

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

Team Id: NM2025TMID16397

Team Leader: RANJITH KUMAR.S

Team member : YUVARAJ.V

Team member : YUVANESH.A

Team member : NAVINKUMAR. T

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:

To establish a clear and efficient project management framework by defining distinct roles and responsibilities for the Project Manager and Team Member, implementing appropriate access controls, and introducing a structured workflow for task assignment and progress tracking to enhance accountability and reduce confusion throughout the project lifecycle.

Skills:

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

TASK INITIATION

Milestone 1 : Users

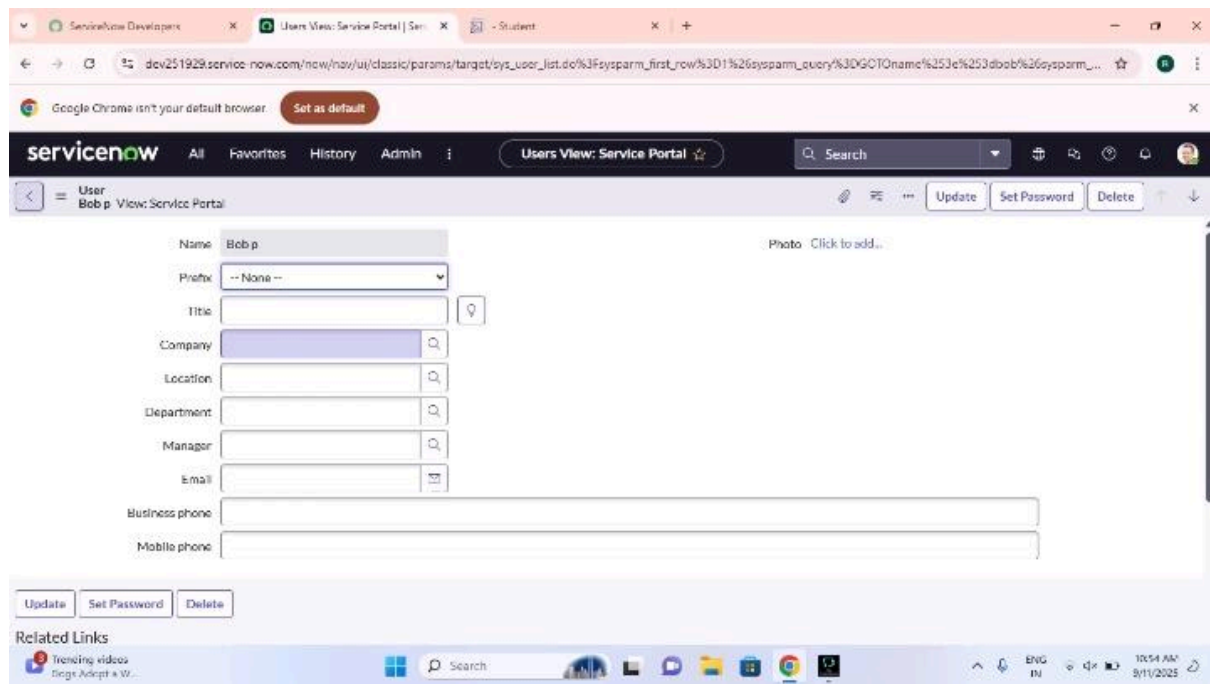
Activity 1: Create Users

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

The screenshot shows a web browser window with the ServiceNow interface. The browser tabs include 'ServiceNow Developers', 'Users View: Service Portal | Ser...', and '- Student'. The address bar shows a URL starting with 'dev251929.service-now.com'. The ServiceNow header includes the logo, navigation tabs (All, Favorites, History, Admin), and a search bar. The main content area is titled 'User View: Service Portal' and shows a form for creating a new user. The form fields are: Name (alice p), Prefix (None), Title, Company, Location, Department, Manager, Email, Business phone, and Mobile phone. There are buttons for 'Update', 'Set Password', and 'Delete' at the bottom of the form. The Windows taskbar is visible at the bottom of the screen.

Create one more user:

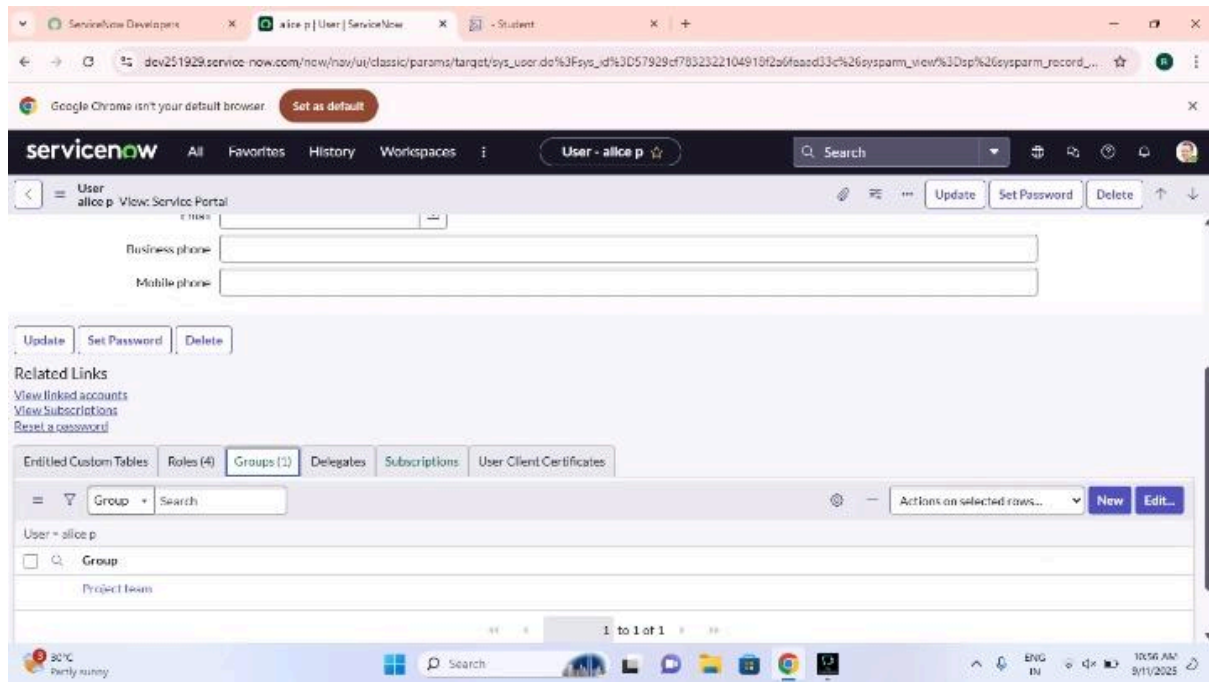
1. Create another user with the following details
2. Click on submit



