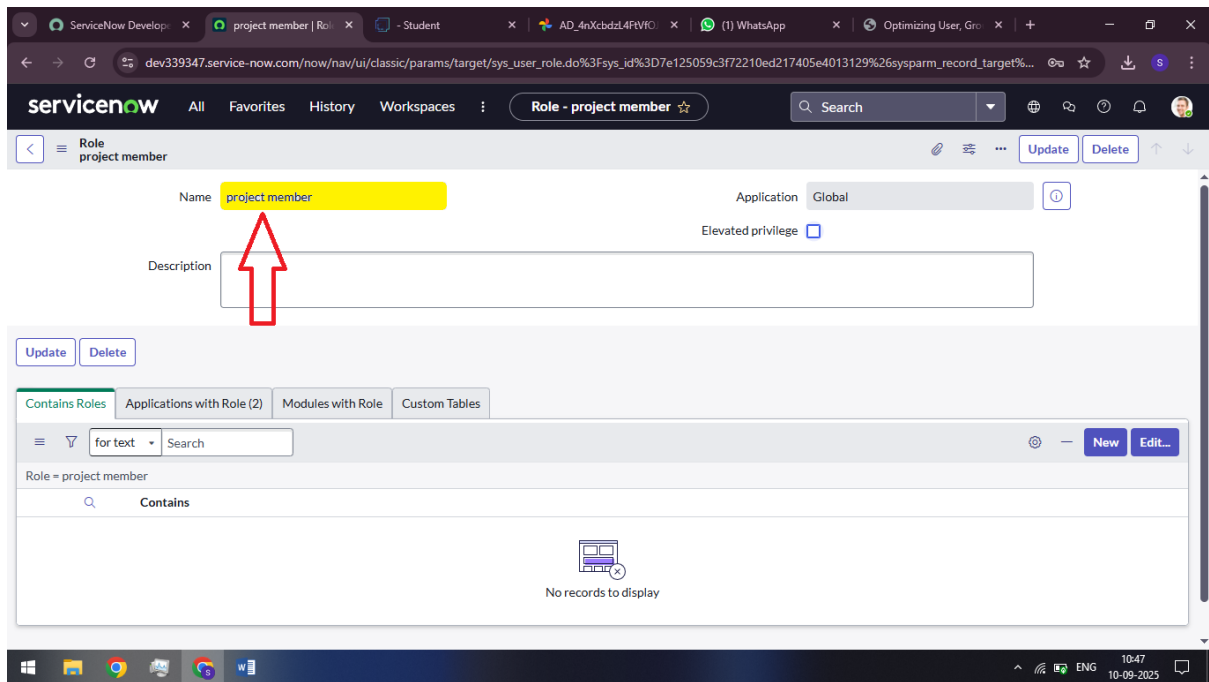
1. Open service now.
2. Click on All >> search for groups
3. Select groups under system security
4. Click on new
5. Fill the following details to create a new group
6. Click on submit



### 3. ROLES:

#### Activity: 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

## 4. TABLES:

### Activity: Create tables

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

ServiceNow Developer

project table | Table

Table - project table

A table is a collection of records in the database. Each record corresponds to a row in a table, and each field on a record corresponds to a column on that table. Applications use tables and records to manage data and processes. [More Info](#)

\* Label **project table**

\* Name u\_project\_table

Application Global

Remote Table

Columns Controls Application Access

Table Columns for text Search

1 to 13 of 13 New

Dictionary Entries

Column label	Type	Reference	Max length	Default value	Display
project name	String	(empty)	40		false
description	String	(empty)	40		false
project id	Integer	(empty)	40		false
Updated	Date/Time	(empty)	40		false
project manger	String	(empty)	40		false

8. Click on submit

## Create one more table:

9. Create another table as: task table 2 and fill with following details.

10. Click on submit.

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task table 2 | Table

Table - task table 2

A table is a collection of records in the database. Each record corresponds to a row in a table, and each field on a record corresponds to a column on that table. Applications use tables and records to manage data and processes. [More Info](#)

