

PROJECT TITLE

OPTIMIZING USER, GROUP, AND ROLE MANAGEMENT WITH ACCESS CONTROL AND WORKFLOWS

Team Id	NM2025TMID02297
Team size	4
Team Leader	ANUSHIYA DEVI M
Team Member	AJITHA M
Team Member	BABISHA J
Team Member	ADCHAYA

Problem Context:

In a small project environment, a Project Manager (Alice) and a Team Member (Bob) are responsible for delivering tasks. However, the absence of well-defined roles, access restrictions, and structured workflows often creates confusion in responsibilities, accountability, and progress monitoring.

Objectives:

- 1. Role Definition:** Clearly outline the duties of Alice as Project Manager and Bob as Team Member, ensuring both responsibility and access boundaries are transparent.
- 2. Access Control:** Introduce mechanisms that limit Bob's ability to create or edit projects beyond his assigned tasks, while still allowing him to view and update his responsibilities.
- 3. Workflow Organization:** Establish a structured process that enables Alice to assign work, track task progress, and oversee completion in a timely and efficient manner.

Key Skills/Tools:

Users, Groups, Roles, Tables, Access Control Lists (ACL), Workflow/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 the ServiceNow user edit interface for a user named Alice P. The user ID is set to 'Alice'. The first name is 'Alice' and the last name is 'P'. The title is 'Title' and the department is 'Department'. The email address is 'alice@gmail.com', the language is 'None', and the calendar integration is 'Outlook'. The time zone is 'System (America/Los_Angeles)', the date format is 'System (yyyy-MM-dd)', and the mobile phone number is empty. The business phone number is also empty. The user is marked as 'Active'. There are checkboxes for 'Password needs reset', 'Locked out', and 'Web service access only', none of which are checked. There is also a checkbox for 'Internal Integration User' which is checked. At the bottom, there are buttons for 'Update', 'Set Password', and 'Delete'. Below the main form, there is a section for 'Related Links' with links to 'View linked accounts', 'View Subscriptions', and 'Reset password'. At the very bottom, there is a navigation bar with tabs for 'Entitled Custom Tables', 'Roles', 'Groups', 'Delegates', 'Subscriptions', and 'User Client Certificates'. The 'Entitled Custom Tables' tab is currently selected.

User ID: Alice

First name: Alice

Last name: P

Title: Title

Department: Department

Email: alice@gmail.com

Language: None

Calendar integration: Outlook

Time zone: System (America/Los_Angeles)

Date format: System (yyyy-MM-dd)

Business phone:

Mobile phone:

Active:

Web service access only:

Internal Integration User:

Update Set Password Delete

Related Links

- View linked accounts
- View Subscriptions
- Reset password

Entitled Custom Tables Roles Groups Delegates Subscriptions User Client Certificates

Create one more user:

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

The screenshot shows the ServiceNow user interface for editing a user account. The top navigation bar includes links for 'User - Bob p' (highlighted), 'Search', 'Dashboard', 'ServiceNow Developers', and 'Bob p | User | ServiceNow'. The main form displays the following fields:

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

Below the form, there are buttons for 'Update', 'Set Password', and 'Delete'. A 'Related Links' section lists 'New linked accounts', 'New Subscriptions', and 'Reset password'. At the bottom, tabs for 'Defined Custom Tables', 'Roles', 'Groups', 'Delegates', 'Subscriptions', and 'User Client Certificates' are visible, along with a search bar.

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.

The screenshot shows the 'Group - New Record' form in ServiceNow. The 'Name' field is populated with 'project team'. The 'Manager' field contains a placeholder icon. The 'Group email' field is empty. The 'Parent' field has a dropdown menu open, showing a single option. Below the form is a large empty area.

