

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:

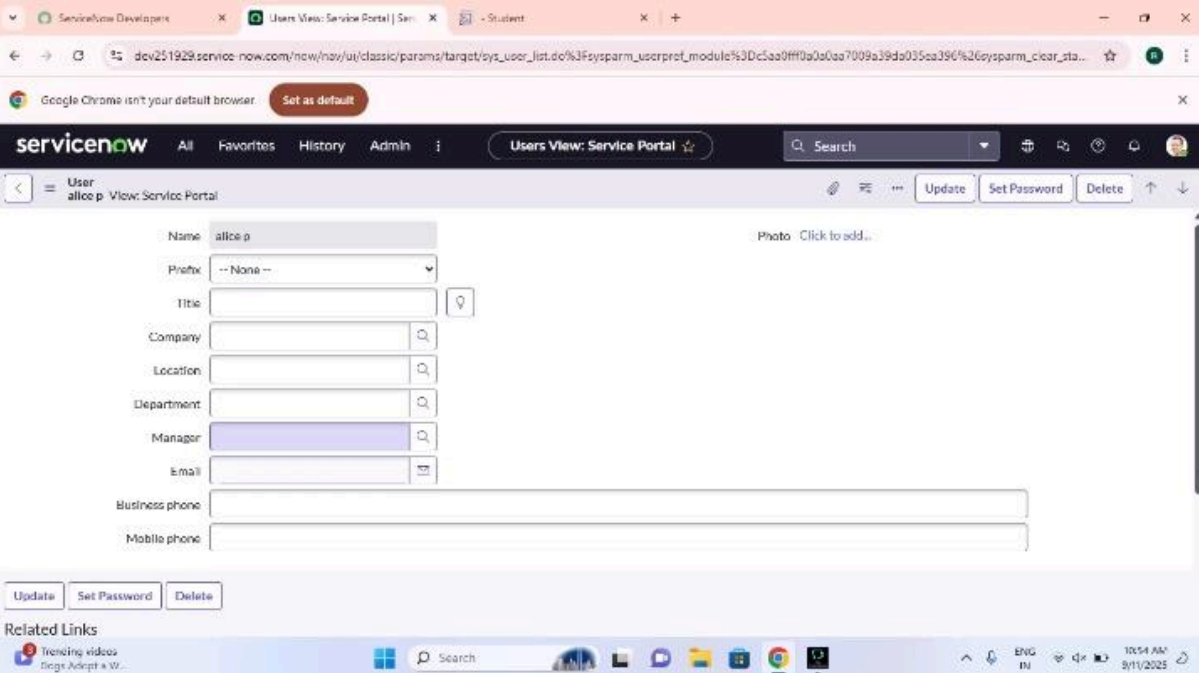
Users, Groups, Roles, Tables, Access Control List, Flow Designer