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 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

ServiceNow Developer | User: alice p | ServiceNow | Student

dev251929.service-now.com/new/nav/ui/classic/params/target/sys_user.do%3Fsys_id%3D057929cf7832322104918f2a6faad33c1%26sysparm_view%3Dsp%26sysparm_record...

Google Chrome isn't your default browser. [Set as default](#)

servicenow All Favorites History Workspaces User: alice p Search

User: alice p View: Service Portal Update Set Password Delete

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

Entitled Custom Tables Roles (4) Groups (2) Delegates Subscriptions User Client Certificates

Role Search Actions on selected rows... Edit...

User: alice p

Role	State	Inherited	Inheritance Count
u_project_table_user	Active	false	
team member	Active	false	
u_task_table2_user	Active	false	
project manager	Active	false	

1 to 4 of 4

Create one more role:

7.Create another role with the following details

8.Click on submit

ServiceNow Developer | User: Bob p | ServiceNow | Student

dev251929.service-now.com/new/nav/ui/classic/params/target/sys_user.do%3Fsys_id%3D0320314b7832322104918f2a6faad33c1%26sysparm_view%3Dsp%26sysparm_record...

Google Chrome isn't your default browser. [Set as default](#)

servicenow All Favorites History Workspaces User: Bob p Search

User: Bob p View: Service Portal Update Set Password Delete

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

Entitled Custom Tables Roles (2) Groups (2) Delegates Subscriptions User Client Certificates

Role Search Actions on selected rows... Edit...

User: Bob p

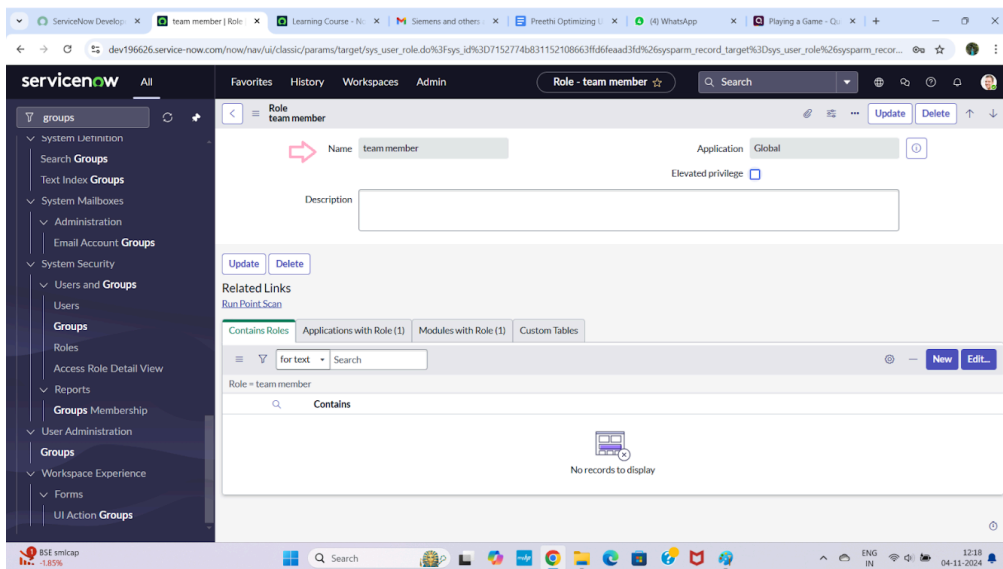
Role	State	Inherited	Inheritance Count
team member	Active	false	
u_task_table2_user	Active	false	

1 to 2 of 2

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

Table - project table

Table Columns: Column label, Search

Dictionary Entries

Column label	Type	Reference	Max length	Default value	Display	Create roles
Created	Date/Time	(empty)	40		false	
Created by	String	(empty)	40		false	
description	String	(empty)	40		false	
end date	Date	(empty)	40		false	
project id	Integer	(empty)	40		false	
project manager	String	(empty)	40		false	
project_name	String	(empty)	40		false	
start date	Date	(empty)	40		false	
status	Choice	(empty)	40		false	
Sys ID	Sys ID (GUID)	(empty)	32		false	
Updated	Date/Time	(empty)	40		false	
Updated by	String	(empty)	40		false	
Updates	Integer	(empty)	40		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

