

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

Team Id: NM2025TMID20087

Team Members: 4

Team Leader: EZHIL ARASAN T

Team Member 1: KESAVAN S

Team Member 2: AKASH A

Team Member 3: RAMKUMAR S

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:

1. Define User Roles Clearly: Establish distinct roles for Alice (Project Manager) and Bob (Team Member) to ensure clarity in responsibilities and access rights within the project management tool.

2. Implement Access Control Mechanisms: Create a system that restricts Bob's access to project creation and editing features while allowing him to view and update his assigned tasks, thereby preventing unauthorized changes.

3. Streamline Workflow Processes: Develop a structured workflow for task assignment and progress tracking, ensuring that Alice can easily assign tasks to Bob and monitor their completion in a timely manner.

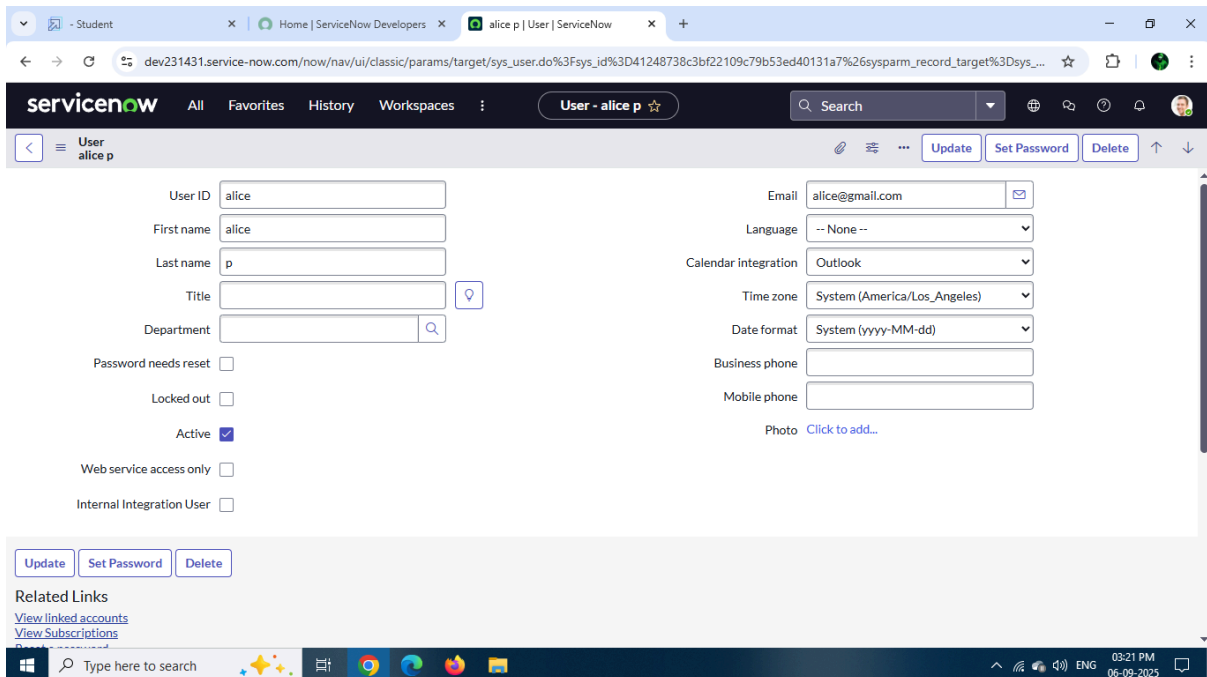
Skills: Users, Groups, Roles, Tables, Access Control List, Flow Designer

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 the ServiceNow user creation interface. The browser tabs include 'Student', 'Home | ServiceNow Developers', and 'alice p | User | ServiceNow'. The URL is 'dev231431.service-now.com/now/nav/ui/classic/params/target/sys_user.do%3Fsys_id%3D41248738c3bf22109c79b53ed40131a7%26sysparm_record_target%3Dsys...'. The page title is 'User - alice p'. The form fields are as follows:

Field	Value
User ID	alice
First name	alice
Last name	p
Title	
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	
Photo	Click to add...

Additional options:

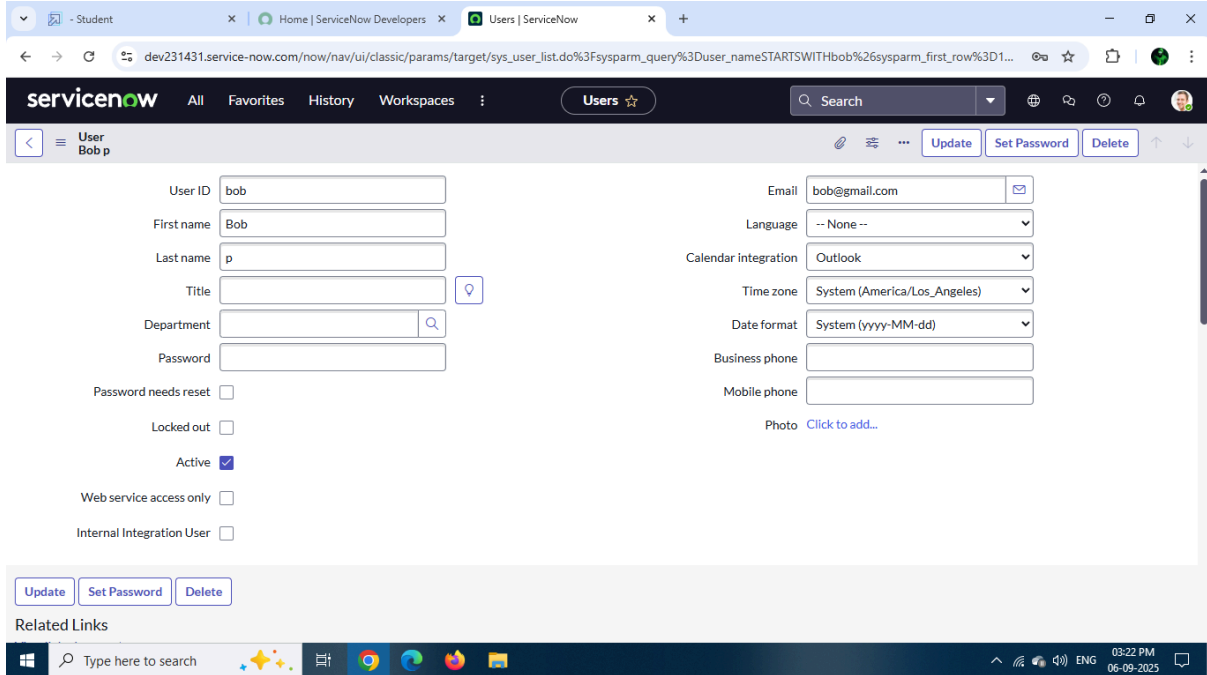
- Password needs reset: ☐
- Locked out: ☐
- Active: ☒
- Web service access only: ☐
- Internal Integration User: ☐

Buttons: Update, Set Password, Delete

Related Links: [View linked accounts](#), [View Subscriptions](#)

Create one more user:

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

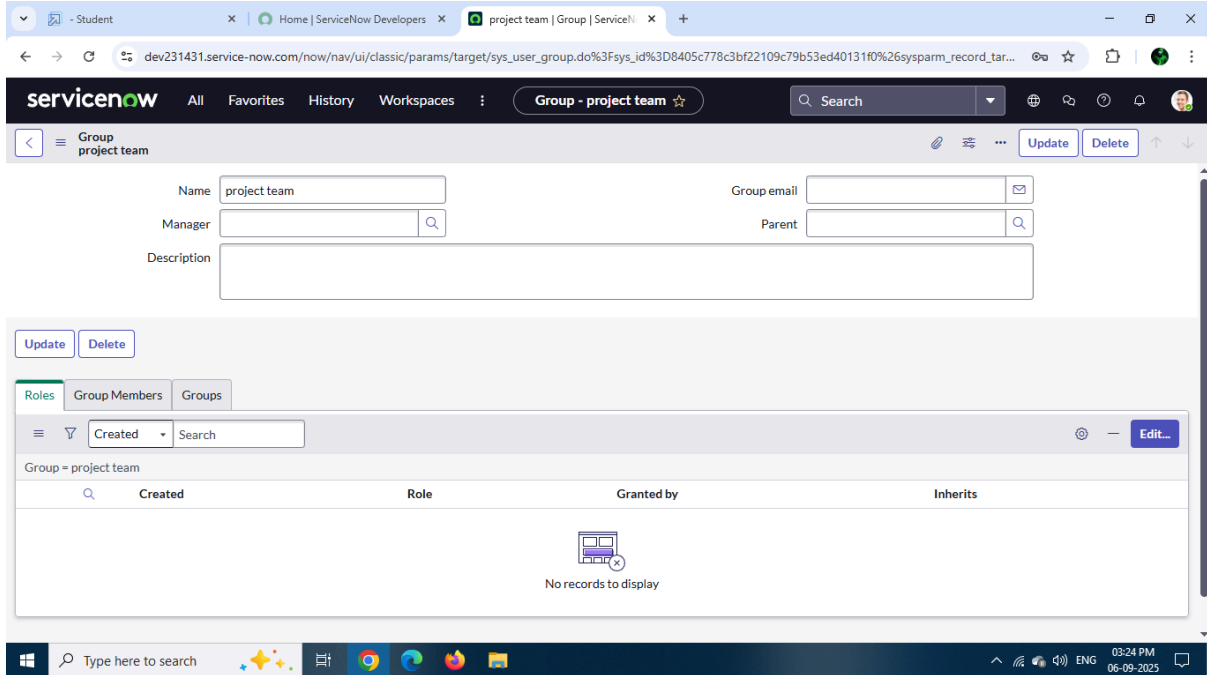


The screenshot shows the ServiceNow 'Users' page for a user named 'Bob p'. The page is divided into two main sections: user details on the left and integration settings on the right. At the top, there are navigation tabs for 'All', 'Favorites', 'History', and 'Workspaces', along with a search bar and a 'Users' tab. Below the navigation, there are buttons for 'Update', 'Set Password', and 'Delete'. The user details section includes fields for 'User ID' (bob), 'First name' (Bob), 'Last name' (p), 'Title' (empty), 'Department' (empty), and 'Password' (empty). There are also checkboxes for 'Password needs reset', 'Locked out', 'Active' (checked), 'Web service access only', and 'Internal Integration User'. The integration settings section includes fields for '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', and a 'Photo' link to add a photo. At the bottom, there are buttons for 'Update', 'Set Password', and 'Delete', and a 'Related Links' section.

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

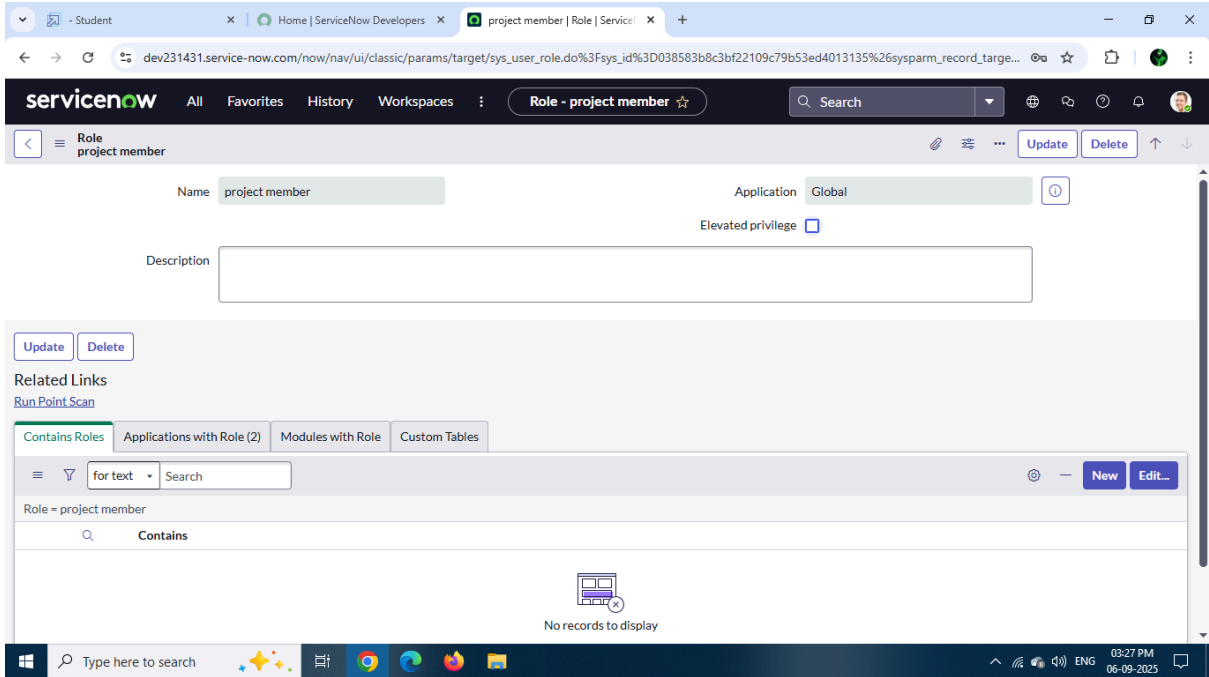


ServiceNow interface showing the 'Group - project team' form. The form includes fields for Name (project team), Group email, Manager, Parent, and Description. Below these are 'Update' and 'Delete' buttons. A tabbed interface shows 'Roles', 'Group Members', and 'Groups'. The 'Roles' tab is active, showing a table with columns: Created, Role, Granted by, and Inherits. The table is empty, displaying 'No records to display'.

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 ServiceNow 'Role - project member' configuration page. The 'Name' field is 'project member' and the 'Application' is 'Global'. The 'Elevated privilege' checkbox is unchecked. The 'Description' field is empty. Below the form are 'Update' and 'Delete' buttons. A 'Related Links' section contains a link to 'Run Point Scan'. A tabbed interface shows 'Contains Roles' as the active tab, with a search bar and 'New' and 'Edit...' buttons. Below this, a table titled 'Contains' is shown with the message 'No records to display'.

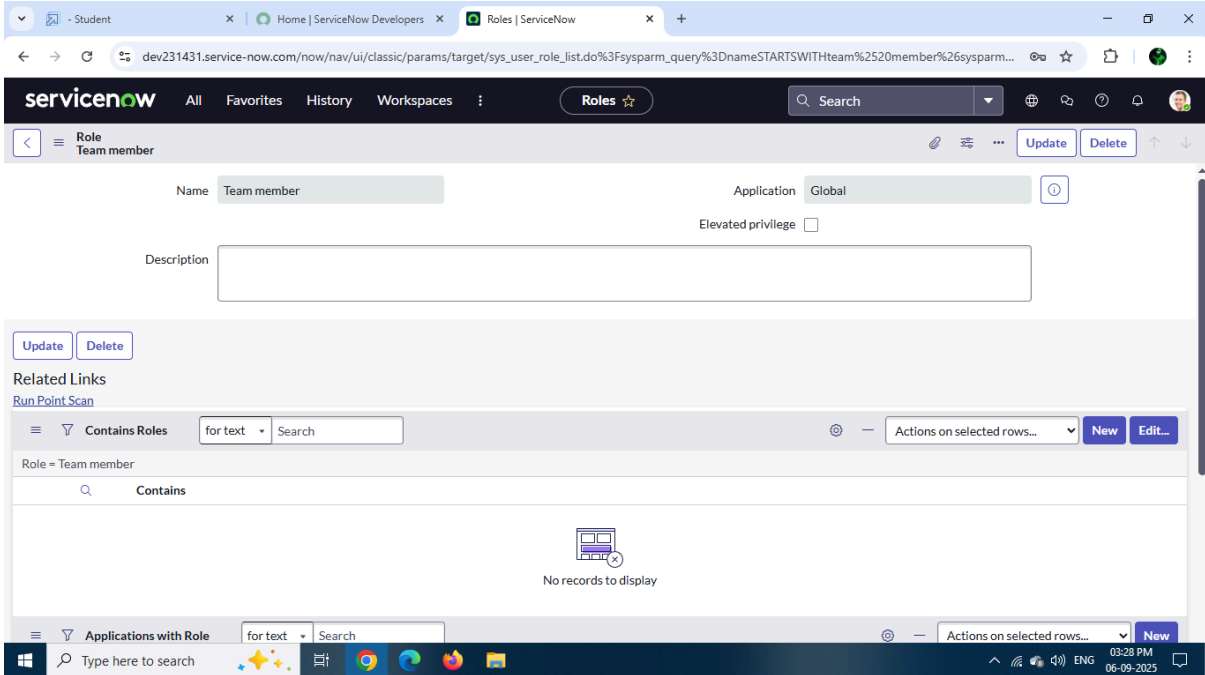
Create one more role:

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

Milestone 4: Table

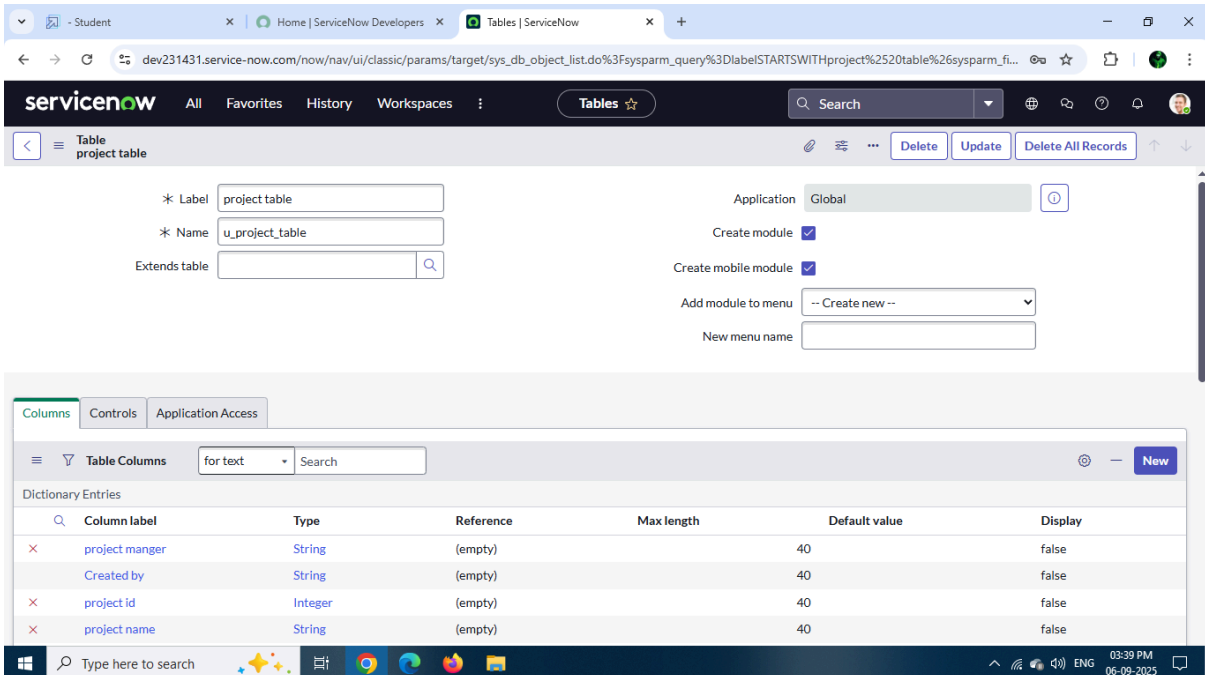
Activity 1: Create Table

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



ServiceNow Roles configuration page for 'Team member' role. The page shows the role name, application (Global), and a description field. Below the form, there are 'Update' and 'Delete' buttons. The 'Related Links' section includes a link to 'Run Point Scan'. The 'Contains' section shows a table with no records displayed. The 'Applications with Role' section also shows a table with no records displayed.

8. Click on submit



ServiceNow Tables configuration page for 'project table'. The page shows the table label, name, and application (Global). It includes checkboxes for 'Create module' and 'Create mobile module', and a dropdown for 'Add module to menu'. Below the form, there are 'Delete', 'Update', and 'Delete All Records' buttons. The 'Columns' section shows a table with dictionary entries for the table columns.

Column label	Type	Reference	Max length	Default value	Display
project manger	String	(empty)	40	false	false
Created by	String	(empty)	40	false	false
project id	Integer	(empty)	40	false	false
project name	String	(empty)	40	false	false

Create one more table:

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

10. Click on submit.

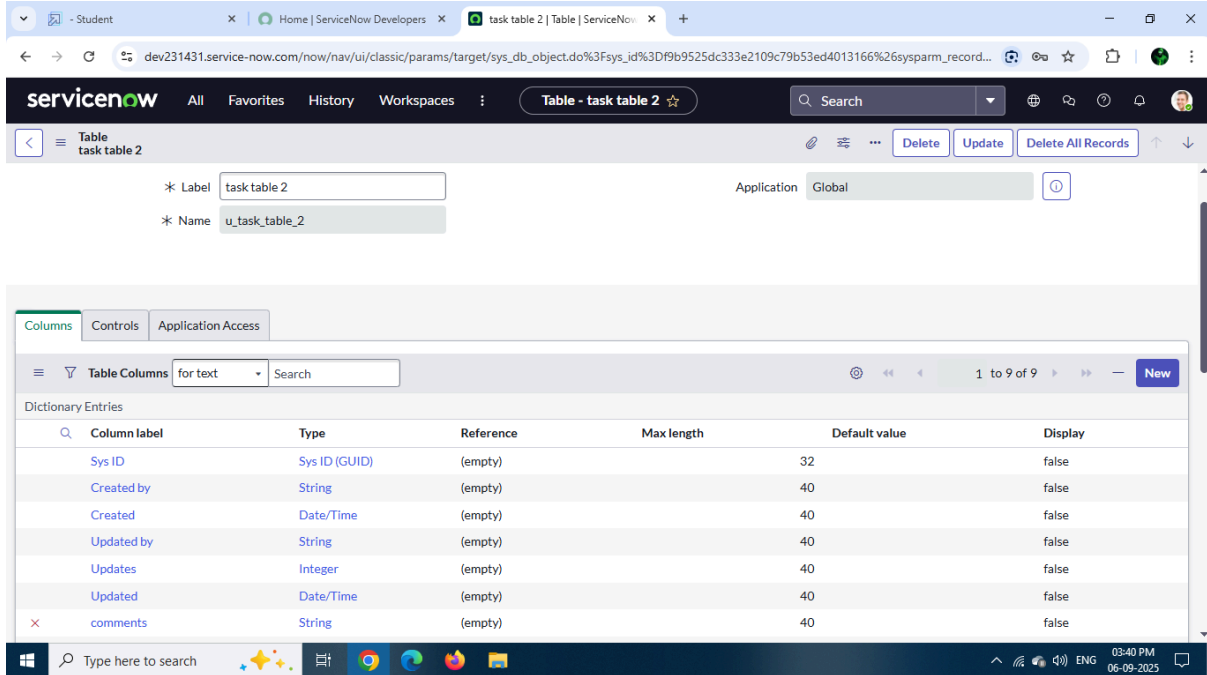


Table - task table 2

* Label: task table 2

* Name: u_task_table_2

Application: Global

Columns | Controls | Application Access

Table Columns: for text

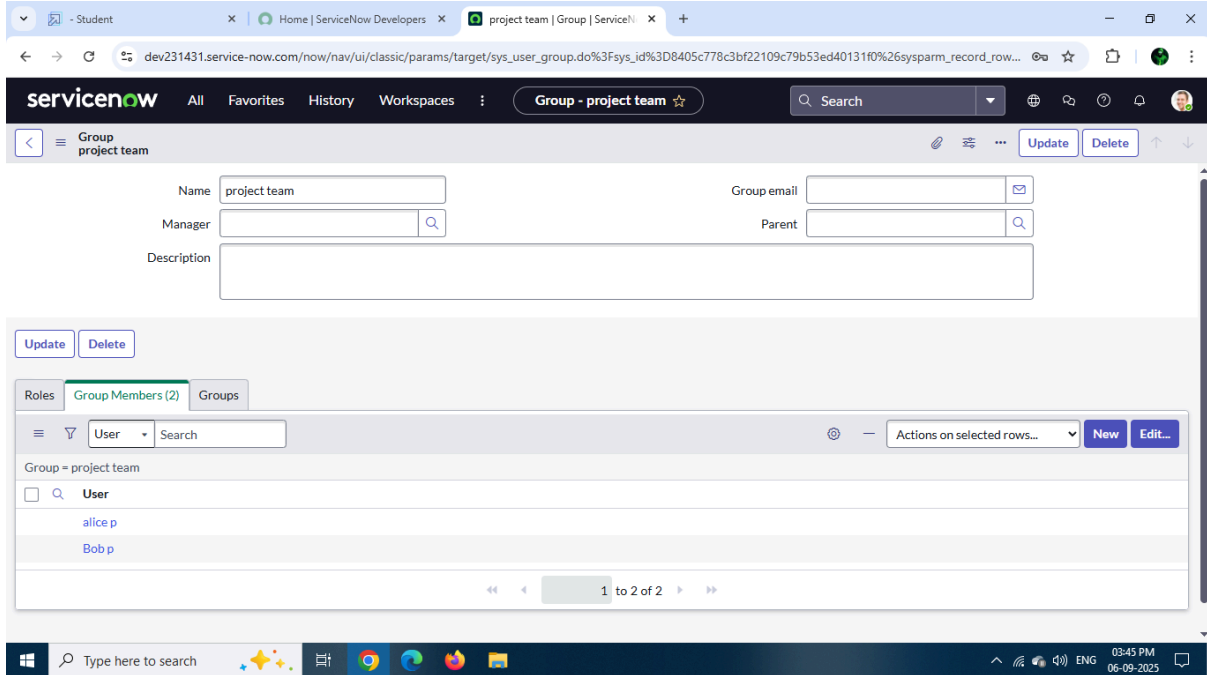
Dictionary Entries

Column label	Type	Reference	Max length	Default value	Display
Sys ID	Sys ID (GUID)	(empty)		32	false
Created by	String	(empty)	40		false
Created	Date/Time	(empty)	40		false
Updated by	String	(empty)	40		false
Updates	Integer	(empty)	40		false
Updated	Date/Time	(empty)	40		false
comments	String	(empty)	40		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