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



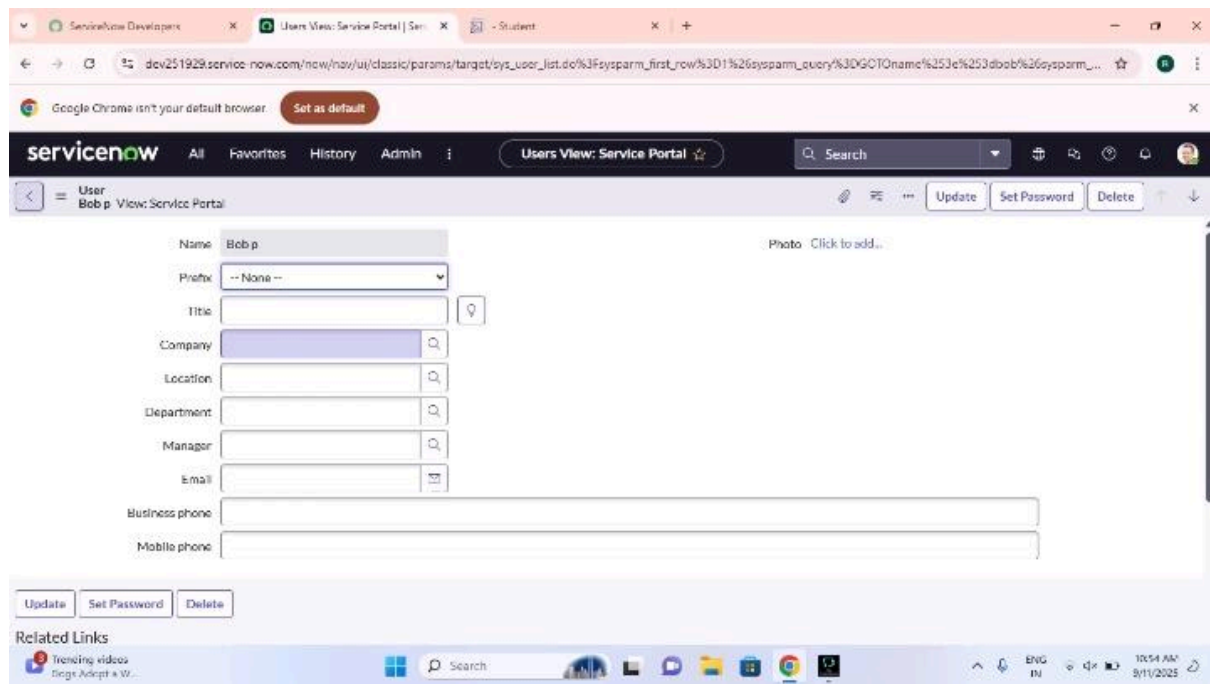
The screenshot shows a web browser window with the ServiceNow interface. The page title is "Users View: Service Portal". The breadcrumb navigation is "User > alice p > View: Service Portal". The form contains the following fields:

- Name:
- Prefix:
- Title:
- Company:
- Location:
- Department:
- Manager:
- Email:
- Business phone:
- Mobile phone:

At the bottom of the form, there are three buttons: "Update", "Set Password", and "Delete". Below the form, there is a "Related Links" section with a link to "Trending videos". The browser's address bar shows the URL: "dev251929.service-now.com/new/nav/ui/classic/params/target/sys_user_list.do%3Fsysparm_userprof_module%3Dc5aa0ff0a0a7009a39da035ca396%26sysparm_clear_sta...". The browser's status bar shows the time as 10:54 AM on 8/11/2025.

Create one more user:

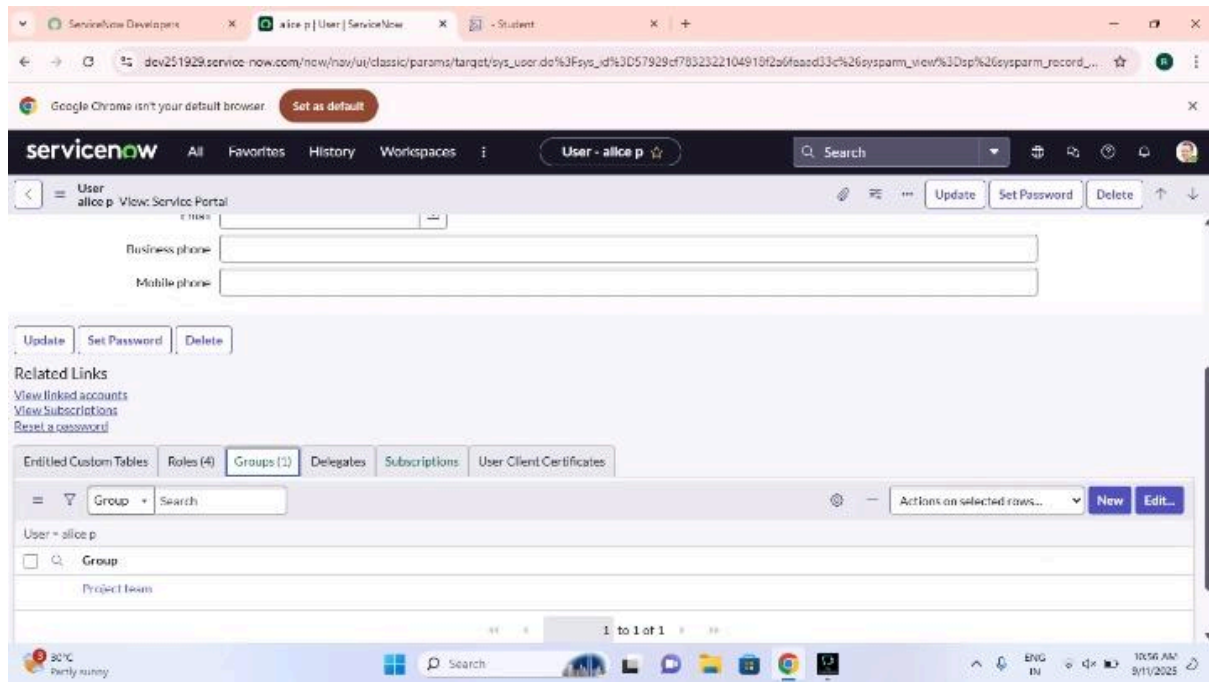
1. Create another user with the following details
2. Click on submit



