

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

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.

Project Flow:

Milestone 1: Create Users.

Milestone 2: Create Groups.

Milestone 3: Create Roles.

Milestone 4: Assign Users to groups.

Milestone 5: Application Access.

Milestone 6: Access Control List.

Milestone 7: Create a Flow to Assign Operation tickets to Groups.

Milestone 8: Conclusion.

Milestone 1 : Create Users:

->**Open service now**

1. Click on All >> search for users
2. Select Users under system security
3. Click on new
4. Fill the following details to create a new user

- Click on submit

The screenshot shows the ServiceNow User - New Record interface. The User ID is set to 'alice'. Other fields include First name ('alice'), Last name ('p'), Title (''), Department (''), Password needs reset (unchecked), Locked out (unchecked), Active (checked), 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 (''), Mobile phone (''), and Photo ('Click to add...'). A note at the top says, 'To set up the User's password, save the record and then click Set Password.' A 'Submit' button is visible in the top right.

Create one more user:

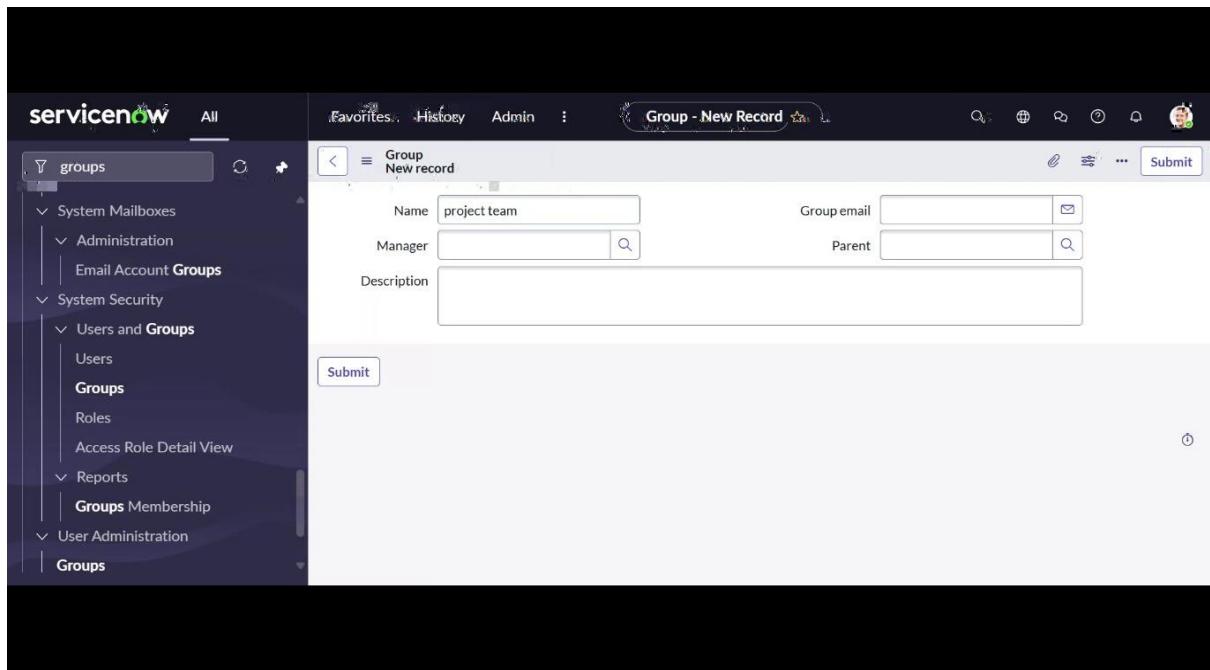
- Create another user with the following details
- Click on submit

The screenshot shows the ServiceNow User - New Record interface. The User ID is set to 'bob'. Other fields include First name ('bob'), Last name ('p'), Title (''), Department (''), Password needs reset (unchecked), Locked out (unchecked), Active (checked), 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 (''), and Photo ('Click to add...'). A note at the top says, 'To set up the User's password, save the record and then click Set Password.' A 'Submit' button is visible in the top right.