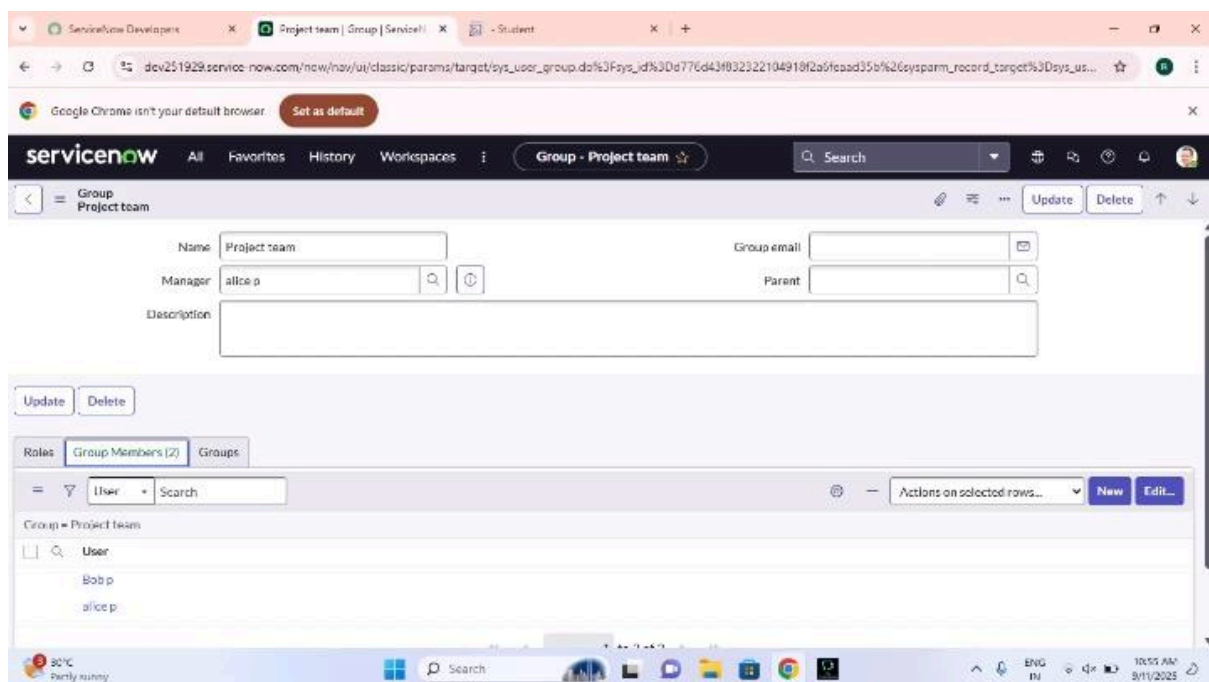
Access Controls (8)

Name	Decision type	Operation	Type	Active	Updated by	Updated
u_task_table_2	Allow If	write	record	true	admin	2025-09-05 09:25:51
u_task_table_2	Allow If	read	record	true	admin	2025-08-30 09:25:43
u_task_table_2	Allow If	delete	record	true	admin	2025-09-05 09:25:51
u_task_table_2	Allow If	create	record	true	admin	2025-08-30 09:25:42
u_task_table_2.u_assigned_to	Allow If	write	record	true	admin	2025-08-31 05:55:39
u_task_table_2.u_due_date	Allow If	write	record	true	admin	2025-09-05 00:26:57
u_task_table_2.u_task_id	Allow If	write	record	true	admin	2025-09-05 00:25:22
u_task_table_2.u_task_name	Allow If	write	record	true	admin	2025-08-31 05:57:00

Milestone 5 : Assign users to groups

Activity 1: Assign users to project team group

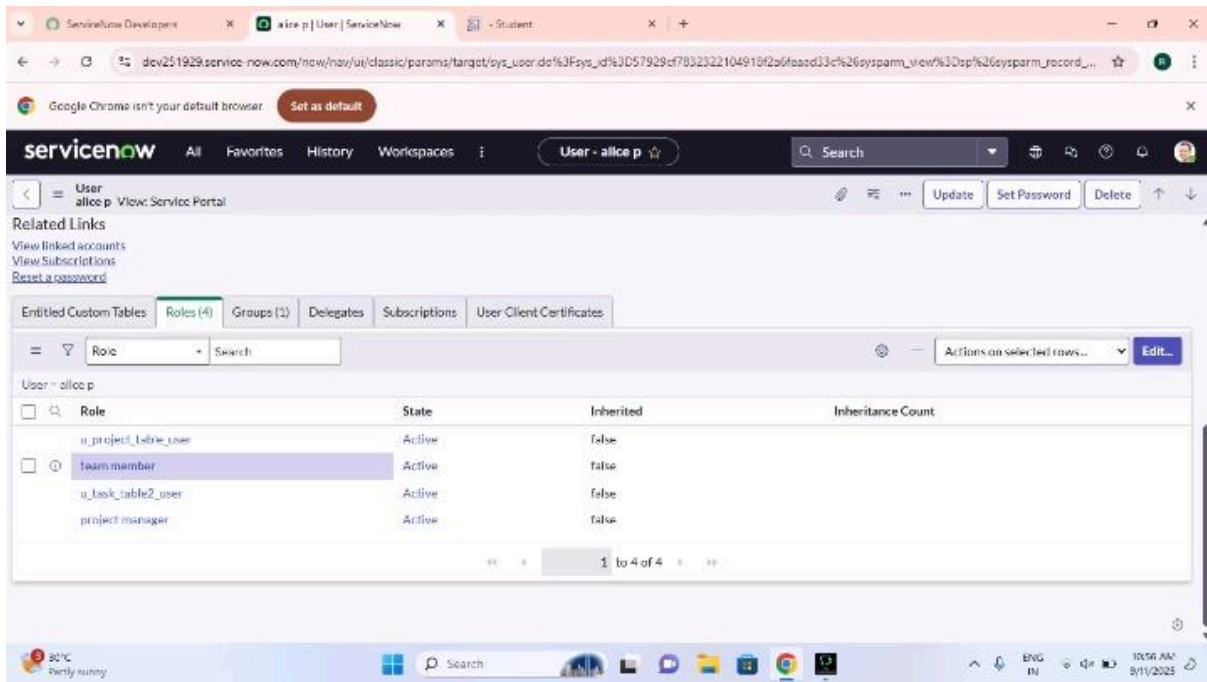
1. Open service now.
2. Click on All >> search for groups
3. Select tables under system definition
4. Select the project team group
5. Under group members
6. Click on edit
7. Select alice p and bob p and save