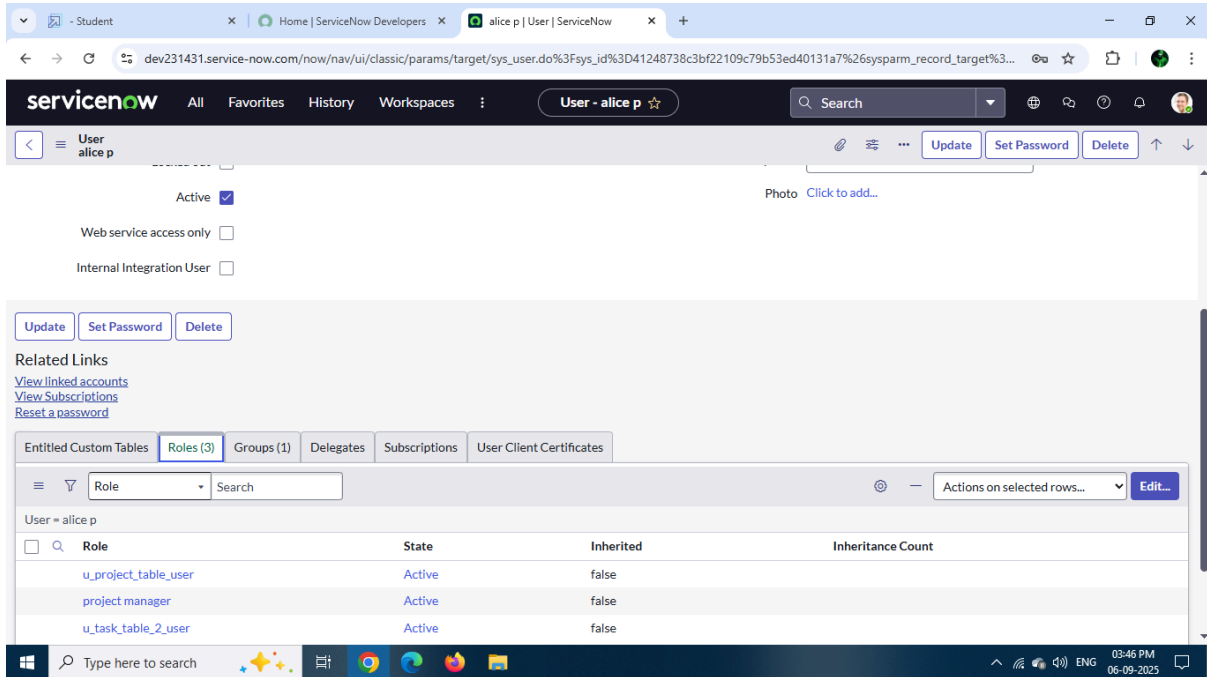


The screenshot shows the ServiceNow 'Group' form for a group named 'project team'. The form includes fields for Name, Manager, Group email, Parent, and Description. Below the form are 'Update' and 'Delete' buttons. The 'Roles' tab is active, showing a table of group members. The table has columns for selection, search, and user names. Two users are listed: 'alice p' and 'Bob p'. The table is paginated to show 1 to 2 of 2 rows. The bottom of the screen shows the Windows taskbar with the search bar and various application icons.

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.

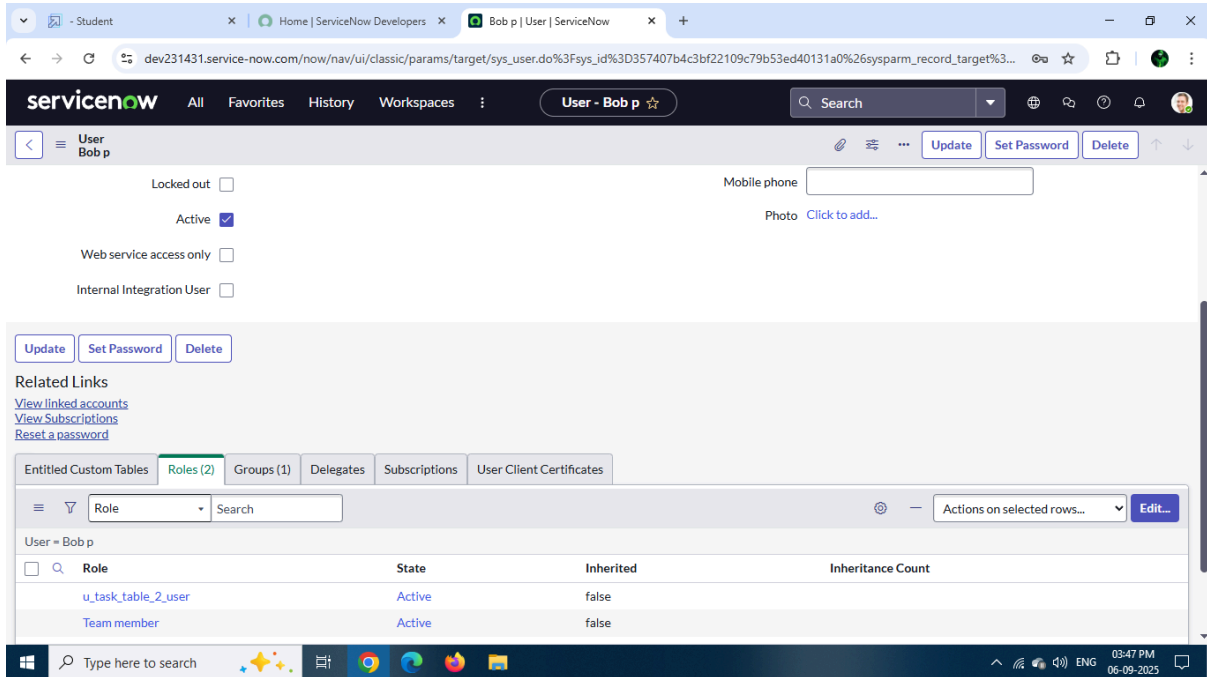


The screenshot shows the ServiceNow user profile page for 'alice p'. The user is active and has the role of 'project manager'. The 'Roles' tab is selected, showing a table of roles assigned to the user.

Role	State	Inherited	Inheritance Count
u_project_table_user	Active	false	
project manager	Active	false	
u_task_table_2_user	Active	false	

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.



ServiceNow User Profile for User - Bob p

Locked out ☐ Active ☒ Web service access only ☐ Internal Integration User ☐

Mobile phone Photo [Click to add...](#)

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

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

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

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

dev231431.service-now.com/now/nav/ui/classic/params/target/sys_app_application.do%3Fsys_id%3D89e289c9c3f762109c79b53ed4013183%26sysparm_recor...

servicenow All Favorites History Admin Application Menu - project table Search

Application Menu project table Update Delete

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](#)

* Title Application 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

dev231431.service-now.com/now/nav/ui/classic/params/target/sys_app_application.do%3Fsys_id%3Dff5305c9c3f762109c79b53ed401310e%26sysparm_re...

servicenow All Favorites History Admin Application Menu - task table2 Search

Application Menu task table2 Update Delete

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](#)