Milestone 2 : Create Groups

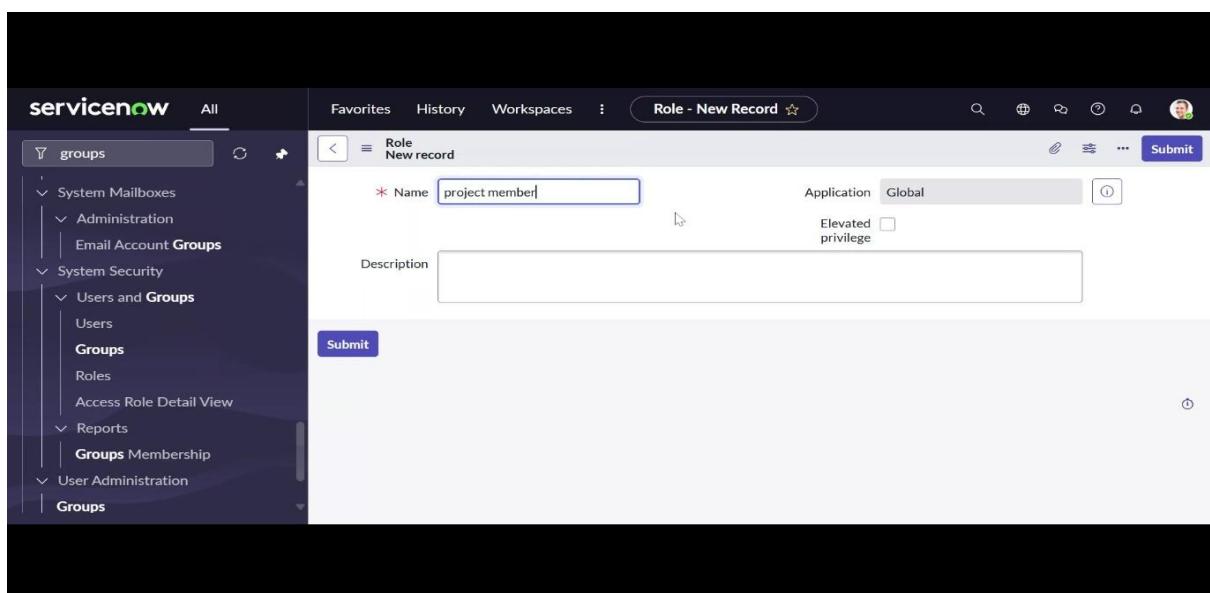
- Open service now.
- Click on All >> search for groups
- Select groups under system security
- Click on new
- Fill the following details to create a new group