\* Label **task table 2**

\* Name u\_task\_table\_2

Application Global

Remote Table

Columns Controls Application Access

Table Columns for text Search

1 to 12 of 12 New

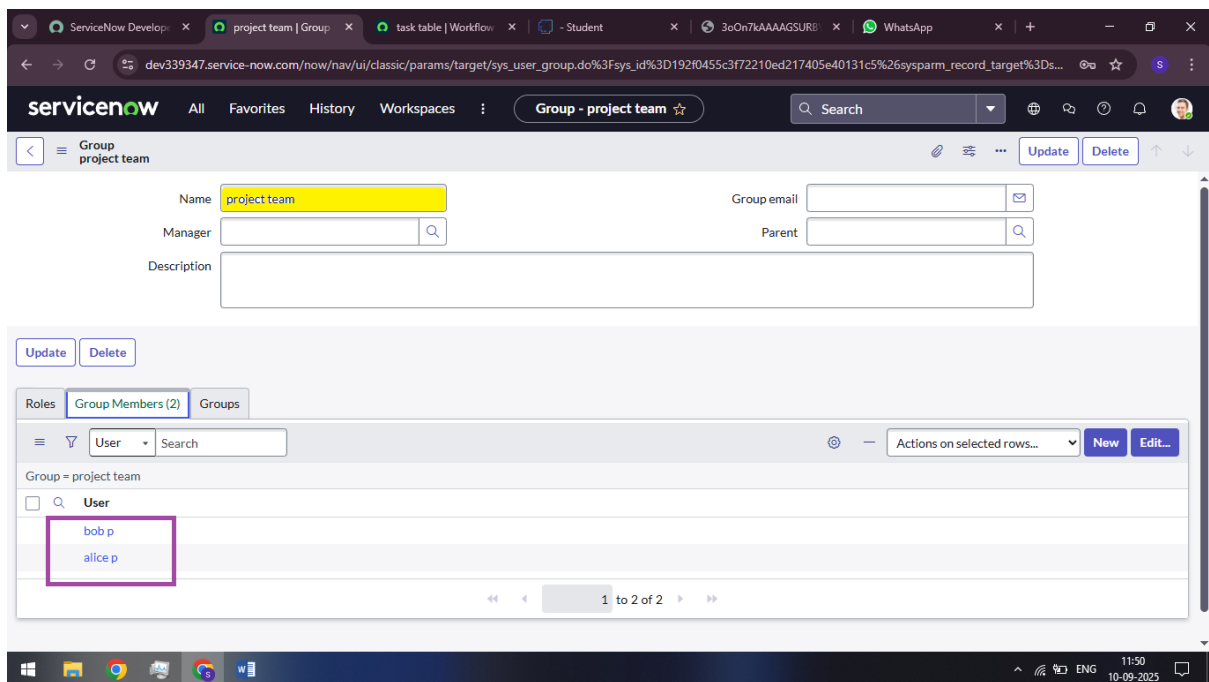
Dictionary Entries

Column label	Type	Reference	Max length	Default value	Display
task id	Integer	(empty)	40		false
task name	String	(empty)	40		false
Updated	Date/Time	(empty)	40		false
status	Choice	(empty)	40		false
Created by	String	(empty)	40		false