* Title Application 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

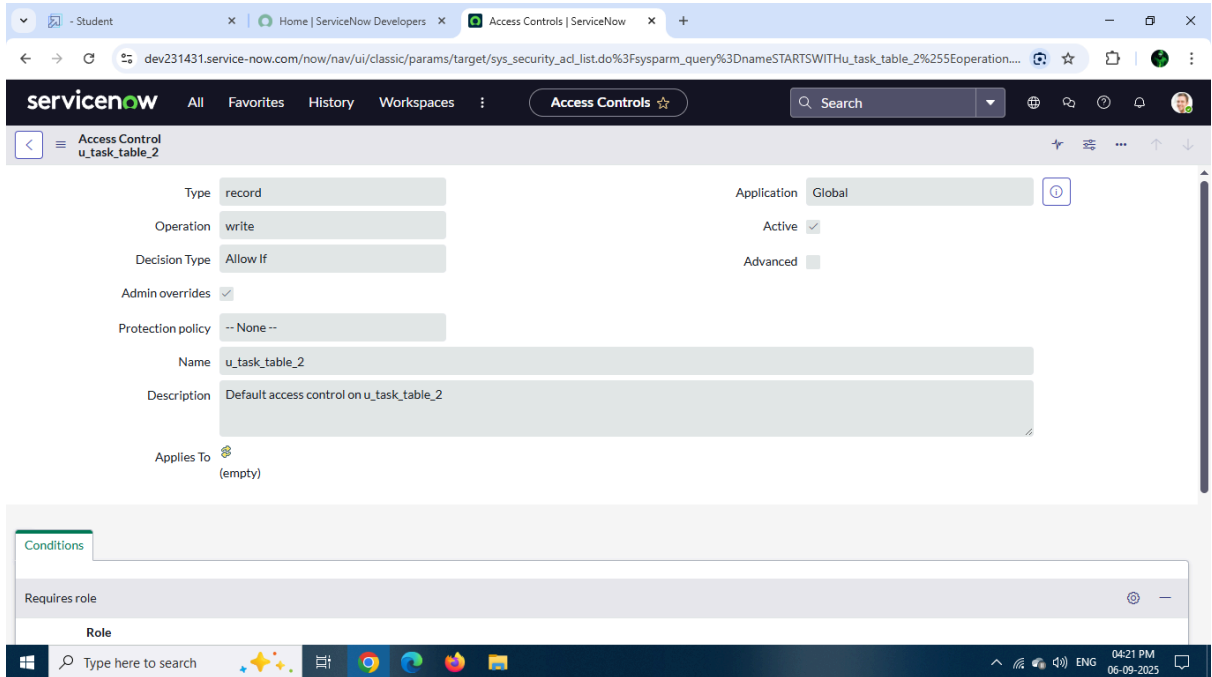
Hint

Description

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

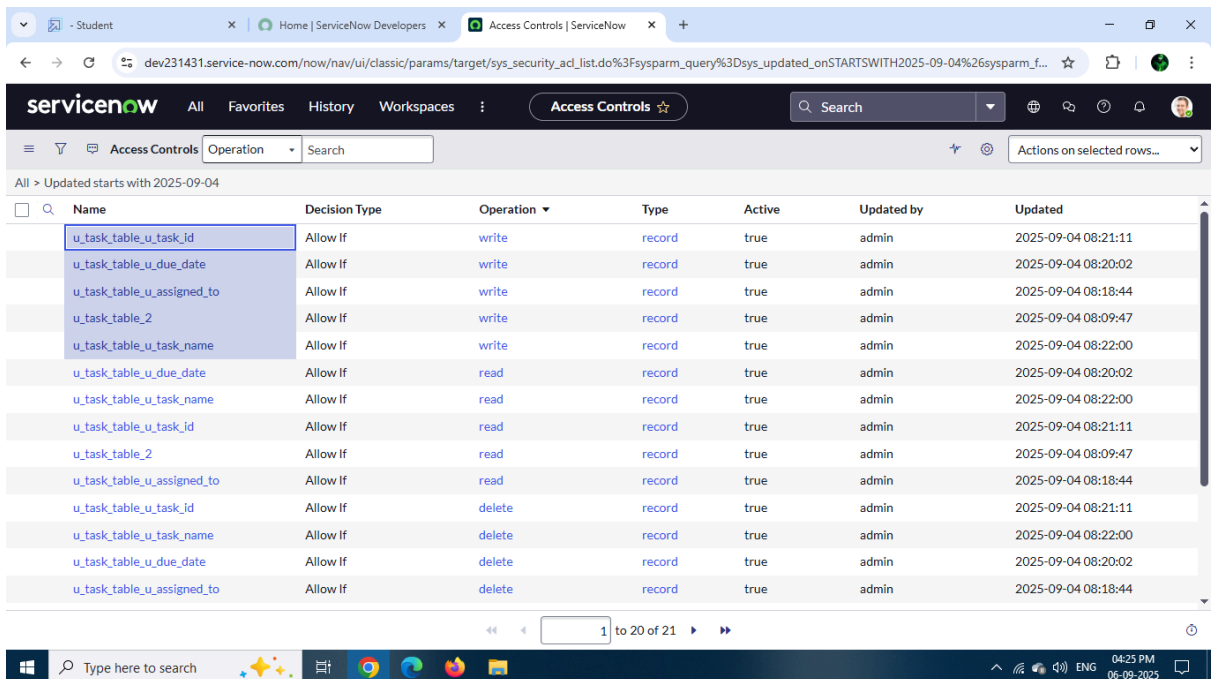


The screenshot shows the ServiceNow Access Control form for the record 'u_task_table_2'. The form is titled 'Access Control u_task_table_2' and includes a search bar and navigation tabs. The form fields are as follows:

Field	Value
Type	record
Operation	write
Decision Type	Allow If
Admin overrides	<input checked="" type="checkbox"/>
Protection policy	-- None --
Name	u_task_table_2
Description	Default access control on u_task_table_2
Applies To	(empty)
Application	Global
Active	<input checked="" type="checkbox"/>
Advanced	<input type="checkbox"/>

Below the form, there is a 'Conditions' section and a 'Requires role' section. The 'Requires role' section is currently empty.

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



The screenshot shows the ServiceNow Access Controls list. The table displays a list of ACLs with columns: Name, Decision Type, Operation, Type, Active, Updated by, and Updated. The table is filtered by 'Updated starts with 2025-09-04'.

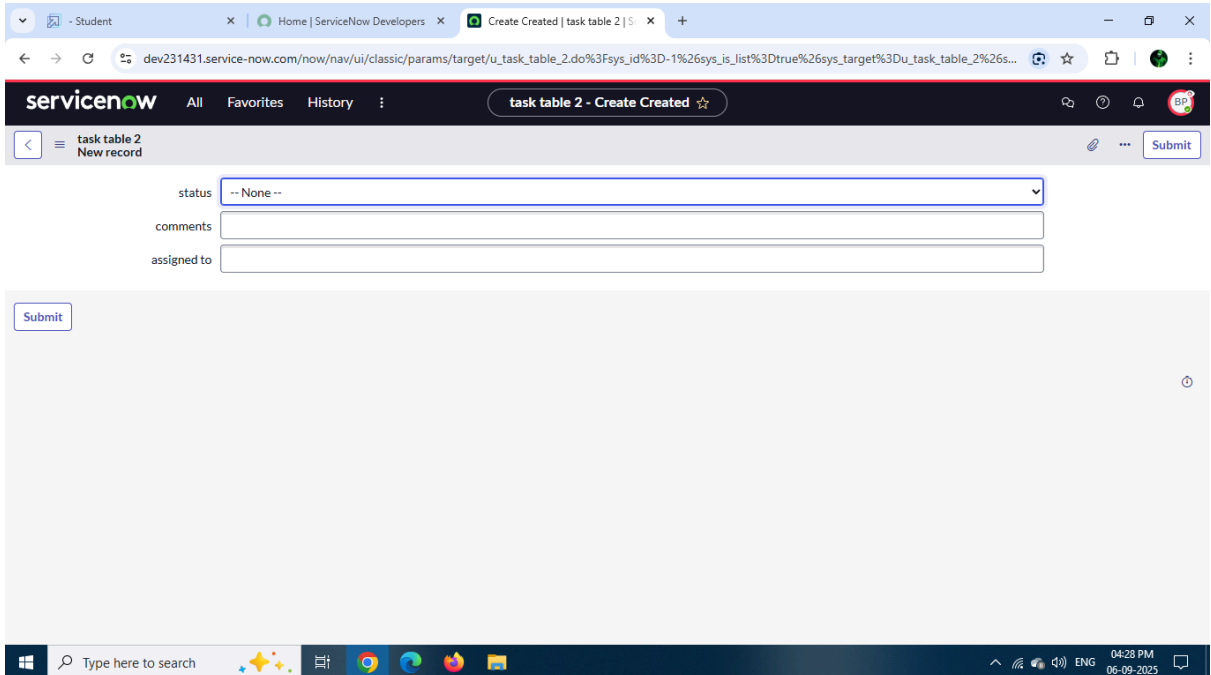
Name	Decision Type	Operation	Type	Active	Updated by	Updated
u_task_table_u_task_id	Allow If	write	record	true	admin	2025-09-04 08:21:11
u_task_table_u_due_date	Allow If	write	record	true	admin	2025-09-04 08:20:02
u_task_table_u_assigned_to	Allow If	write	record	true	admin	2025-09-04 08:18:44
u_task_table_2	Allow If	write	record	true	admin	2025-09-04 08:09:47
u_task_table_u_task_name	Allow If	write	record	true	admin	2025-09-04 08:22:00
u_task_table_u_due_date	Allow If	read	record	true	admin	2025-09-04 08:20:02
u_task_table_u_task_name	Allow If	read	record	true	admin	2025-09-04 08:22:00
u_task_table_u_task_id	Allow If	read	record	true	admin	2025-09-04 08:21:11
u_task_table_2	Allow If	read	record	true	admin	2025-09-04 08:09:47
u_task_table_u_assigned_to	Allow If	read	record	true	admin	2025-09-04 08:18:44
u_task_table_u_task_id	Allow If	delete	record	true	admin	2025-09-04 08:21:11
u_task_table_u_task_name	Allow If	delete	record	true	admin	2025-09-04 08:22:00
u_task_table_u_due_date	Allow If	delete	record	true	admin	2025-09-04 08:20:02
u_task_table_u_assigned_to	Allow If	delete	record	true	admin	2025-09-04 08:18:44