6. Click on submit



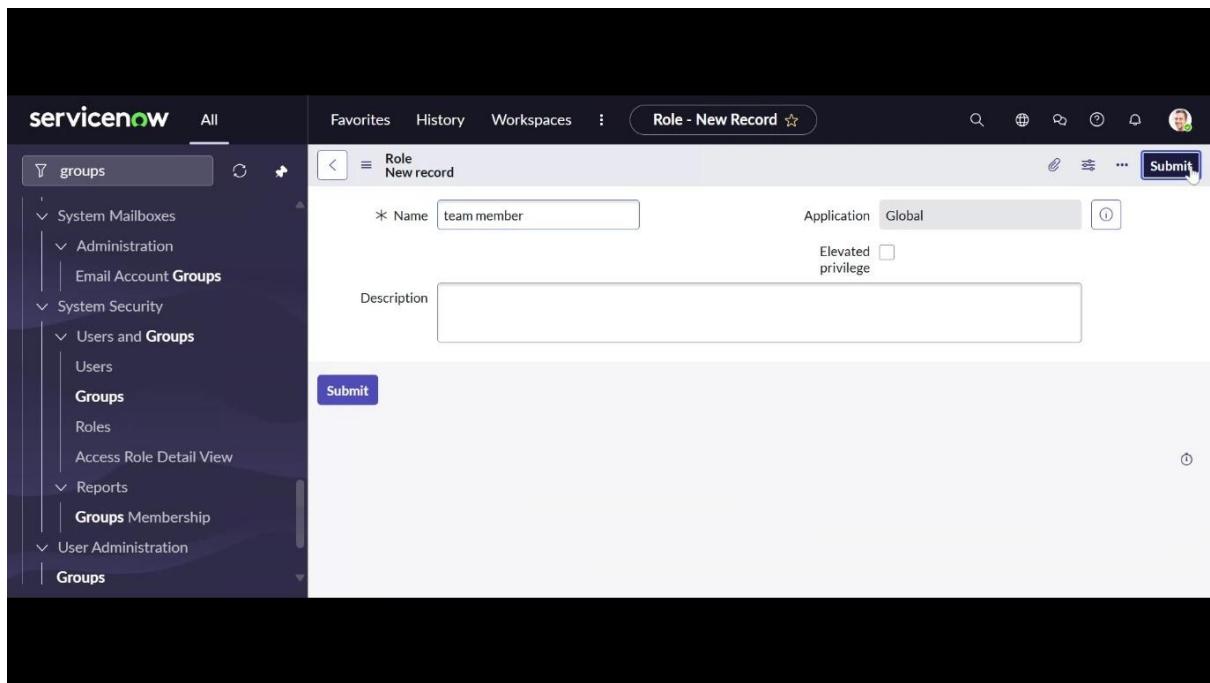
Milestone 3 : Create Roles

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:

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



Milestone 4 : Assign users to groups:

i) 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 interface for managing users. The left sidebar is titled 'servicenow' and contains a search bar with 'user' typed in. Under 'System Security > Users and Groups > Users', there is a list of users. The main panel shows the details for 'User - alice p'. At the top, there are tabs for 'Entitled Custom Tables', 'Roles (3)', 'Groups', 'Delegates', 'Subscriptions', and 'User Client Certificates'. The 'Roles (3)' tab is selected. Below it is a table with columns: Role, State, Inherited, and Inheritance Count. The table contains three rows: 'u_project_table_user' (Active, false), 'u_task_table_2_user' (Active, false), and 'project member' (Active, false). A message at the bottom says '1 to 3 of 3'.

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.

The screenshot shows the ServiceNow user interface for managing users. The left sidebar is titled 'servicenow' and contains a search bar with 'user' typed in. Under 'System Security > Users and Groups > Users', there is a list of users. The main panel shows the details for 'User - bob p'. At the top, there are tabs for 'Entitled Custom Tables', 'Roles (2)', 'Groups', 'Delegates', 'Subscriptions', and 'User Client Certificates'. The 'Roles (2)' tab is selected. Below it is a table with columns: Role, State, Inherited, and Inheritance Count. The table contains two rows: 'team member' (Active, false) and 'u_task_table_2_user' (Active, false). A message at the bottom says '1 to 2 of 2'.

Milestone 5 : 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 configuration for 'project table'. The title is 'Application Menu - project table'. The 'Title' field is set to 'project table', 'Application' is 'Global', and 'Active' is checked. Under 'Roles', 'project member' is selected. The 'Category' is 'Custom Applications'. A tooltip message is visible at the bottom: 'The text that appears in a tooltip when a user points to this application menu'.

The screenshot shows the ServiceNow application menu configuration for 'task table 2'. The title is 'Application Menu - task table 2'. The 'Title' field is set to 'task table 2', 'Application' is 'Global', and 'Active' is checked. Under 'Roles', 'team member, u_task_table_2_user, project member' are selected. The 'Category' is 'Custom Applications'. A tooltip message is visible at the bottom: 'The text that appears in a tooltip when a user points to this application menu'.