Milestone 3: Roles

Activity 1: Create roles

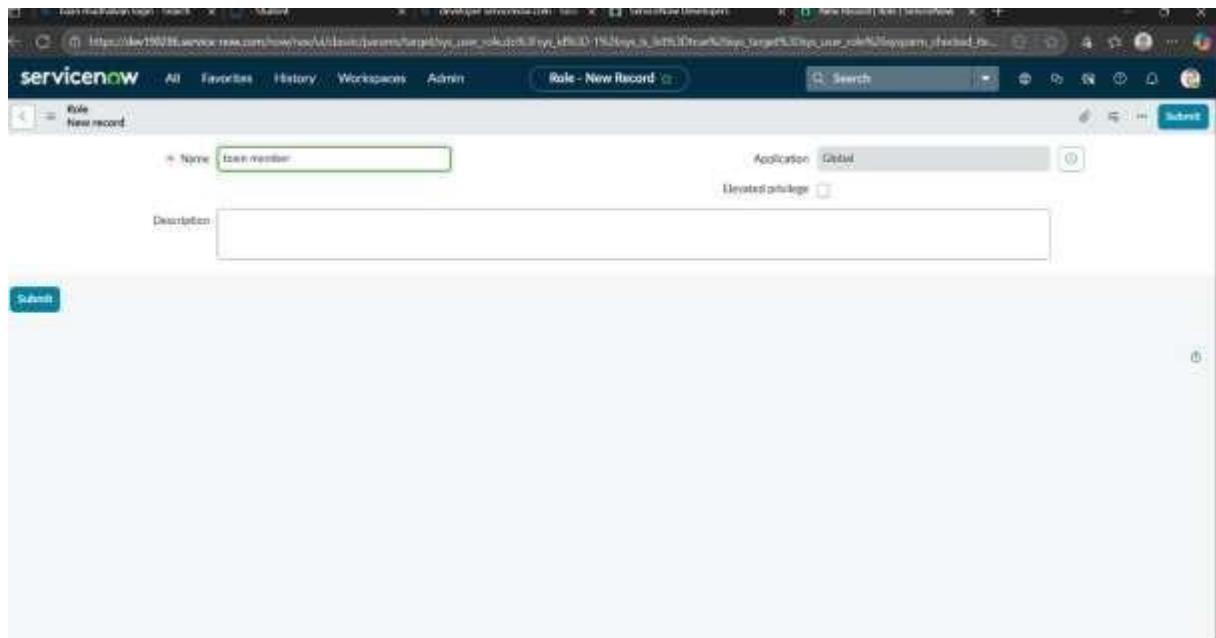
1. Open service now.
2. Click on All >> search for roles
3. Select roles under system security
4. Click on new
5. Fill the following details to create a new role
6. Click on submit.

The screenshot shows the 'Role - project member' creation page. The 'Name' field is set to 'PROJECT MEMBER'. The 'Application' field is set to 'Global'. The 'Description' field is empty. At the bottom, there are 'Update' and 'Delete' buttons, along with tabs for 'Current Items', 'Applications with Role', 'Modules with Role', and 'Custom Tables'. A search bar and a 'New' button are also present.

Create one more role:

7. Create another role with the following details

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

https://dev134007.service-now.com/nav/nav/u/classic/params/target/ys_db_object.do?sys_id=0D-7%26sys_id=b63Dtrue%26sys_target%3Dsys_db_object%26sysparam_checked_items%3D

servicenow All Favorites History Workspaces Admin Table - New Record Search ... Submit Cancel

Table New record

* Name: u_project_table

Create module

Extends table:

Create mobile module

Add module to menu: --Create new--

New menu name: project.table

Remote Table

Columns Controls Application Access

Table Columns: for text Search

Dictionary Entries

Column label	Type	Reference	Maxlength	Default value	Display
project id					false
project name					false
project manager					false

8. Click on submit

https://dev134007.service-now.com/nav/nav/u/classic/params/target/ys_db_object.do?sys_id=0D-7%26sys_id=b63Dtrue%26sys_target%3Dsys_db_object%26sysparam_checked_items%3D

servicenow All Favorites History Workspaces Admin Table - New Record Search ... Submit Cancel

Table New record

* Name: u_task_table_2

Create module

Extends table:

Create mobile module

Add module to menu: --Create new--

New menu name: task.table.2

Remote Table

Columns Controls Application Access

Table Columns: Column label + Search

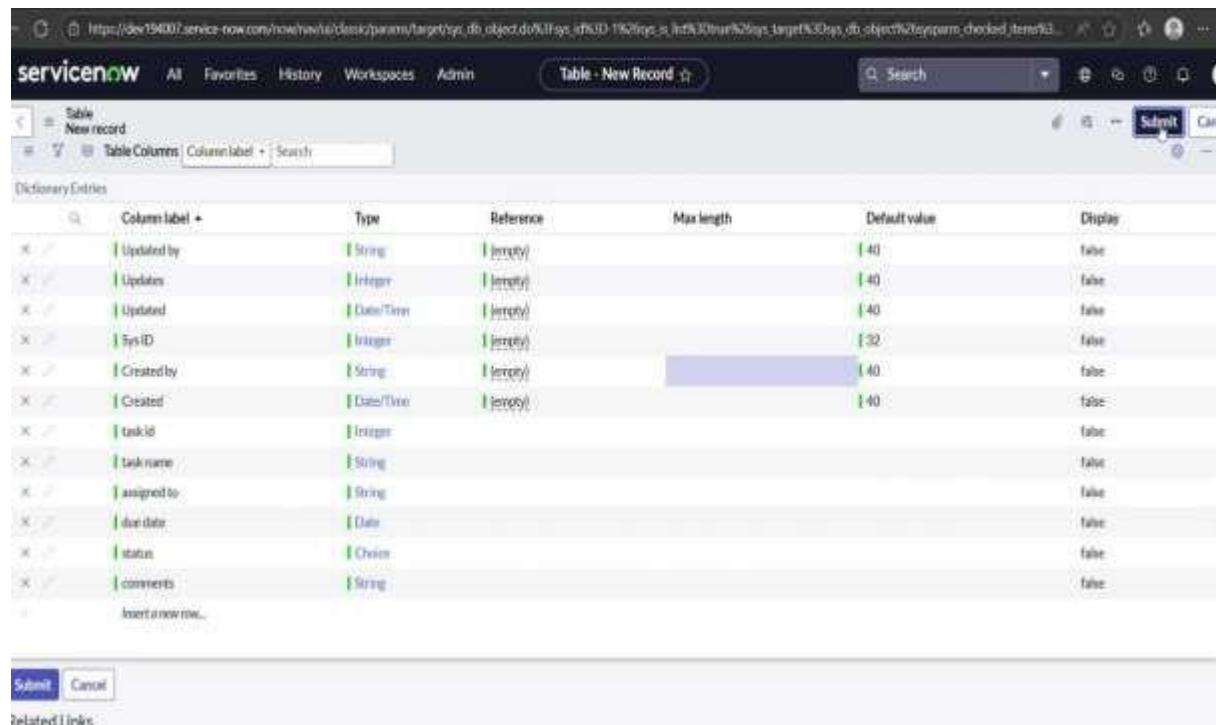
Dictionary Entries

Column label	Type	Reference	Maxlength	Default value	Display
Updated by	String	(empty)	40		false
Updates	Integer	(empty)	40		false
Updated	Date/Time	(empty)	40		false
sys ID	String	(empty)	32		false
	String	(empty)	40		false

Create one more table:

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

10. Click on submit.



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
SysID	Integer	{empty}	32		false
Created by	String	{empty}	40		false
Created	Date/Time	{empty}	40		false
taskid	Integer				false
task name	String				false
assigned to	String				false
due date	Date				false
status	Choice				false
comments	String				false