The table shows 14 rows of ACLs. The first 5 rows are for 'write' operations, and the next 9 rows are for 'read' and 'delete' operations. The table is paginated, showing 1 to 20 of 21 rows.

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

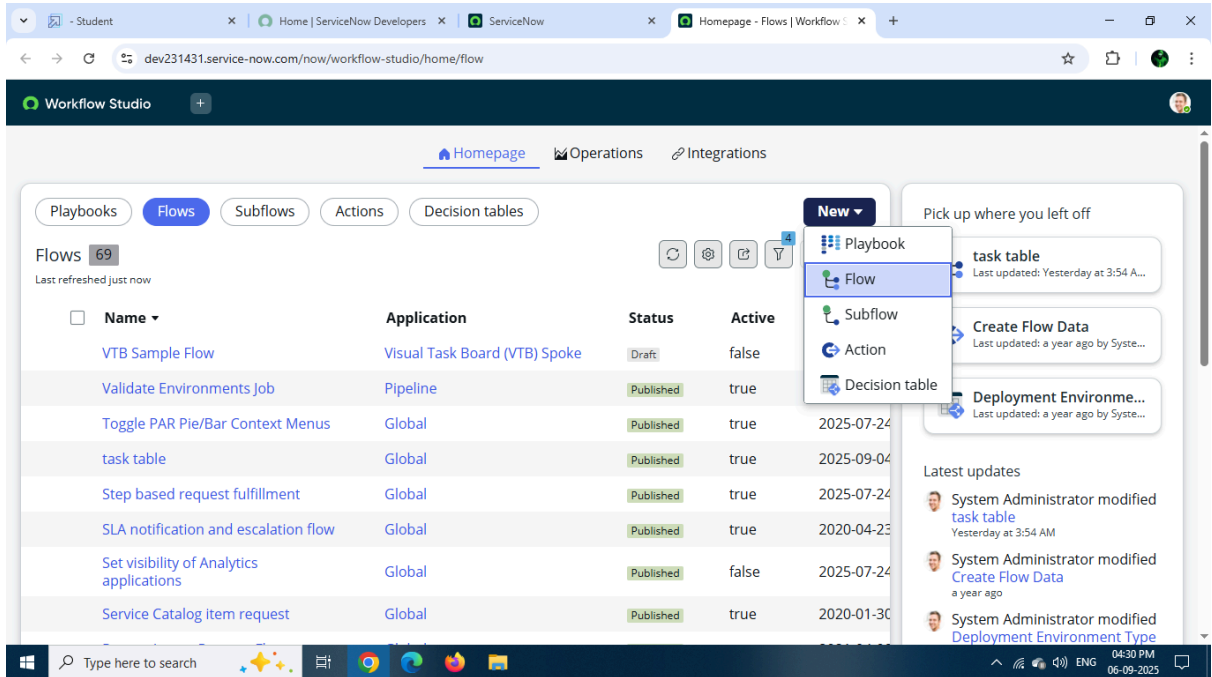
16. Comment and status fields are have the edit access



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.



Workflow Studio

Homepage Operations Integrations

Playbooks **Flows** Subflows Actions Decision tables

Flows 69
Last refreshed just now

Name	Application	Status	Active	
VTB Sample Flow	Visual Task Board (VTB) Spoke	Draft	false	
Validate Environments Job	Pipeline	Published	true	
Toggle PAR Pie/Bar Context Menus	Global	Published	true	2025-07-24
task table	Global	Published	true	2025-09-04
Step based request fulfillment	Global	Published	true	2025-07-24
SLA notification and escalation flow	Global	Published	true	2020-04-23
Set visibility of Analytics applications	Global	Published	false	2025-07-24
Service Catalog Item request	Global	Published	true	2020-01-30

New ▾

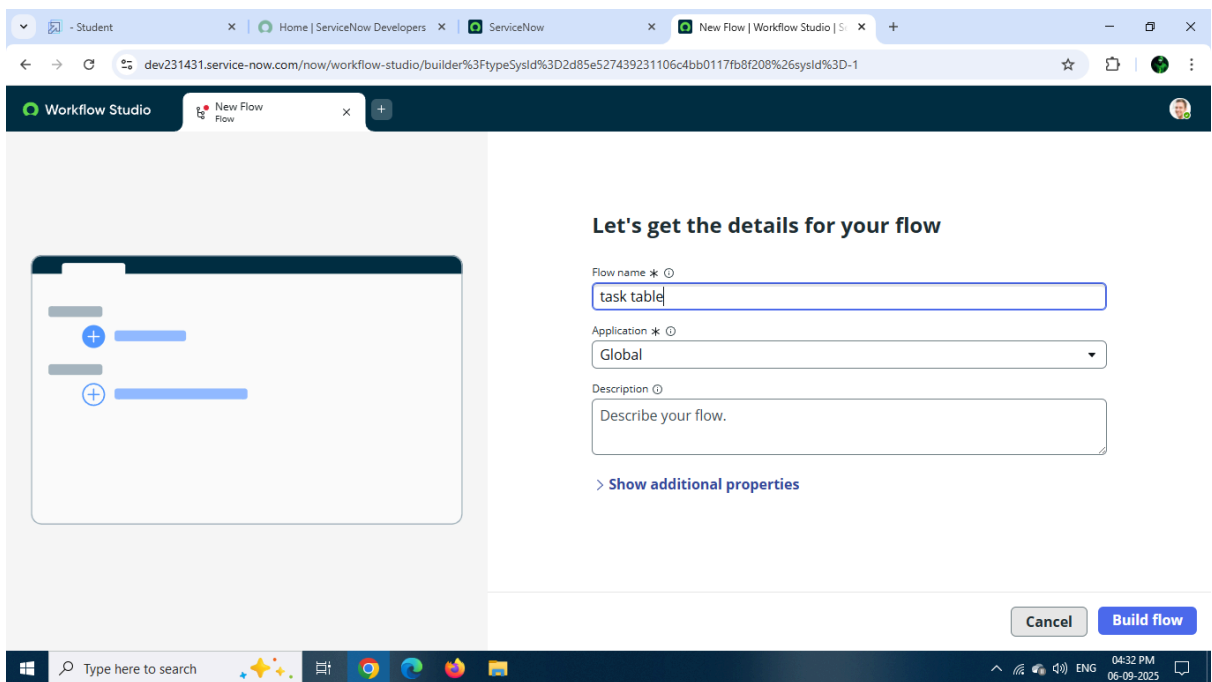
- Playbook
- Flow**
- Subflow
- Action
- Decision table

Pick up where you left off

- task table
Last updated: Yesterday at 3:54 A...
- Create Flow Data
Last updated: a year ago by Syste...
- Deployment Environme...
Last updated: a year ago by Syste...