## 5. Assign users to groups:

## Activity: Assign users to project team group

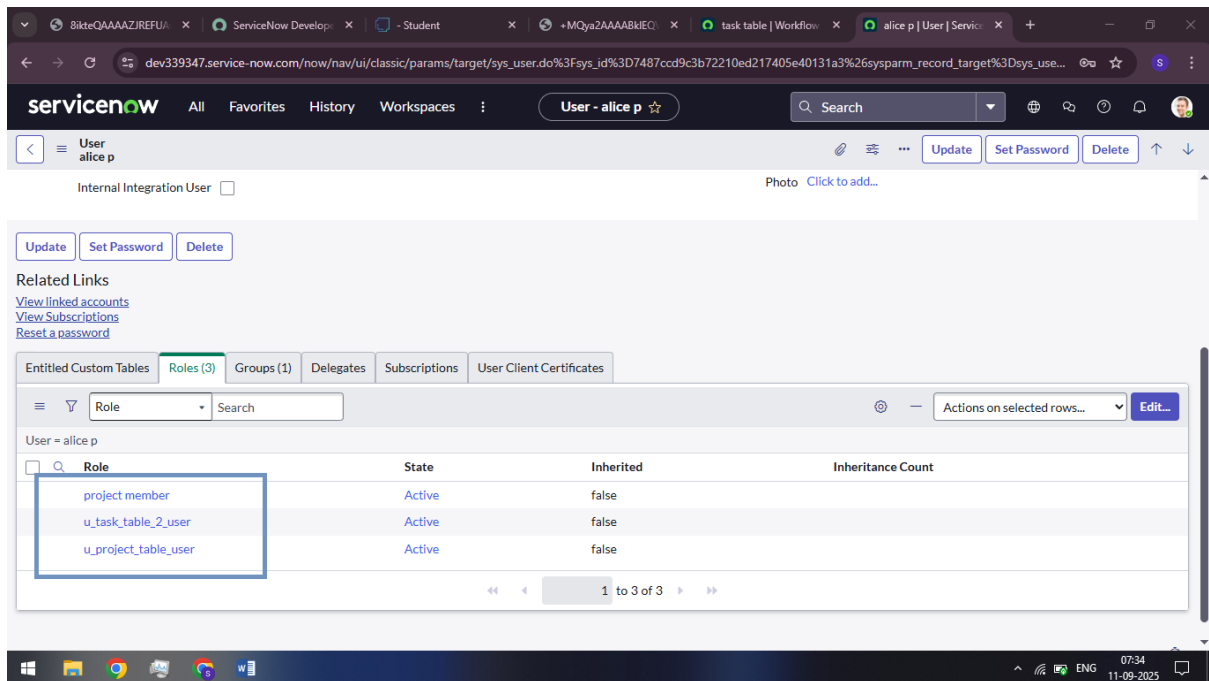
1. Open service now.
2. Click on All >> search for groups
3. Select tables under system definition
4. Select the project team group
5. under group members
6. Click on edit
7. Select Alice p and bob p and save



## 6. Assign roles to users:

### Activity 1: Assign roles to alice user

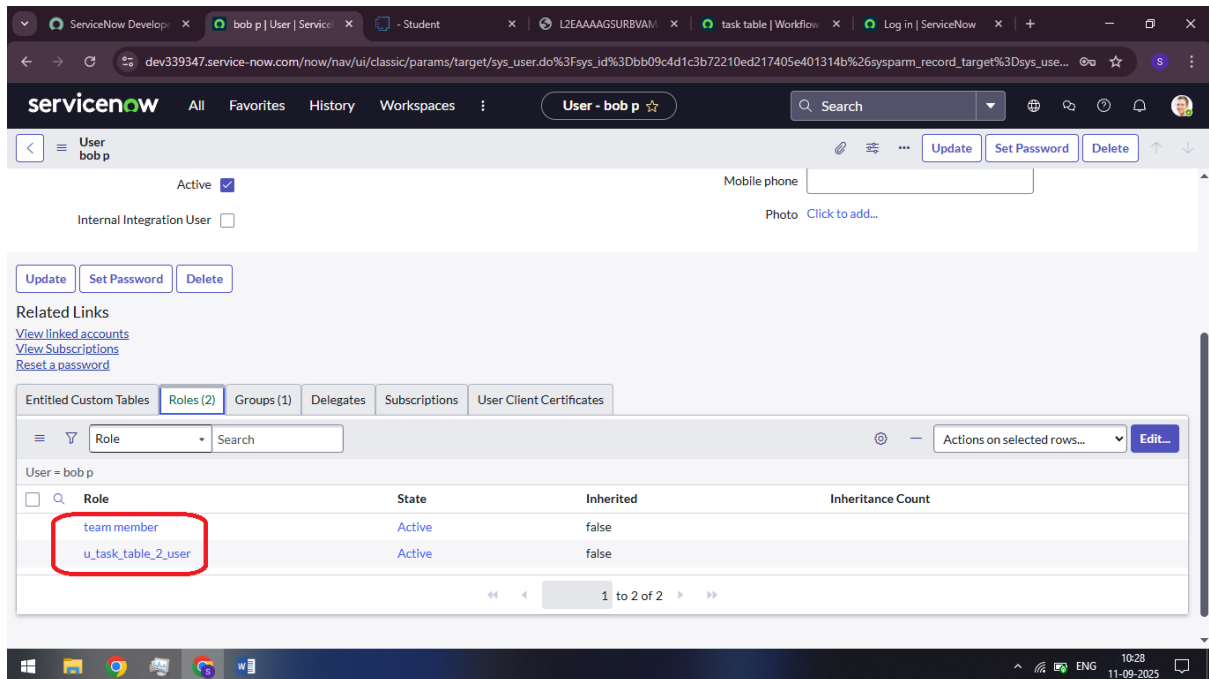
1. Open servicenow. Click on All >> search for user
2. Select tables under system definition
3. Select the project manager user
4. under project manager
5. Click on edit
6. Select project member and save
7. Click on edit add u\_project\_table role and u\_task\_table role
8. Click on save and update the 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.