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

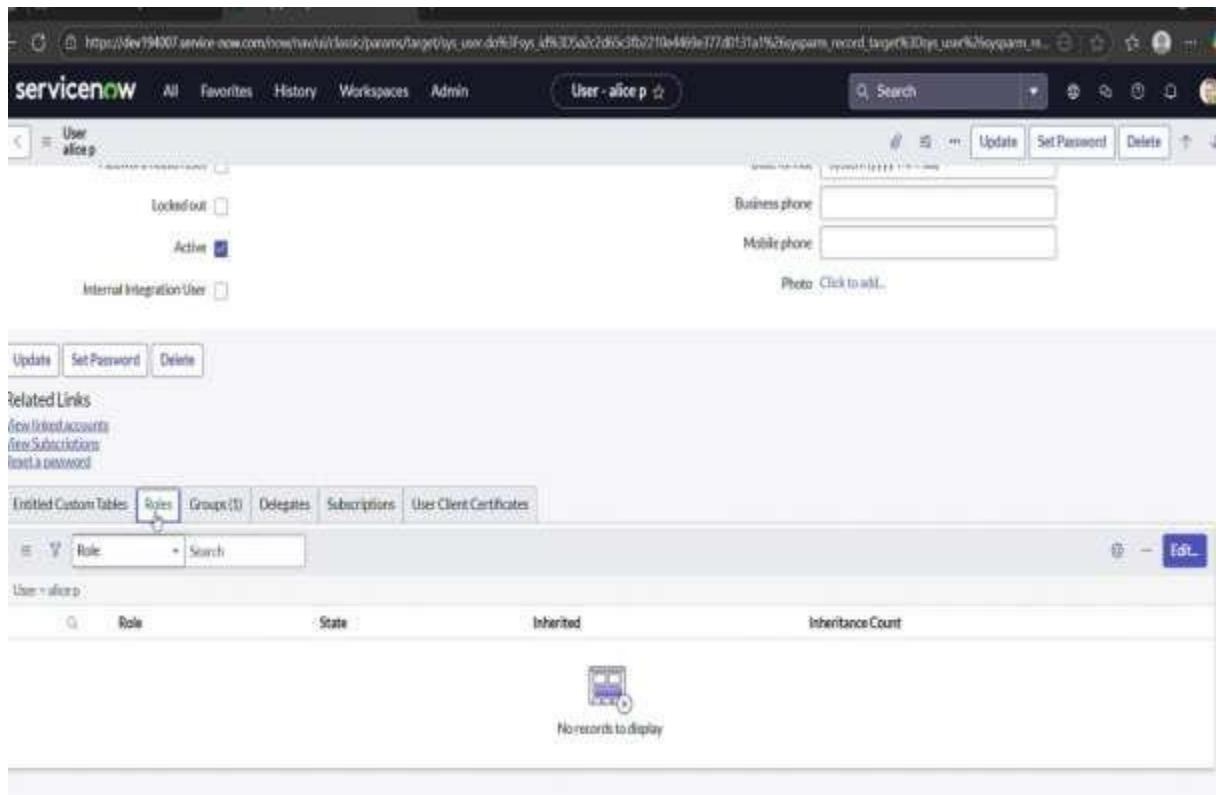
3. Select tables under system definition

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.

The screenshot shows the ServiceNow user profile page for 'User - alice p'. The top navigation bar includes links for All, Favorites, History, Workspaces, Admin, and a search bar. The main content area displays the user's details: 'User - alice p', 'Password needs reset' (unchecked), 'Locked out' (unchecked), 'Active' (checked), and 'Internal Integration User' (unchecked). There are fields for 'Dateformat' (set to 'System (yyyy-MM-dd)'), 'Business phone', and 'Mobile phone'. A 'Photo' field with the placeholder 'Click to add...' is present. Action buttons include 'Update', 'Set Password', and 'Delete'. Below this, a section titled 'Related Links' lists 'New linked accounts', 'New Subscriptions', and 'Reset a password'. A 'Custom Tables' tab is selected, showing a list of roles assigned to the user. The table has columns for Role, State, Inherited, and Inheritance Count. Two roles are listed: 'u_project_table_user' and 'u_task_table_2_user', both marked as 'Active' and 'Inherited' with an 'Inheritance Count' of 1. A search bar and an 'Edit...' button are at the bottom of the table.

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.

User ID: bob

First name: Bob

Last name: P.

Title:

Department:

Employee number:

Manager:

Active:

External Integration User:

Trusted: bob@intelligrator.com

Mobile 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 edit...

Update Set Password Delete

Milestone 7: Application access

Activity 1: Assign table access to application

1. while creating a table it automatically create 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

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

The screenshot shows the ServiceNow Access Control (ACL) creation interface. The top navigation bar includes 'Access Controls'. The main form has the following fields:

- Type: record
- Operation: write
- Decision Type: Allow
- Application: Global
- Active: checked
- Protection policy: None
- Description: (empty)
- Applies To: (with 'Add Filter Condition' and 'Add OR Clause' buttons)

A 'Conditions' section is visible at the bottom.