Milestone 6 : Access Control List.

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

The screenshot shows the ServiceNow interface for creating a new Access Control List (ACL) record. The left sidebar is titled "Self-Service" and lists various application categories. The main area has a title bar "Access Control - New Record" with a star icon. Below the title is a warning message: "Warning: A role, security attribute, data condition, or script is required to properly secure access with this ACL." The form fields include:

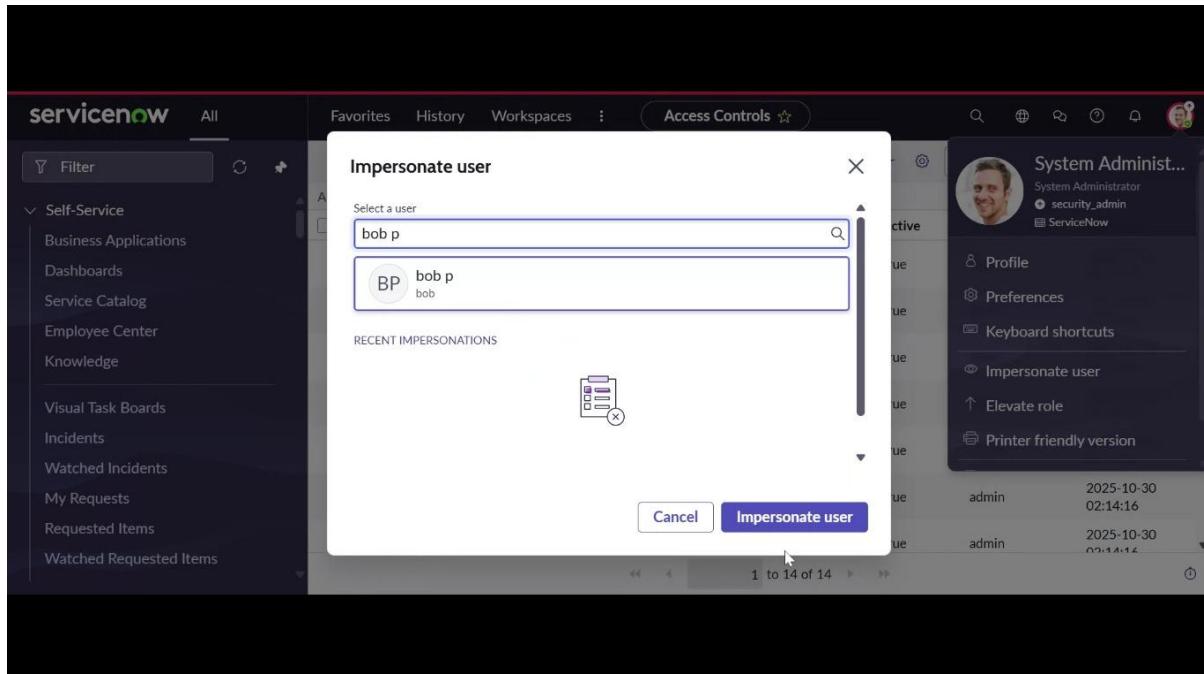
- * Type: record
- * Operation: create
- Decision Type: Allow If
- Application: Global (checkbox checked)
- Active: Active (checkbox checked)
- Advanced: Advanced (checkbox unchecked)
- Admin overrides: Admin overrides (checkbox checked)
- Protection policy: -- None --
- * Name: task table 2 [u_task_table_2]
- Description: status
- Applies To: No.of records matching the condition: 0 ⓘ
- Buttons: 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

The screenshot shows the ServiceNow interface with the 'Access Controls' module selected. The left sidebar is collapsed, and the main area displays a list of access control records. The table has the following columns: Name, Decision Type, Operation, Type, Active, Updated by, and Updated. The 'Name' column contains entries like 'u_task_table_2', 'u_task_table_2.u_assigned_to', 'u_task_table_2.u_comments', etc. The 'Decision Type' column shows 'ALLOW IF' for most rows. The 'Operation' column is mostly 'create'. The 'Type' column is 'record'. The 'Active' column shows 'true'. The 'Updated by' column shows 'admin'. The 'Updated' column shows dates and times such as '2025-10-30 02:14:16' and '2025-10-30 02:51:55'. A search bar at the top is set to 'Name'.