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 Developers | project manager | Role | ServiceNow

dev251929.service-now.com/now/nav/ui/classic/params/target/sys_user_role.do%3Fsys_id%3Da96b67e183b36a104918f2a6fea35b%26sysparm_record_target%3Dsys_user...

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

servicenow All Favorites History Workspaces **Role - project manager** Search

Role project manager

Name project manager Application Global

Elevated privilege ☐

Description

Update Delete

Related Links

[Run Point Scan](#)

Contains Roles Applications with Role (4) Modules with Role Custom Tables

for text Search New Edit...

Role = project manager

Contains

ENG IN 9:46 PM 9/12/2025

Create one more role:

7.Create another role with the following details

8.Click on submit

ServiceNow Developers | team member | Role | ServiceNow

dev251929.service-now.com/now/nav/ui/classic/params/target/sys_user_role.do%3Fsys_id%3Df62794bb832322104918f2a6fea35c1%26sysparm_record_target%3Dsys_user...

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

servicenow All Favorites History Workspaces **Role - team member** Search

Role team member

Name team member Application Global

Elevated privilege ☐

Description

Update Delete

Related Links

[Run Point Scan](#)

Contains Roles Applications with Role (2) Modules with Role (1) Custom Tables

for text Search New Edit...

Role = team member

Contains

ENG IN 9:47 PM 9/12/2025

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

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: Application:

* Name:

Columns Controls Application Access

Table Columns Column label Search 1 to 13 of 13 New

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	

ServiceNow Developers | Table | ServiceNow | Student

dev251929.service-now.com/now/nav/ui/classic/params/target/sys_db_object.do%3Fsys_id%3Dedc30bf83a322104918f2a6fead3de%36sysparm_record_target%3Dsys_db_o...

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servicenow All Favorites History Workspaces 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	

30°C Partly sunny

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.

ServiceNow Developers | Table | ServiceNow | Student

dev251929.service-now.com/now/nav/ui/classic/params/target/sys_db_object.do%3Fsys_id%3D160b78f783e322104918f2a6fead3d5%26sysparm_record_target%3Dsys...

Google Chrome isn't your default browser. Set as default

servicenow All Favorites History Workspaces Table - task table 2

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 Application Global

* Name u_task_table_2

Columns Controls Application Access

Table Columns Column label Search

Dictionary Entries

Column label	Type	Reference	Max length	Default value	Display	Create roles
assigned to	String	(empty)	40	bob	false	
comments	String	(empty)	200	feedback	false	
Created	Date/Time	(empty)	40		false	

1 to 12 of 12

9:49 PM 9/12/2025

The screenshot shows the ServiceNow Table Editor for a table named 'task table 2'. The interface includes a search bar, a 'Table Columns' section with a search input, and a 'Dictionary Entries' table. The 'Dictionary Entries' table lists various fields with their types, references, max lengths, default values, and display settings.