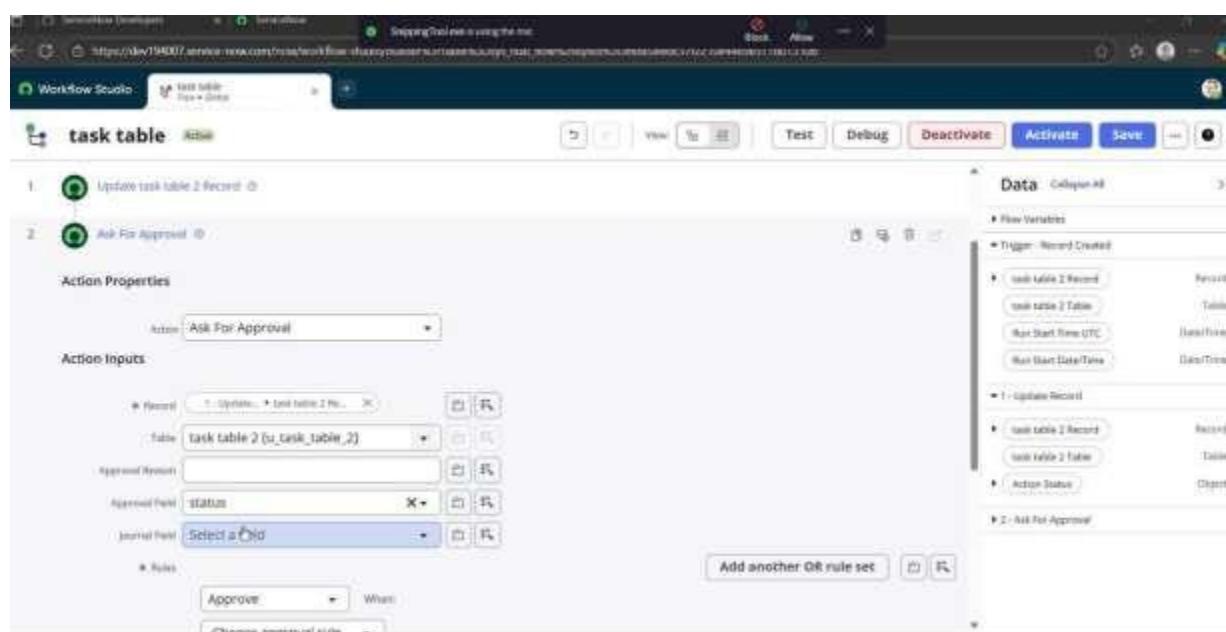
6. Fill the following details to create a new ACL
7. Scroll down under requires role
8. Double click on insert a new row
9. Give task table and team member role
10. Click on submit
11. Similarly create 4 acl for the following fields
12. Click on profile on top right side

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 have the edit access

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.