Milestone 6 : Assign roles to users

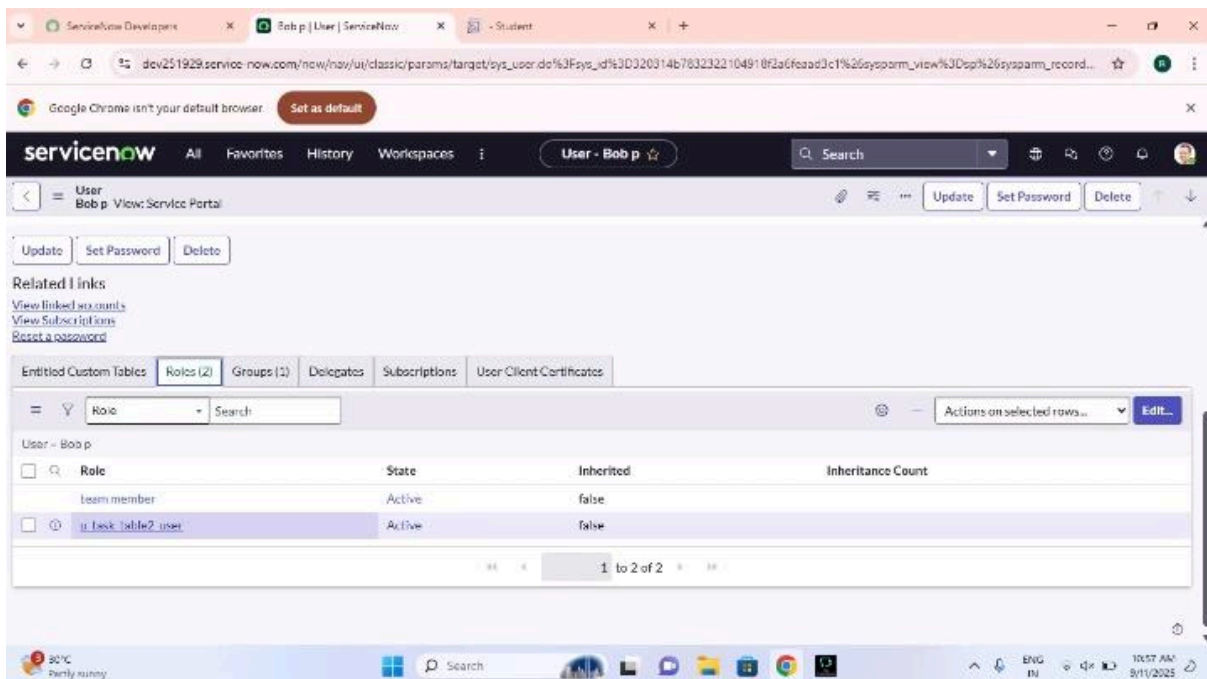
Activity 1: Assign roles to alice user

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 service now 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

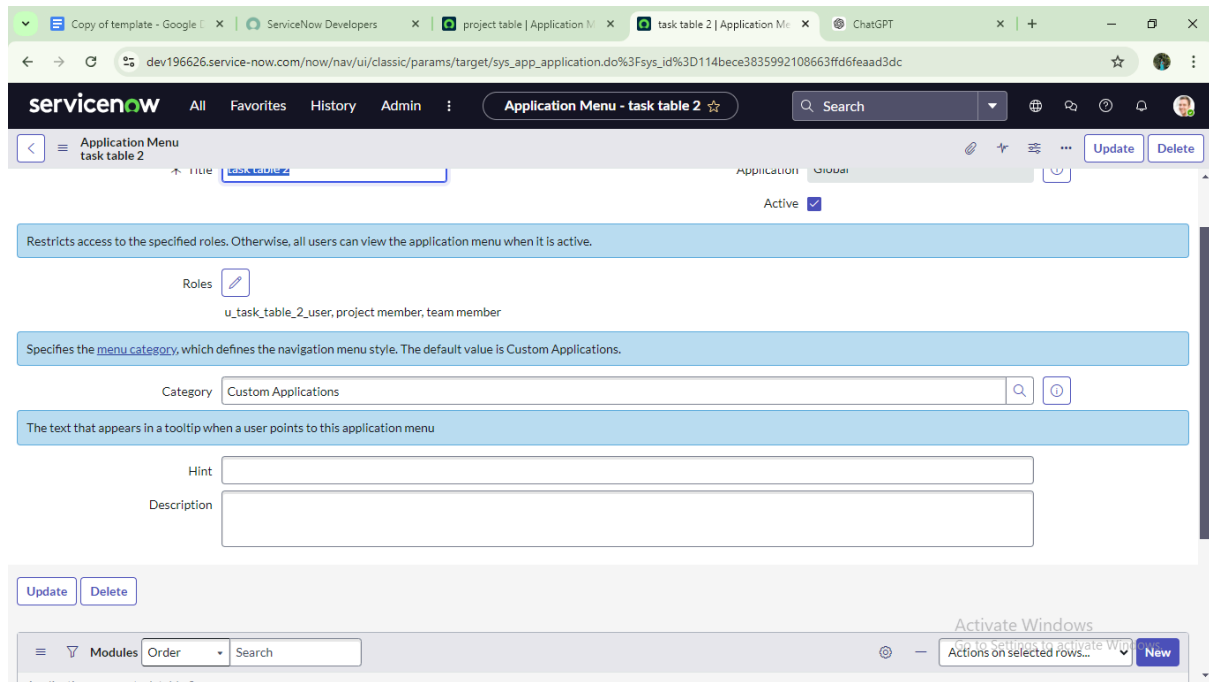
Activity 1: Assign table access to application