Q	Column label	Type	Reference	Max length	Default value	Display	Create roles
X	assigned to	String	(empty)	40	bob	false	
X	comments	String	(empty)	200	feedback	false	
	Created	Date/Time	(empty)	40		false	
	Created by	String	(empty)	40		false	
X	due date	Date	(empty)	40		false	
X	status	Choice	(empty)	40	in progress	false	
	Sys ID	Sys ID (GUID)	(empty)	32		false	
X	task id	Integer	(empty)	40		false	
X	task name	String	(empty)	40		false	
	Updated	Date/Time	(empty)	40		false	
	Updated by	String	(empty)	40		false	
	Updates	Integer	(empty)	40		false	

Create choices for status fields:

1. Click on the status field in project table
2. Scroll down and click choices field
3. Create new on choice field
4. label: completed
5. Value: completed
6. Create two more choices
7. On hold
8. In progress

The screenshot shows the ServiceNow Table Editor for a table named 'project table'. The interface includes a search bar, a 'Table Columns' section with a search input, and a 'Dictionary Entries' table. The 'Dictionary Entries' table lists various fields with their types, references, max lengths, default values, and display settings. The 'status' field is highlighted.

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

ServiceNow Developers | status | Dictionary Entry | ServiceNow | how to take screenshot in laptop |

dev251929.service-now.com/now/nav/ui/classic/params/target/sys_dictionary.do%3Fsys_id%3D244a3cb783e322104918f2a6fead355%26sysparm_record_target%3...

Dictionary Entry - status

A dictionary entry manages how ServiceNow stores data in tables and fields (columns). For new dictionary entries, select a **Table** and the field **Type** of the new column. Also enter a column label, which becomes the field label, and the column name. If necessary, set a **Max length** for text String type fields, make the field **Mandatory** to save a record, and make the field a **Display Value** for reference fields so it appears on records that reference this table. [More Info](#)

* Table: project table [u_project_table]

* Type: Choice

* Column label: status

* Column name: u_status

Application: Global

Active: ☒

Function field: ☐

Read only: ☐

Mandatory: ☐

Display: ☐

Choice List Specification

Default Value

Displays a list of suggested values in a Choice list. In the Advanced view you can select the Choice table and the Choice field to take choice values from, plus a Dependent field.

Choice: Suggestion

ServiceNow Developers | status | Dictionary Entry | ServiceNow | how to take screenshot in laptop |

dev251929.service-now.com/now/nav/ui/classic/params/target/sys_dictionary.do%3Fsys_id%3D244a3cb783e322104918f2a6fead355%26sysparm_record_target%3...

Dictionary Entry - status

Choice: Suggestion

Delete Column Update

Related Links

[Show Table](#)

[Run Point Scan](#)

[Advanced view](#)