Name	Decision Type	Operation	Type	Active	Updated by	Updated
u_task_table_2	ALLOW IF	create	record	true	admin	2025-10-30 02:14:16
u_task_table_2.u_assigned_to	Allow If	create	record	true	admin	2025-10-30 02:51:55
u_task_table_2.u_comments	Allow If	create	record	true	admin	2025-10-30 02:57:20
u_task_table_2.u_due_date	Allow If	create	record	true	admin	2025-10-30 02:53:26
u_task_table_2.u_status	Allow If	create	record	true	admin	2025-10-30 02:50:32
u_task_table_2.u_task_id	Allow If	create	record	true	admin	2025-10-30 02:54:46
u_task_table_2.u_task_name	Allow If	create	record	true	admin	2025-10-30 02:56:10

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



The screenshot shows the 'task table 2 - Create' form in ServiceNow. The top navigation bar includes 'All', 'Favorites', 'History', and the current page title 'task table 2 - Create'. On the right, there are buttons for 'Submit', '...', and a refresh icon. The form itself has several fields:

- 'comments' input field
- 'status' dropdown menu set to '-- None --'
- 'due date' input field
- 'assigned to' input field
- 'task name' input field
- 'task id' input field

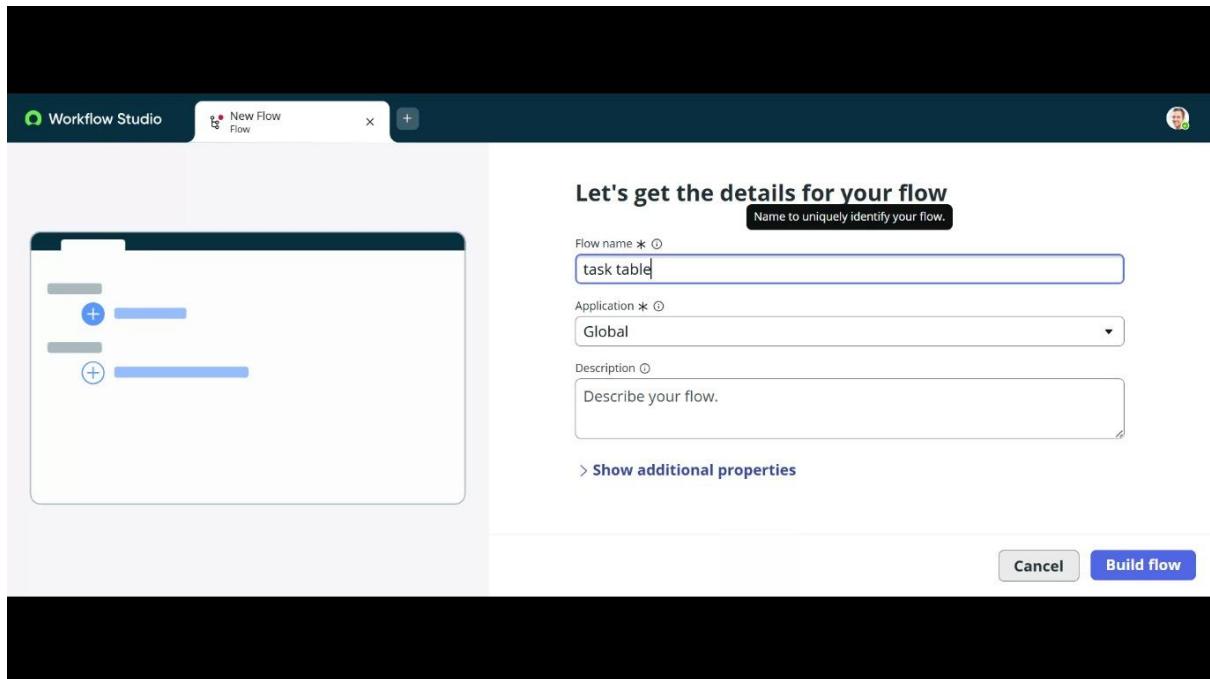
A 'Submit' button is located at the bottom left of the form area.