## 7. Application access

### Activity: 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 displays the ServiceNow 'Application Menu - project table' configuration page. The page includes a search bar at the top, a navigation bar with tabs for 'All', 'Favorites', 'History', and 'Admin', and a sidebar on the left. The main content area contains the following fields and options:

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

## 8. Access control list

### Activity: 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, script or ACL control via reference fields is required to properly secure access with this ACL.

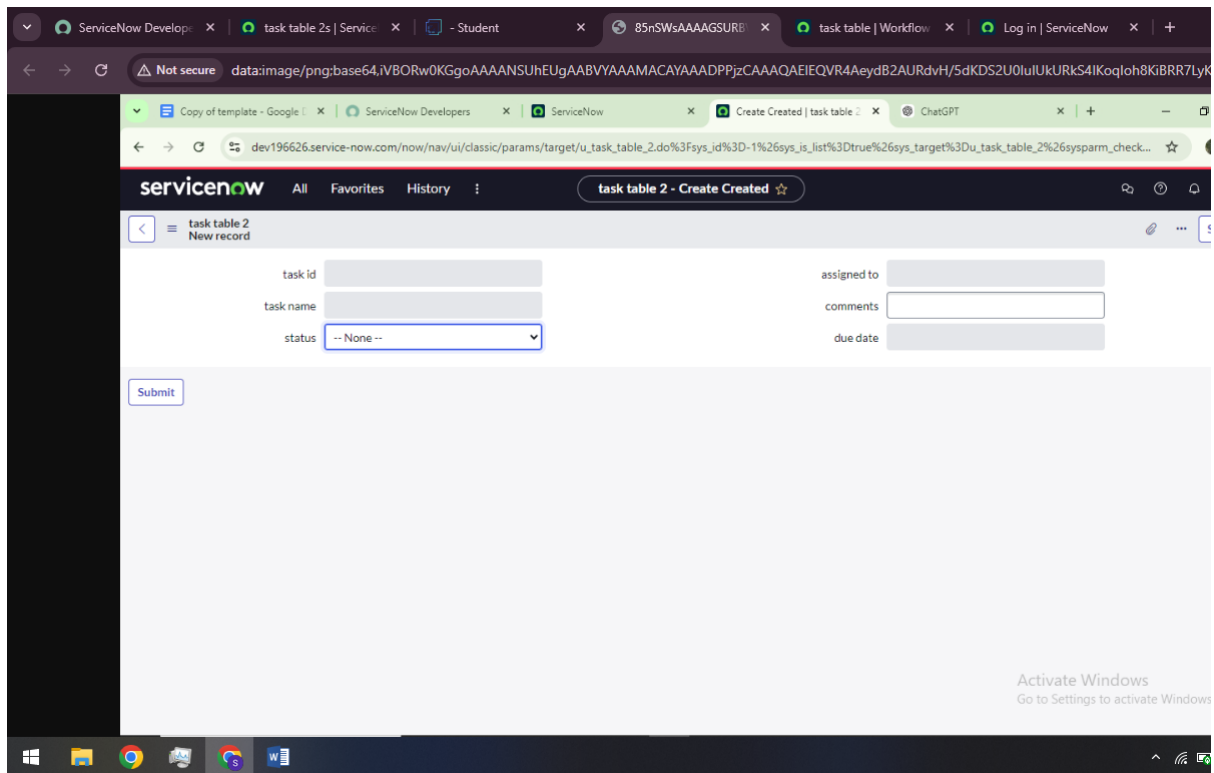
\* Type: record  
 \* Operation: create  
 Decision Type: Allow If  
 Admin overrides: ☒  
 Protection policy: -- None --  
 \* Name:   
 Description:   
 Applies To:   
 Add Filter Condition Add OR Clause