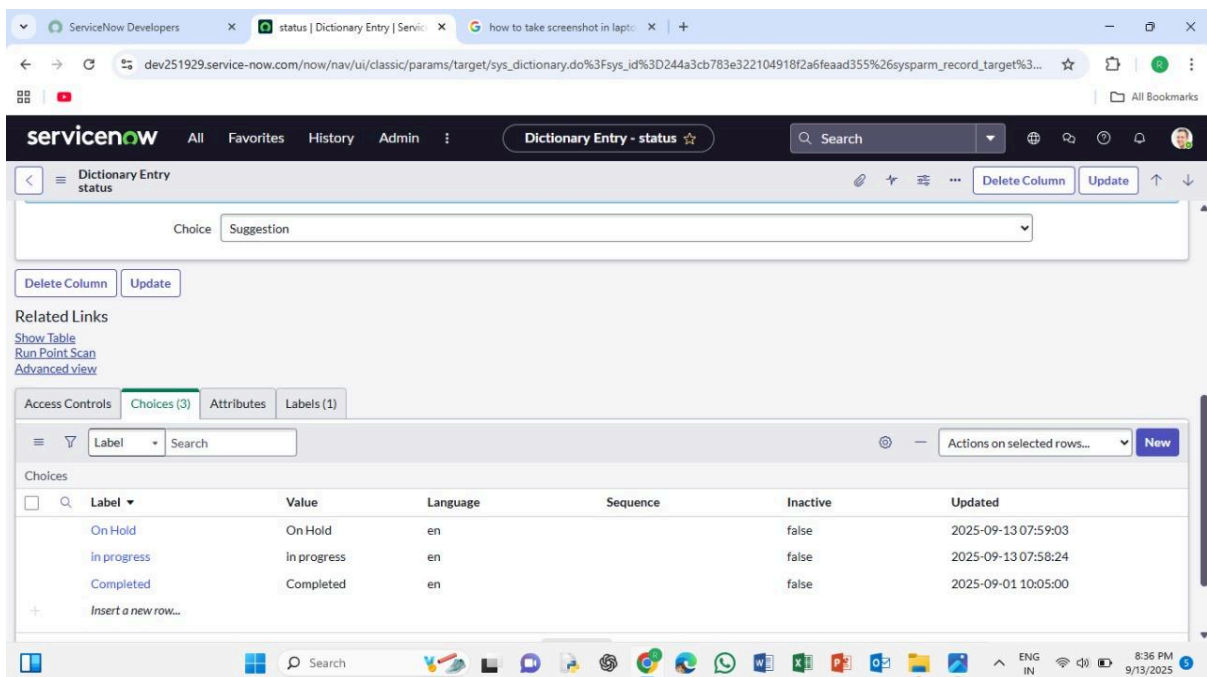
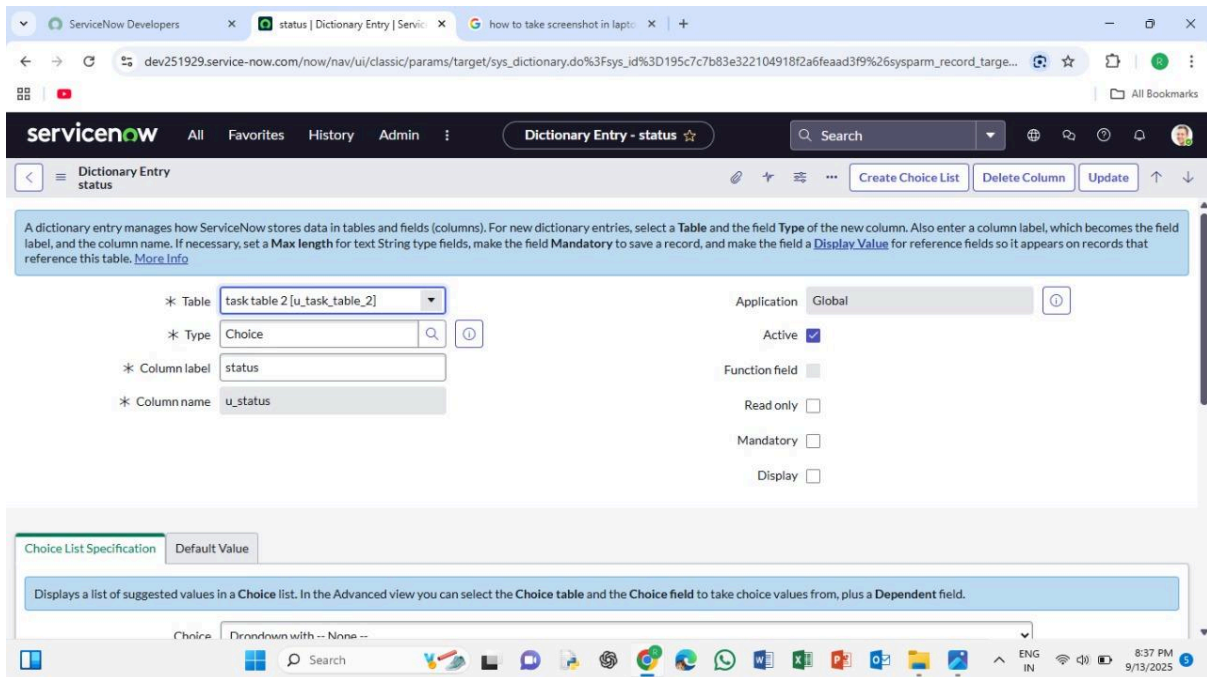
Access Controls Choices (3) Attributes Labels (1)