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 ServiceNow 'Application Menu - project table' configuration page. The browser address bar shows the URL: `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 main content area includes:

- A header bar with 'Application Menu - project table' and 'Update' and 'Delete' buttons.
- A description: '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](#)'.
- Fields for configuration:
 - * Title:
 - Application:
 - Active: ☒
- A note: 'Restricts access to the specified roles. Otherwise, all users can view the application menu when it is active.'
- Roles:
- A note: 'Specifies the [menu.category](#), which defines the navigation menu style. The default value is Custom Applications.'
- Category:
- A note: 'The text that appears in a tooltip when a user points to this application menu'
- Hint:
- Description:

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.



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

Admin overrides: ☒

Protection policy: -- None --

* Name: task table 2 [u_task_table_2]

Description:

Applies To: No. of records matching the condition: 1

Add Filter Condition Add "OR" Clause

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

Application: Global

Active: ☒

Advanced: ☐

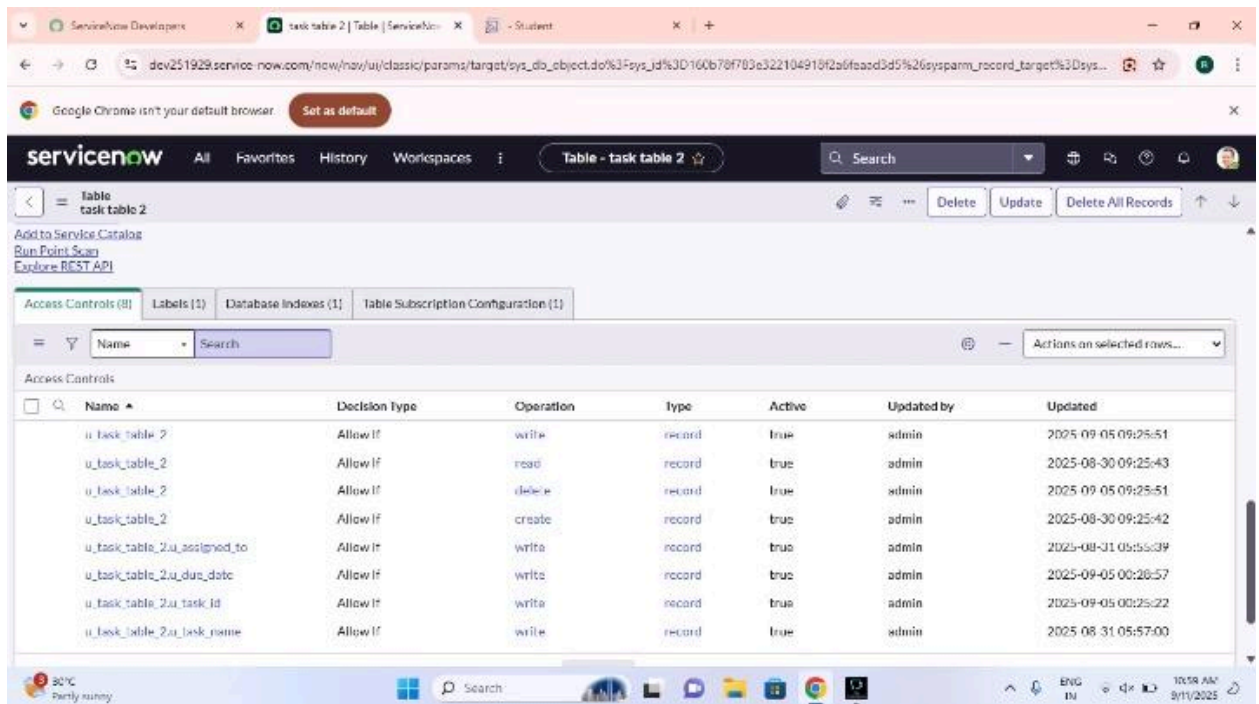
Submit

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. 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



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

task id:

task name:

status:

assigned to:

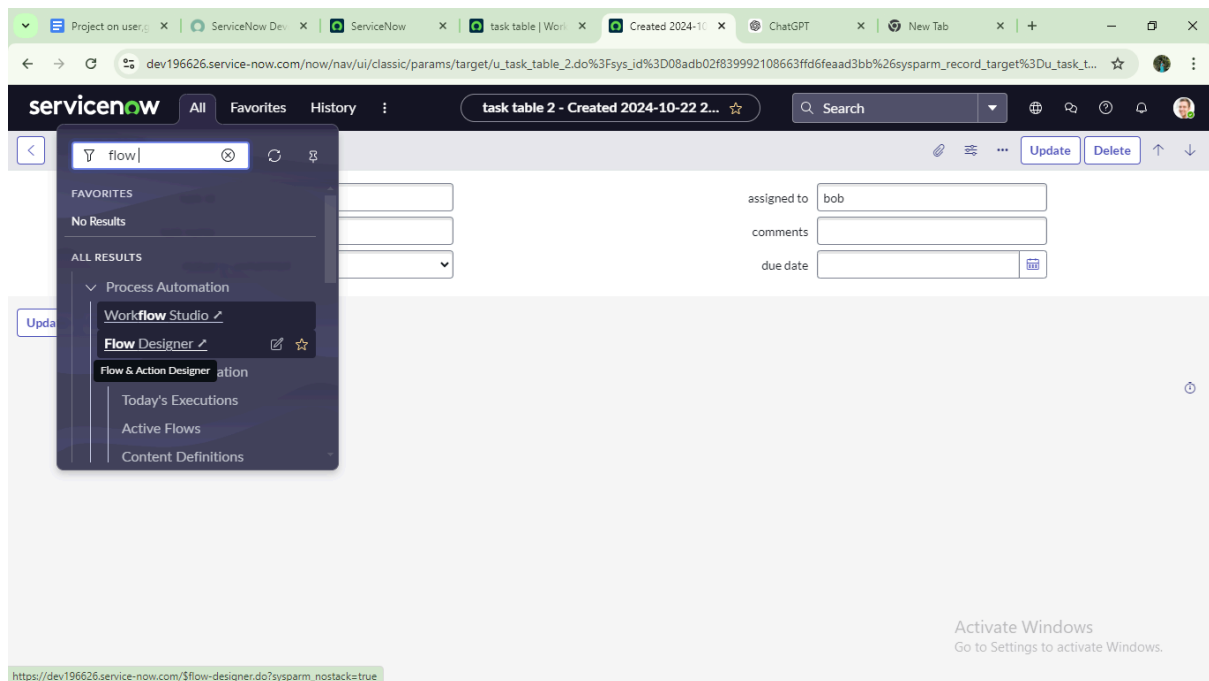
comments:

due date:

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.



The screenshot shows the ServiceNow Workflow Studio homepage. The top navigation bar includes 'Homepage', 'Operations', and 'Integrations'. Below this, there are tabs for 'Playbooks', 'Flows', 'Subflows', 'Actions', and 'Decision tables'. The 'Flows' tab is selected, showing a list of 39 flows. A 'New' dropdown menu is open, showing options for 'Playbook', 'Flow', 'Subflow', 'Action', and 'Decision table'. The 'Flow' option is highlighted. On the right side, there are sections for 'Pick up where you left off' and 'Latest updates'.

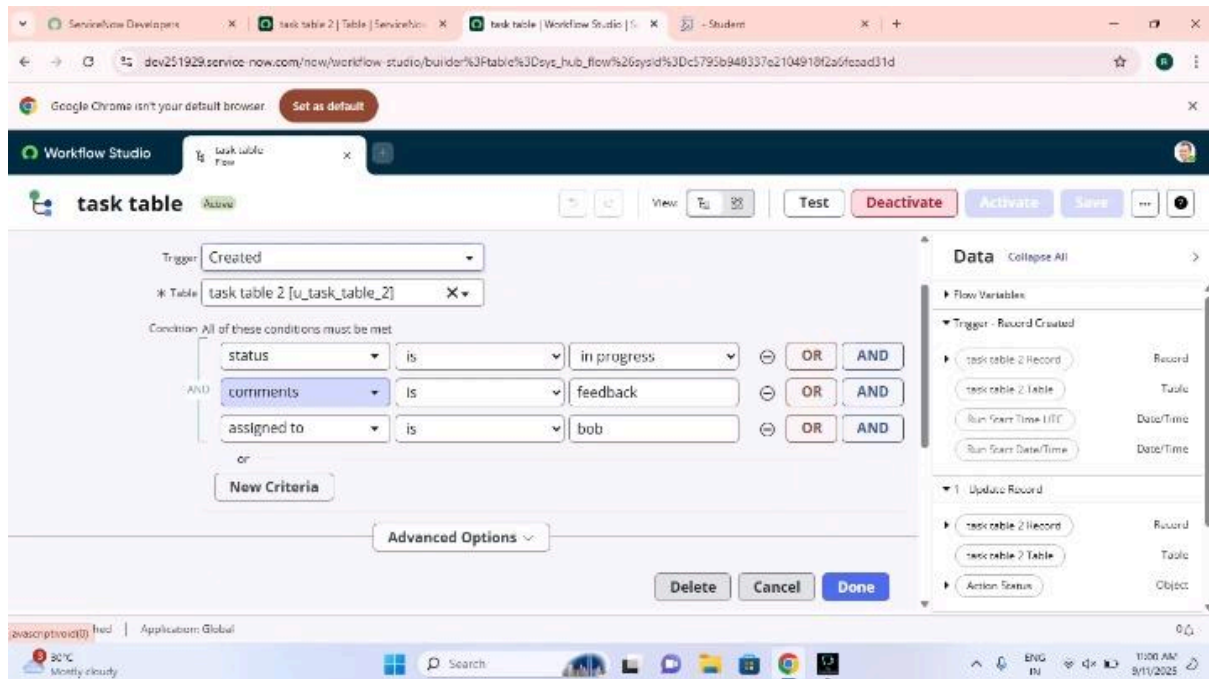
Name	Application	Status	Active	Update
Benchmark Recommendation Evaluator	Benchmarks Spoke	Published	true	2024-09-27 22:00:13
Business process approval flow	Global	Published	true	2020-09-27 22:00:13
Change - Cloud Infrastructure - Authorize	Global	Published	true	2020-11-11 07:08:05
Change - Emergency - Authorize	Global	Published	true	2020-10-06 05:39:49
Change - Emergency - Implement	Global	Published	true	2020-09-23 05:06:26
Change - Emergency - Review	Global	Published	true	2020-10-27 04:18:08
Change - Normal - Assess	Global	Published	true	2020-10-06 05:37:05
Change - Normal - Authorize	Global	Published	true	2020-10-06 05:38:35
Change - Normal - Implement	Global	Published	true	2020-09-23 04:23:59