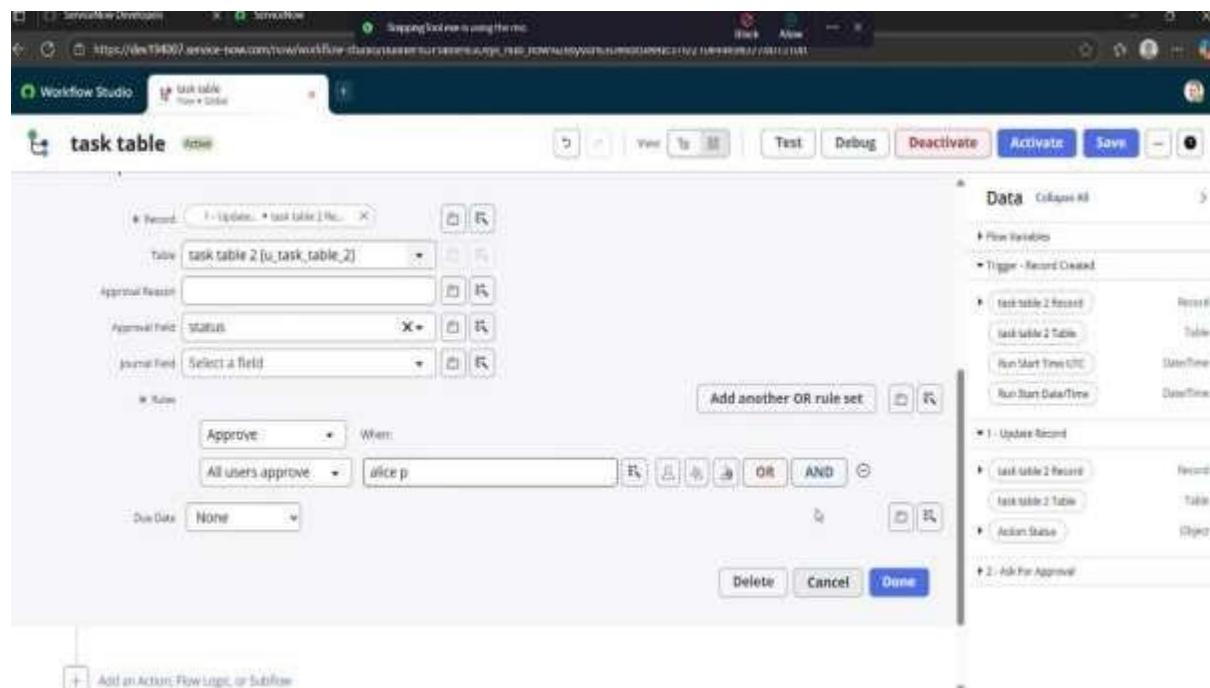
2. Select action in that, search for “update records”.

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.
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 a ServiceNow interface for the 'Approvals' list view. The top navigation bar includes 'servicenow', 'All', 'Favorites', 'History', 'Workspaces', 'Approvals', 'Search', and a user icon. The main area displays a table with the following columns: State, Approver, Comments, Approver ID, and Created. The 'State' column uses color-coded icons: green for 'Approved', red for 'Rejected', yellow for 'Requested', and blue for 'Pending'. The 'Approver' column lists names like Fred Luddy, Howard Johnson, Ron Katherin, Luke Wilson, Christian Mitchell, and Bernard Laboy. The 'Comments' column contains placeholder text '(empty)'. The 'Approver ID' column shows IDs starting with CHG or CHL. The 'Created' column shows dates from 2024-09-01 to 2024-10-22. A search bar at the top is set to 'Created'.

	Approver	Comments	Approver ID	Created
State	Approver	Comments	Approver ID	Created
Approved	Fred Luddy	(empty)	CHG00000095	2024-09-01 12:19:33
Rejected	Fred Luddy	(empty)	CHG00000095	2024-09-01 12:17:03
Requested	Fred Luddy	(empty)	CHG00000095	2024-09-01 12:15:44
Requested	Howard Johnson	(empty)	CHG00000095	2024-09-01 06:15:29
Requested	Ron Katherin	(empty)	CHG00000095	2024-09-01 06:15:29
Requested	Luke Wilson	(empty)	CHG00000095	2024-09-01 06:15:29
Requested	Christian Mitchell	(empty)	CHG00000095	2024-09-01 06:15:29
Requested	Bernard Laboy	(empty)	CHG00000095	2024-09-01 06:15:29
Requested	Howard Johnson	(empty)	CHG00000095	2024-09-01 06:15:29
Requested	Ron Katherin	(empty)	CHG00000095	2024-09-01 06:15:29
Requested	Luke Wilson	(empty)	CHG00000095	2024-09-01 06:15:29
Requested	Christian Mitchell	(empty)	CHG00000095	2024-09-01 06:15:29
Requested	Bernard Laboy	(empty)	CHG00000095	2024-09-01 06:15:29

Conclusion:

This approach provides a streamlined system for managing projects by defining roles, applying access restrictions, and organizing workflows. It helps the team collaborate effectively, improves accountability, simplifies task tracking, and ensures successful project delivery.