Milestone 7 : 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.

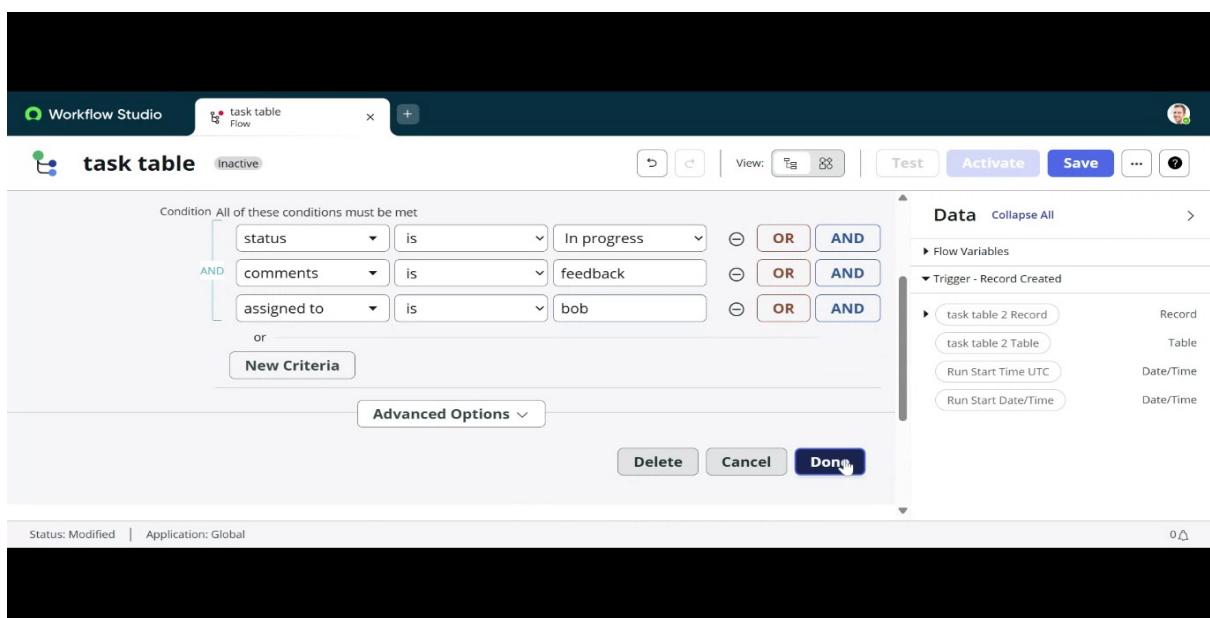
The screenshot shows the ServiceNow search interface with the query 'flow'. The results list includes 'Docker Webhook Answer Subflow' and 'Process Docker Webhook Subflow'. On the left, the navigation bar shows 'Flow Designer' selected under 'Workflow Studio'.

The screenshot shows the Workflow Studio interface with the 'Flows' tab selected. A 'New' dropdown menu is open, showing options like Playbook, Flow, Subflow, Action, and Decision table. To the right, there's a sidebar with links to Product Documentation, ServiceNow Videos, Community, Centre of Excellence, and Developer Portal.