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

Name	Decision Type	Operation	Type	Active	Updated by	Updated
u_task	Search	Search	Search	Search	Search	Search
u_task_table_2	Allow If	create	record	true	admin	2025-09-07 23:49:28
u_task_table_2	Allow If	write	record	true	admin	2025-09-07 23:49:28
u_task_table_2	Allow If	read	record	true	admin	2025-09-07 23:49:28
u_task_table_2	Allow If	delete	record	true	admin	2025-09-07 23:49:29
u_task_table_2.u_assigned_to	Allow If	write	record	true	admin	2025-09-08 00:20:52
u_task_table_2.u_due_date	Allow If	write	record	true	admin	2025-09-08 00:23:12
u_task_table_2.u_status	Allow If	write	record	true	admin	2025-09-08 00:11:54
u_task_table_2.u_task_id	Allow If	write	record	true	admin	2025-09-08 00:25:34
u_task_table_2.u_task_name	Allow If	write	record	true	admin	2025-09-08 00:27:39

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

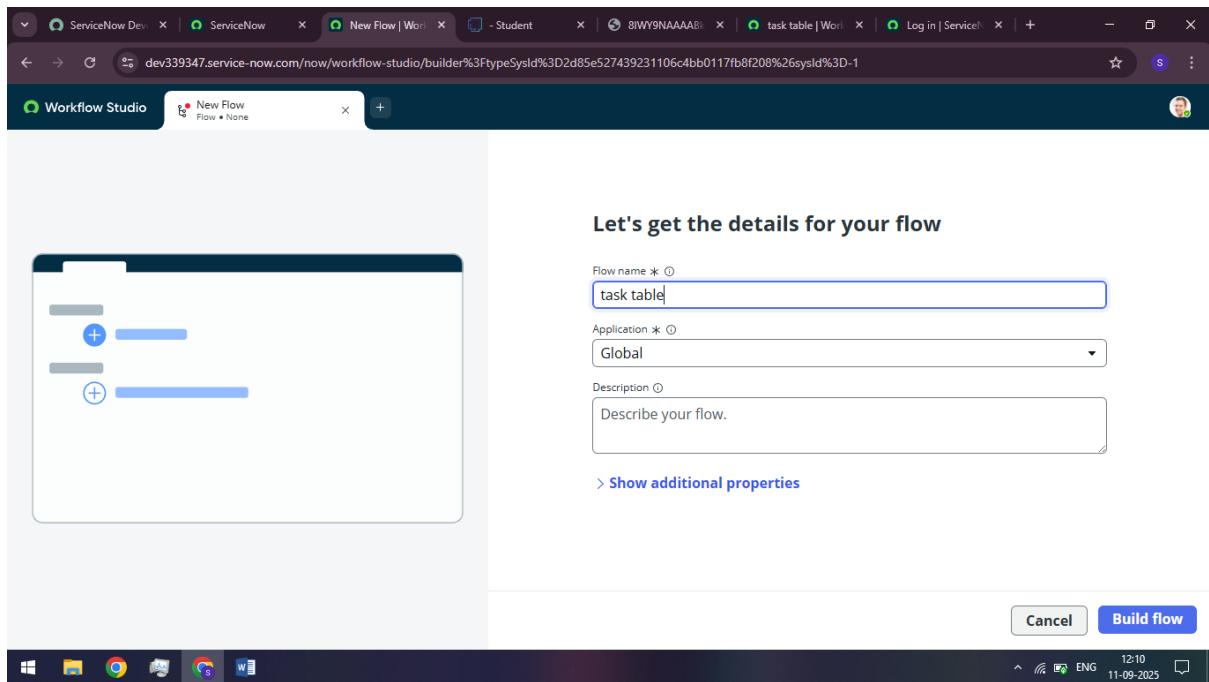
16. Comment and status fields are have the edit access