Latest updates

- System Administrator modified task table
Yesterday at 3:54 AM
- System Administrator modified Create Flow Data
a year ago
- System Administrator modified Deployment Environment Type



Workflow Studio

New Flow

Let's get the details for your flow

Flow name *

Application *

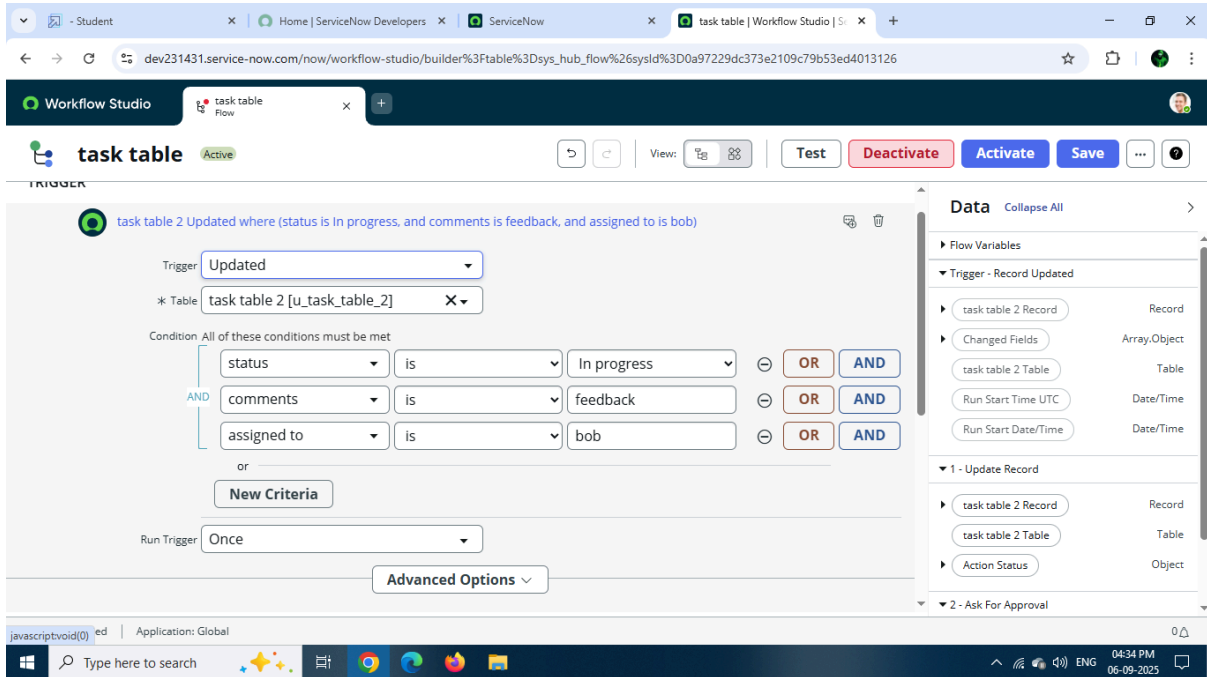
Description

[Show additional properties](#)

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
5. After that click on Done.



The screenshot shows the ServiceNow Workflow Studio interface. The trigger is configured as follows:

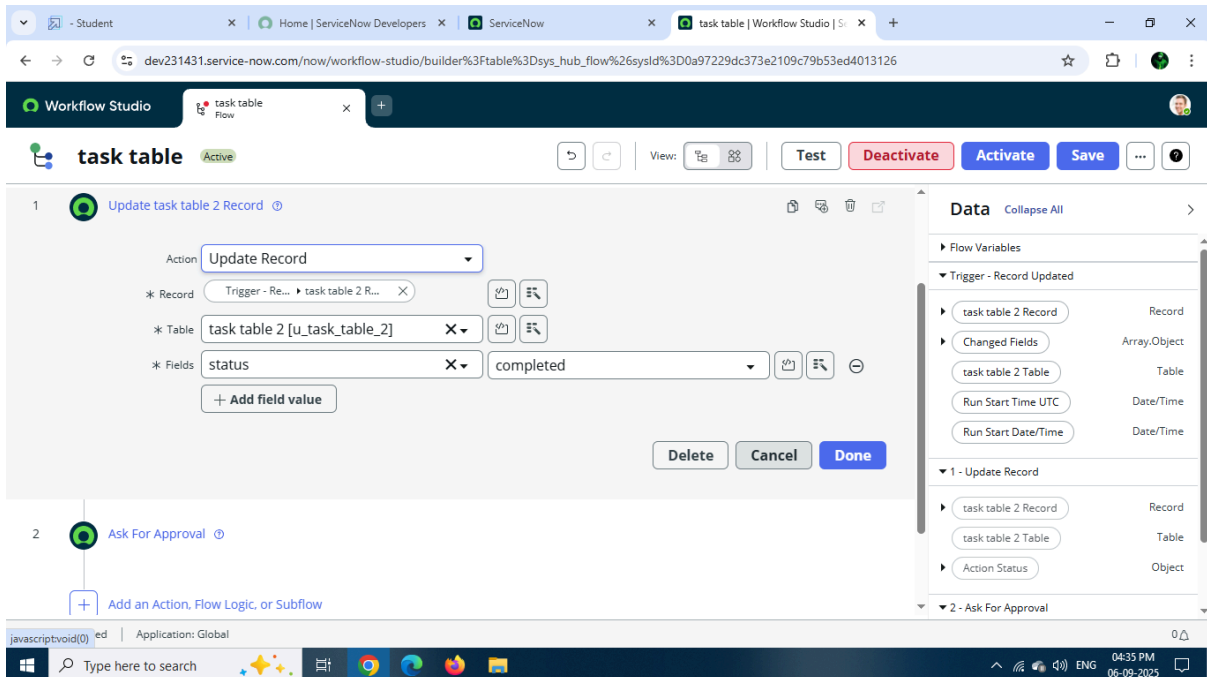
- Trigger:** Updated
- Table:** task table 2 [u_task_table_2]
- Condition:** All of these conditions must be met
 - status is In progress
 - comments is feedback
 - assigned to is bob
- Run Trigger:** Once

The right-hand pane shows the **Data** section with the following variables:

- Flow Variables:**
 - task table 2 Record (Record)
 - Changed Fields (Array/Object)
 - task table 2 Table (Table)
 - Run Start Time UTC (Date/Time)
 - Run Start Date/Time (Date/Time)
- 1 - Update Record:**
 - task table 2 Record (Record)
 - task table 2 Table (Table)
 - Action Status (Object)
- 2 - Ask For Approval**

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.



The screenshot shows the ServiceNow Workflow Studio interface with the action configuration for 'Update task table 2 Record'.

- Action:** Update Record
- Record:** Trigger - Re... task table 2 R...
- Table:** task table 2 [u_task_table_2]
- Fields:** status completed

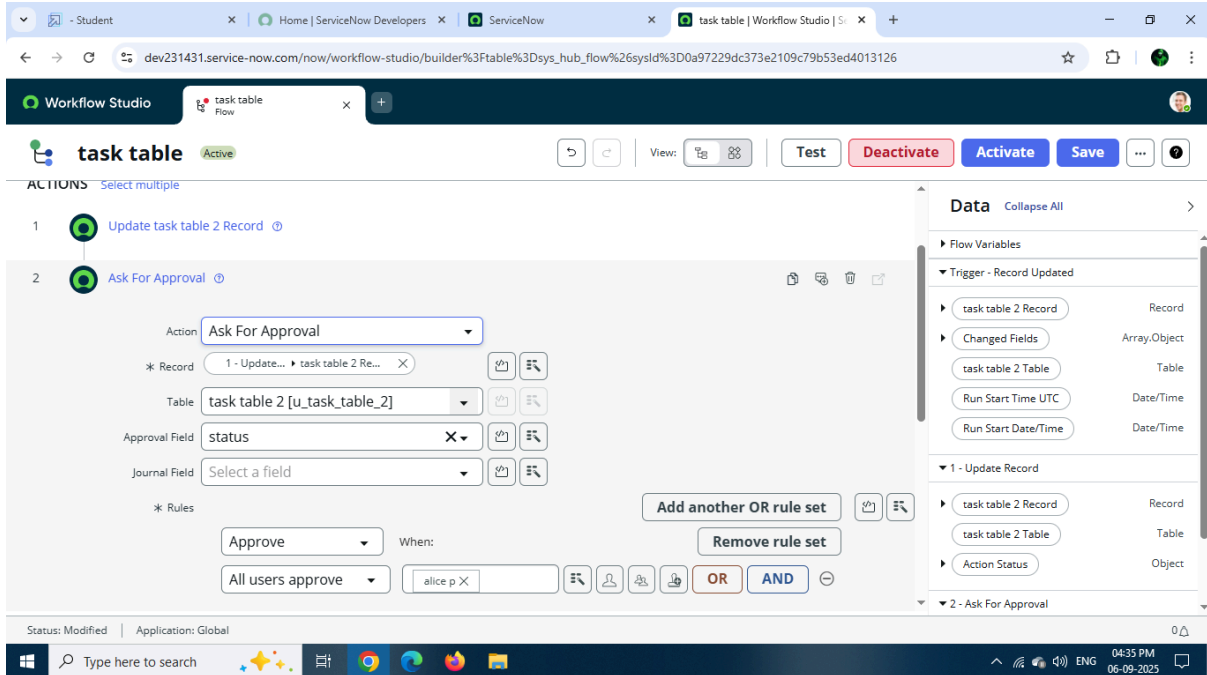
The right-hand pane shows the **Data** section with the following variables:

- Flow Variables:**
 - task table 2 Record (Record)
 - Changed Fields (Array/Object)
 - task table 2 Table (Table)
 - Run Start Time UTC (Date/Time)
 - Run Start Date/Time (Date/Time)
- 1 - Update Record:**
 - task table 2 Record (Record)
 - task table 2 Table (Table)
 - Action Status (Object)
- 2 - Ask For Approval**

Next step:

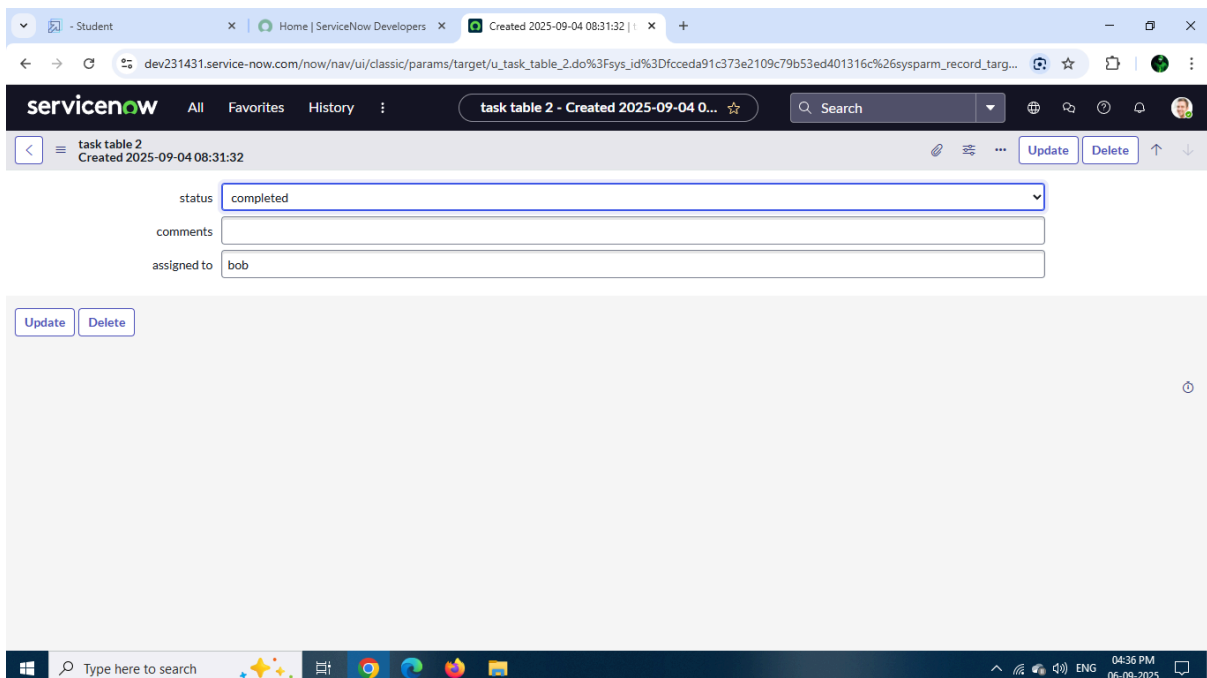
1. Now under Actions.
2. Click on Add an action.
3. Select action in that ,search for “ ask for approval ”.

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.



The screenshot shows the ServiceNow Workflow Studio interface. The main workspace displays the 'Ask For Approval' action configuration. The 'Action' is set to 'Ask For Approval'. The 'Record' field is 'task table 2 [u_task_table_2]'. The 'Approval Field' is 'status'. The 'Journal Field' is 'Select a field'. The 'Rules' section shows a rule set with the condition 'All users approve' and the action 'Approve'. The 'Data' panel on the right shows the flow variables for the 'Trigger - Record Updated' event, including 'task table 2 Record', 'Changed Fields', 'task table 2 Table', 'Run Start Time UTC', and 'Run Start Date/Time'.

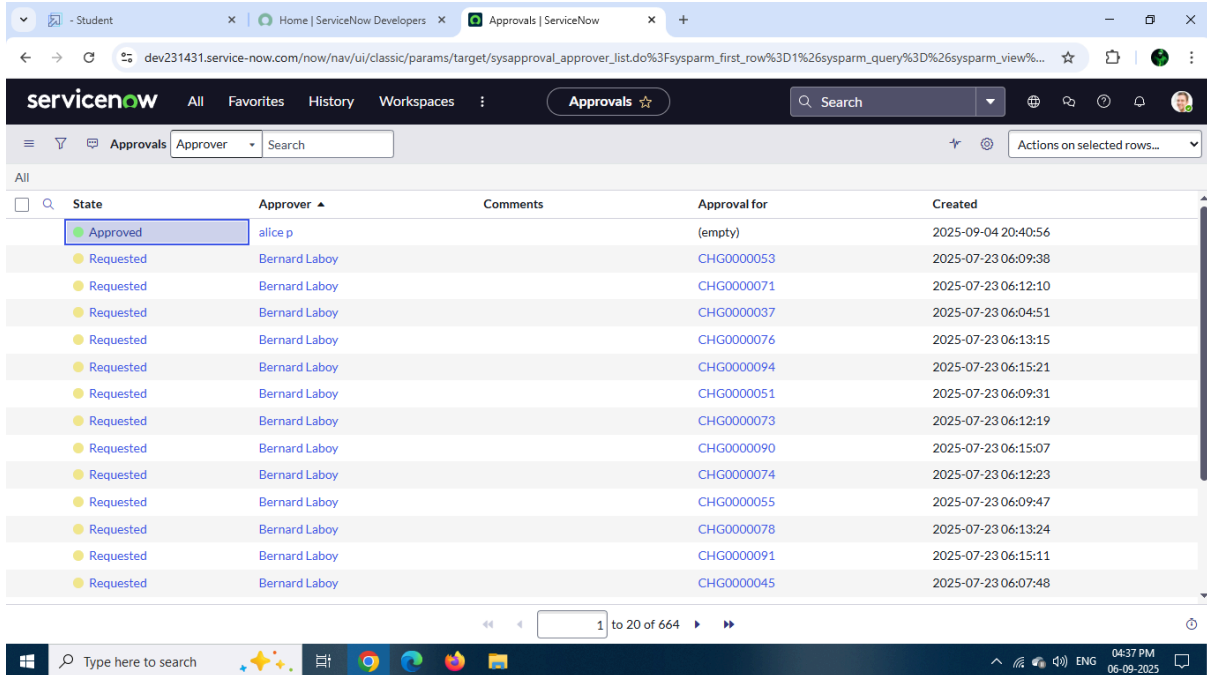
9. Go to application navigator search for task table.
10. Its status field is updated to completed



The screenshot shows the ServiceNow application navigator. The 'task table 2' record is displayed. The 'status' field is set to 'completed'. The 'comments' field is empty. The 'assigned to' field is set to 'bob'. The 'Update' and 'Delete' buttons are visible at the bottom of the record.

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)	2025-09-04 20:40:56
Requested	Bernard Laboy		CHG0000053	2025-07-23 06:09:38
Requested	Bernard Laboy		CHG0000071	2025-07-23 06:12:10
Requested	Bernard Laboy		CHG0000037	2025-07-23 06:04:51
Requested	Bernard Laboy		CHG0000076	2025-07-23 06:13:15
Requested	Bernard Laboy		CHG0000094	2025-07-23 06:15:21
Requested	Bernard Laboy		CHG0000051	2025-07-23 06:09:31
Requested	Bernard Laboy		CHG0000073	2025-07-23 06:12:19
Requested	Bernard Laboy		CHG0000090	2025-07-23 06:15:07
Requested	Bernard Laboy		CHG0000074	2025-07-23 06:12:23
Requested	Bernard Laboy		CHG0000055	2025-07-23 06:09:47
Requested	Bernard Laboy		CHG0000078	2025-07-23 06:13:24
Requested	Bernard Laboy		CHG0000091	2025-07-23 06:15:11
Requested	Bernard Laboy		CHG0000045	2025-07-23 06:07:48

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.