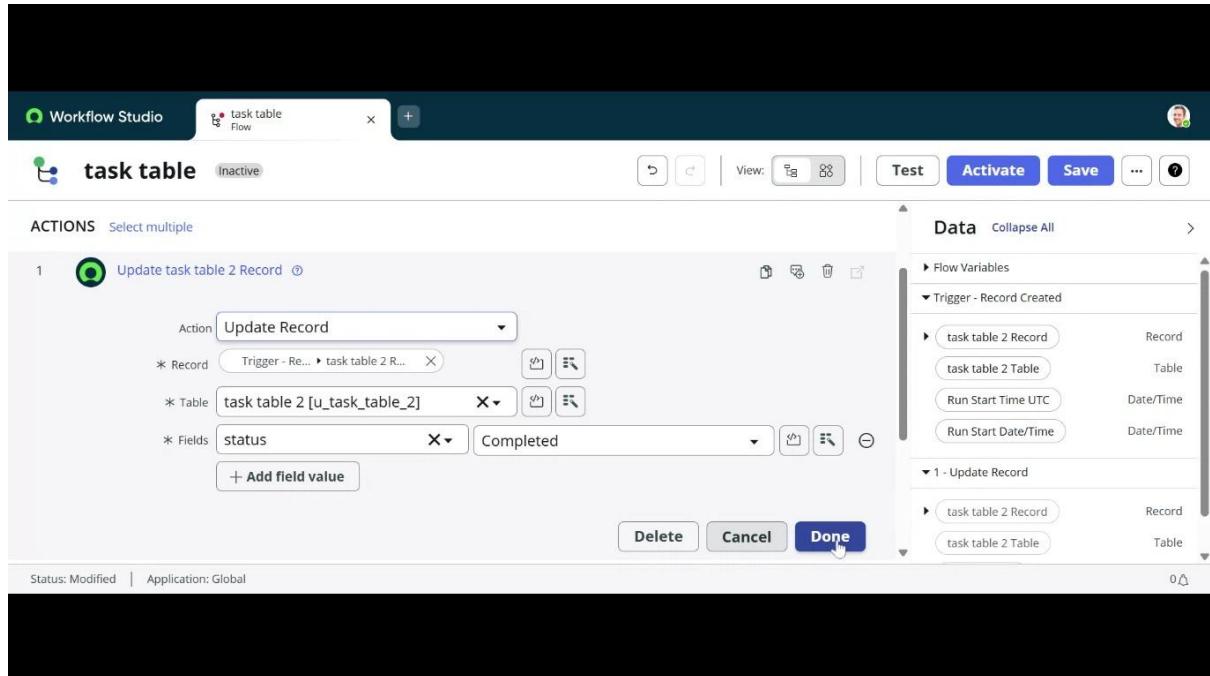
Next step:

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.