## 9. Flow

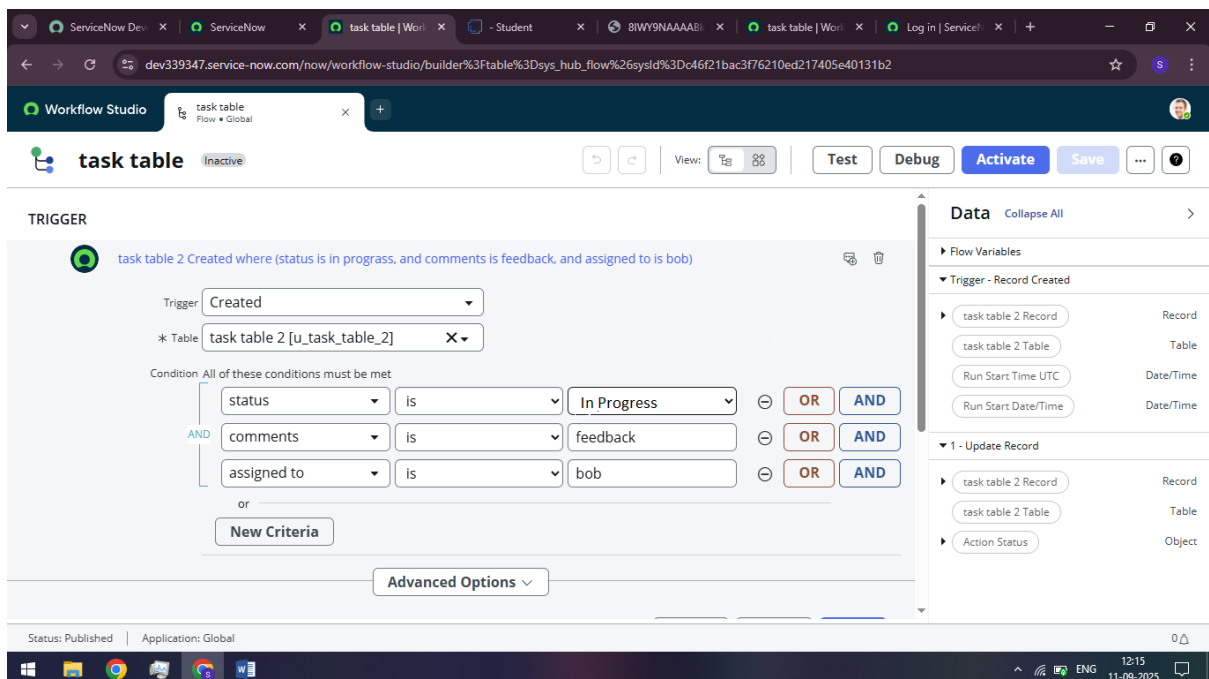
### Activity: Create a Flow to Assign operations ticket to group

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.