The screenshot shows the 'New Flow' builder page in ServiceNow Workflow Studio. The page title is 'Let's get the details for your flow'. There are three main input fields: 'Flow name' (with the value 'task table'), 'Description' (with the placeholder 'Describe your flow.'), and 'Application' (with the value 'Global'). Below these fields is a link '> Show additional properties'. At the bottom right, there are two buttons: 'Cancel' and 'Build flow'. An 'Activate Windows' watermark is visible in the bottom right corner.

next step:

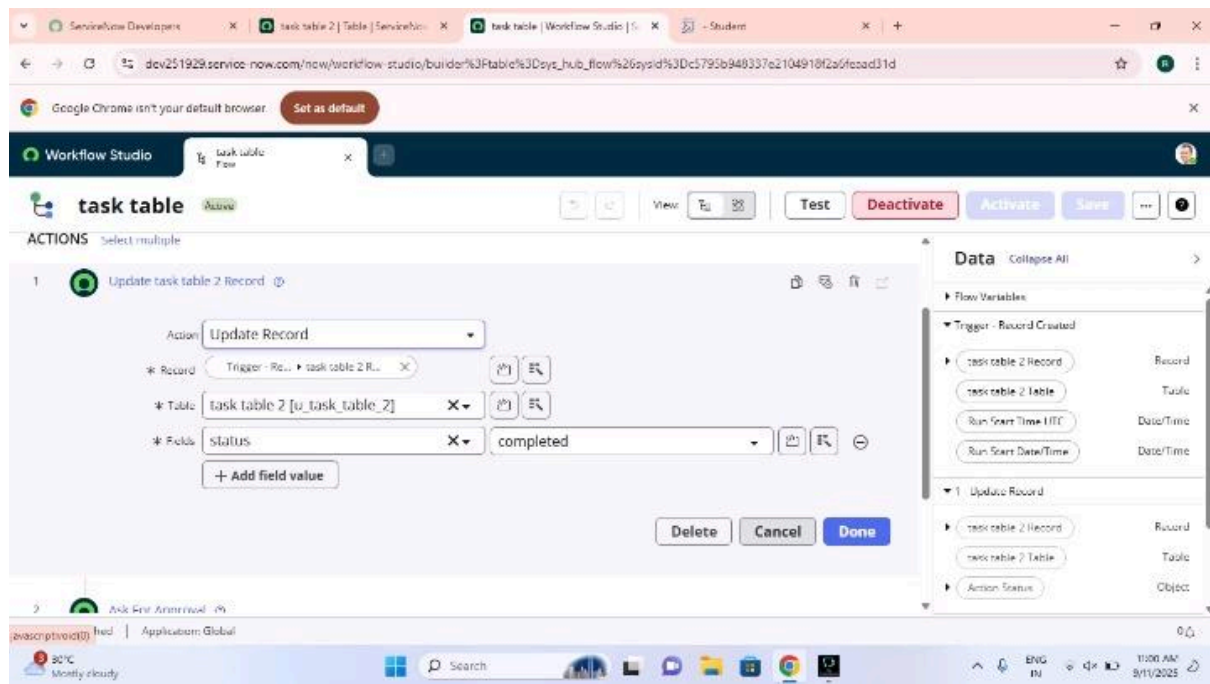
1. Click on Add a trigger
2. Select the trigger in that Search for "create record" and select that.

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.



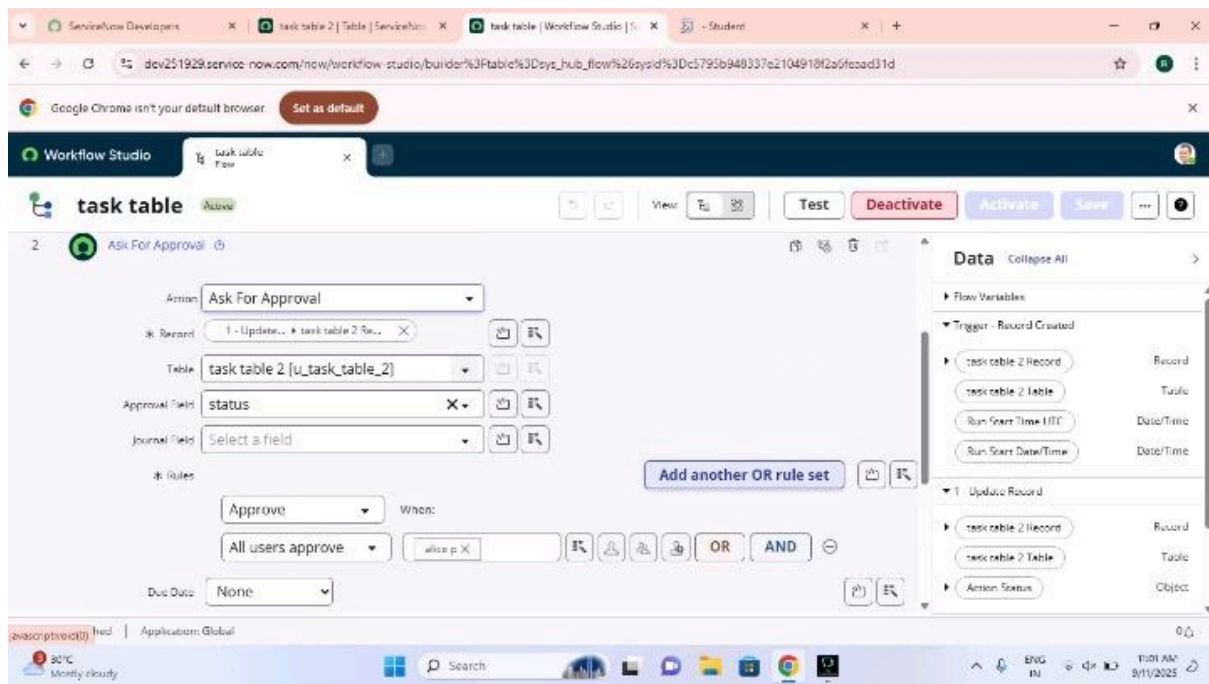
Next step:

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.



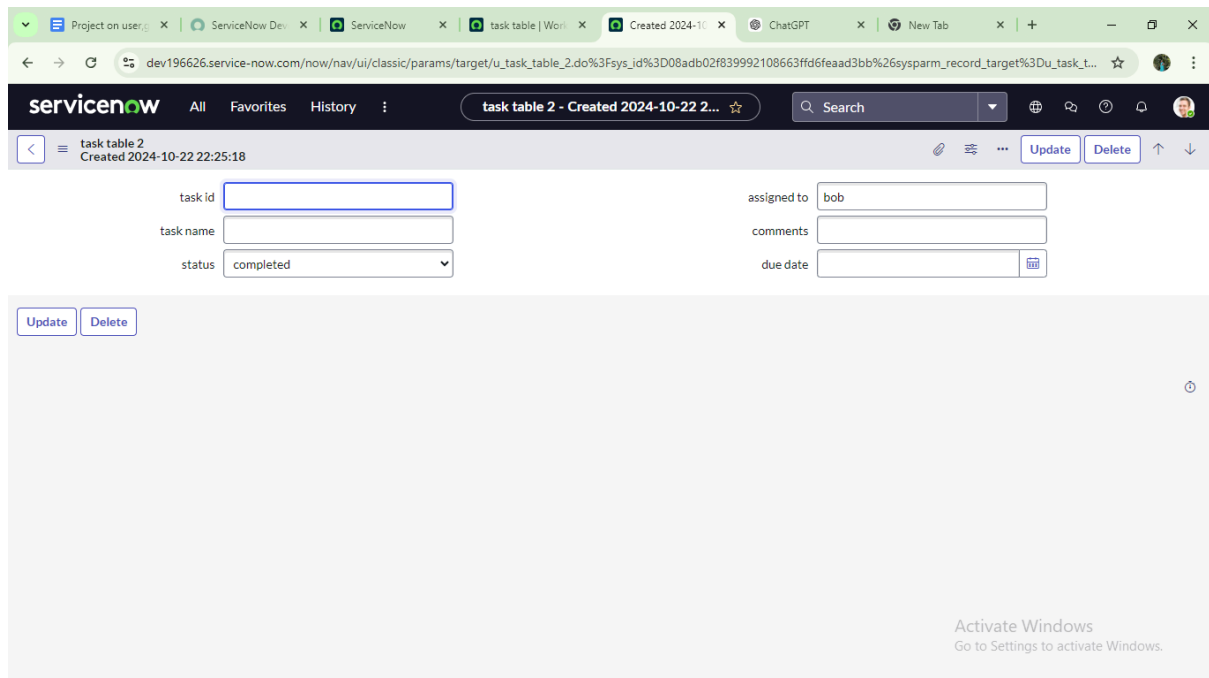
Next step:

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

The screenshot displays the ServiceNow 'Approvals' page. The interface includes a top navigation bar with 'Approvals' selected, a search bar, and a 'Set as default' button. Below the navigation bar, there's a table of approval records. The table has columns for 'State', 'Approver', 'Comments', 'Approval for', and 'Created'. The 'State' column shows various statuses like 'Approved' (green dot) and 'No Longer Required' (grey dot). The 'Approver' column lists 'alice p' and '(empty)'. The 'Created' column shows timestamps from 2025-09-01 to 2025-09-05. At the bottom, there's a pagination bar showing '1 to 20 of 703' records.

State	Approver	Comments	Approval for	Created
Approved	(empty)		(empty)	2025-09-05 01:07:27
Approved	(empty)		(empty)	2025-09-05 01:06:19
Approved	(empty)		(empty)	2025-09-05 01:06:41
Approved	alice p		(empty)	2025-09-01 22:24:39
No Longer Required	alice p		(empty)	2025-09-01 11:06:58
No Longer Required	alice p		(empty)	2025-09-01 11:03:04
Approved	alice p		(empty)	2025-09-05 01:13:12
No Longer Required	alice p		(empty)	2025-09-01 23:14:17
No Longer Required	alice p		(empty)	2025-09-04 23:58:40
Approved	alice p		(empty)	2025-09-04 23:59:10
Approved	alice p		(empty)	2025-09-05 01:19:27
No Longer Required	alice p		(empty)	2025-09-04 23:57:20

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.