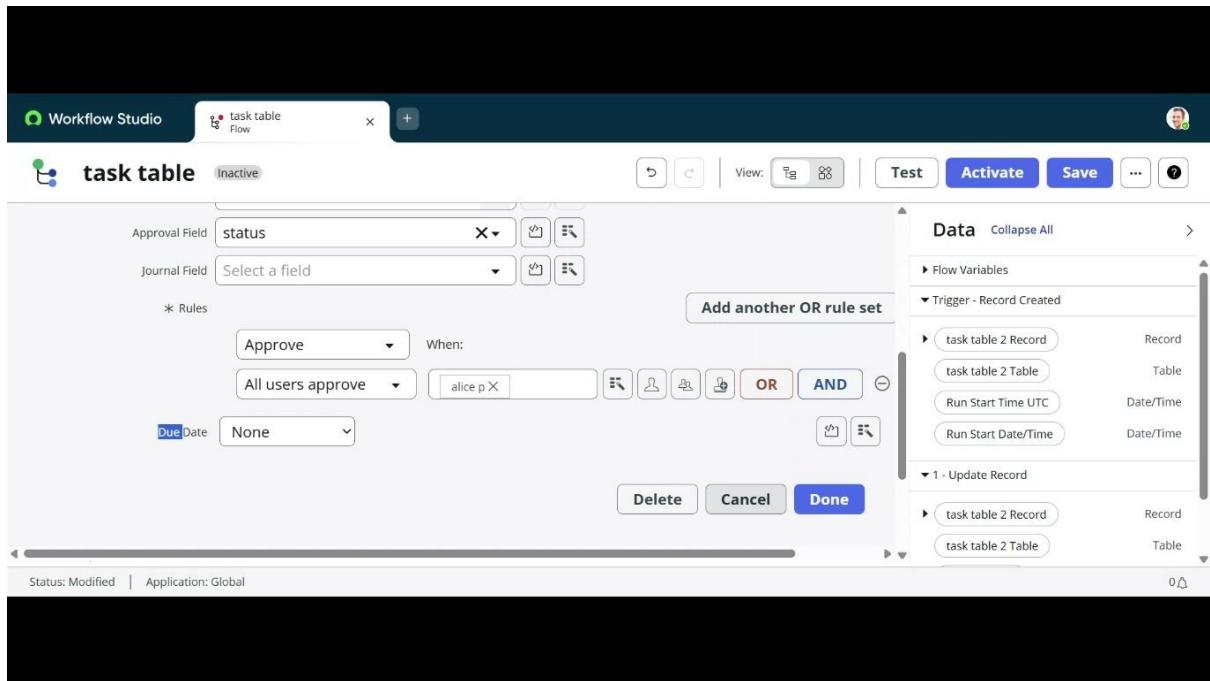
Next step:

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.



1. Go to application navigator and search for my approval
2. Click on my approval under the service desk.
3. Alice p got approval request then right click on requested then select approved

The screenshot shows the ServiceNow application navigator with the 'approval' search term selected. The results pane displays a list of approvals:

State	Approver	Comments	Approval for	Created
Requested	alice p	(empty)	CHG0000053	2025-08-06 06:09:38
Requested	Bernard Laboy	CHG0000071	2025-08-06 06:12:10	
Requested	Bernard Laboy	CHG0000037	2025-08-06 06:04:51	
Requested	Bernard Laboy	CHG0000076	2025-08-06 06:13:15	
Requested	Bernard Laboy	CHG0000094	2025-08-06 06:15:21	
Requested	Bernard Laboy	CHG0000051	2025-08-06 06:09:31	
Requested	Bernard Laboy	CHG0000073	2025-08-06 06:12:19	
Requested	Bernard Laboy	CHG0000090	2025-08-06 06:15:07	
Requested	Bernard Laboy	CHG0000074	2025-08-06 06:12:33	

The screenshot shows the ServiceNow interface for the 'Approvals' module. The left sidebar has a search bar with 'approval' and a 'FAVORITES' section with 'No Results'. The main area has a header with 'Favorites', 'History', 'Workspaces', 'Approvals', and a search bar for 'Approvals' with 'Approver' set to 'Search'. A message at the top says 'Approved task table 2: Created 2025-10-30 03:27:05'. Below is a table titled 'All > Approver Name >= alice p' with columns: State, Approver, Comments, Approval for, and Created. The table lists 8 rows of data.

State	Approver	Comments	Approval for	Created
Approved	alice p	(empty)	2025-10-30 03:27:07	
Requested	Bernard Laboy	CHG0000053	2025-08-06 06:09:38	
Requested	Bernard Laboy	CHG0000071	2025-08-06 06:12:10	
Requested	Bernard Laboy	CHG0000037	2025-08-06 06:04:51	
Requested	Bernard Laboy	CHG0000076	2025-08-06 06:13:15	
Requested	Bernard Laboy	CHG0000094	2025-08-06 06:15:21	
Requested	Bernard Laboy	CHG0000051	2025-08-06 06:09:31	
Requested	Bernard Laboy	CHG0000073	2025-08-06 06:12:19	

Milestone 8: 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.