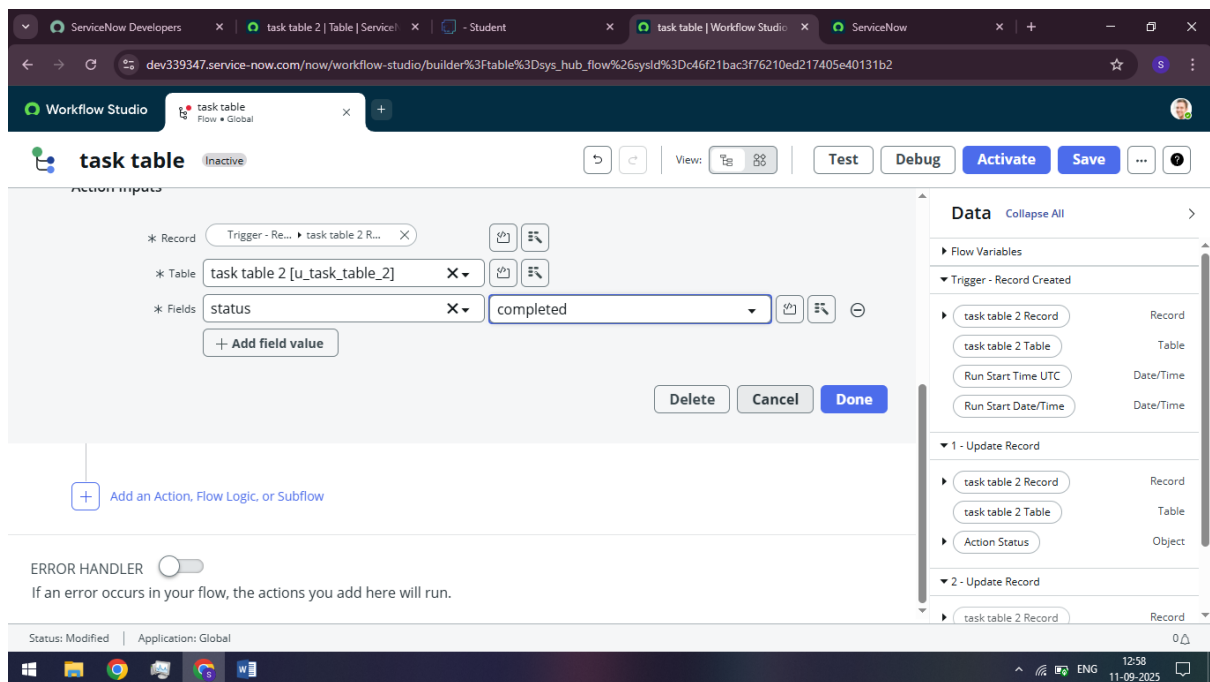
### Next step:

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.



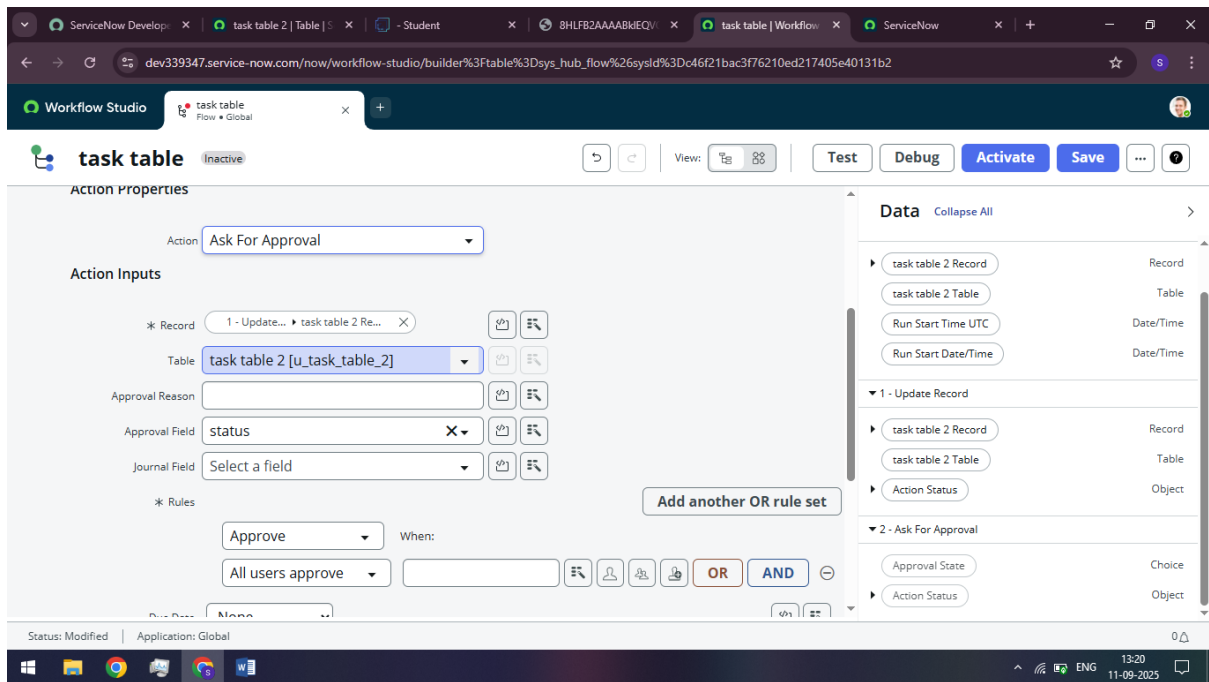
### Next step:

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.

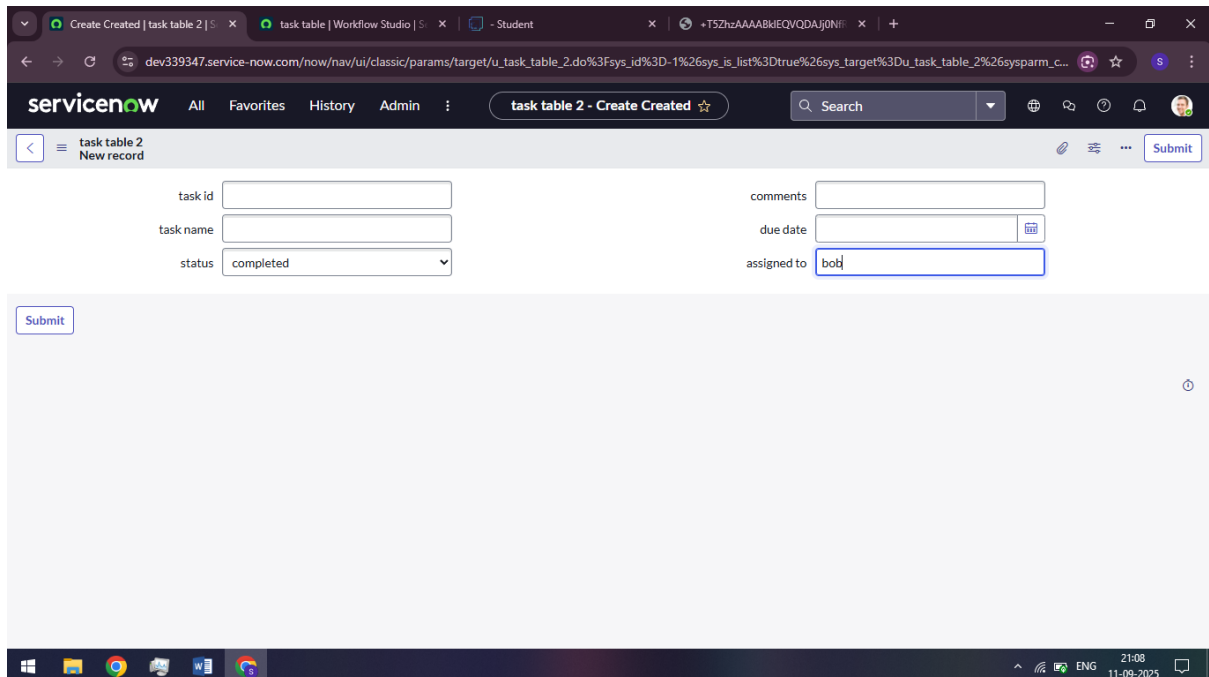


### Next step:

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.



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

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.