Label Search

Actions on selected rows... New

Label	Value	Language	Sequence	Inactive	Updated
On Hold	On Hold	en		false	2025-09-13 07:59:03
In progress	In progress	en		false	2025-09-13 07:58:24
Completed	Completed	en		false	2025-09-01 10:05:00
Insert a new row...					

Create choices for task table

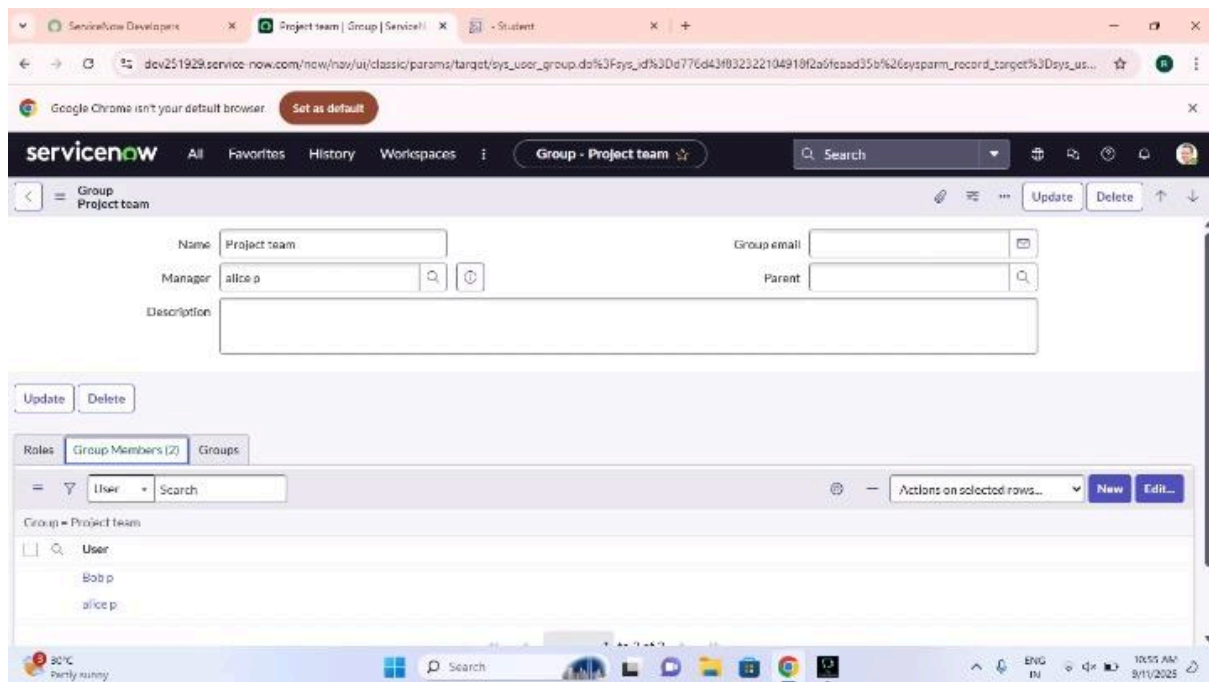


Milestone 5 : Assign users to groups

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

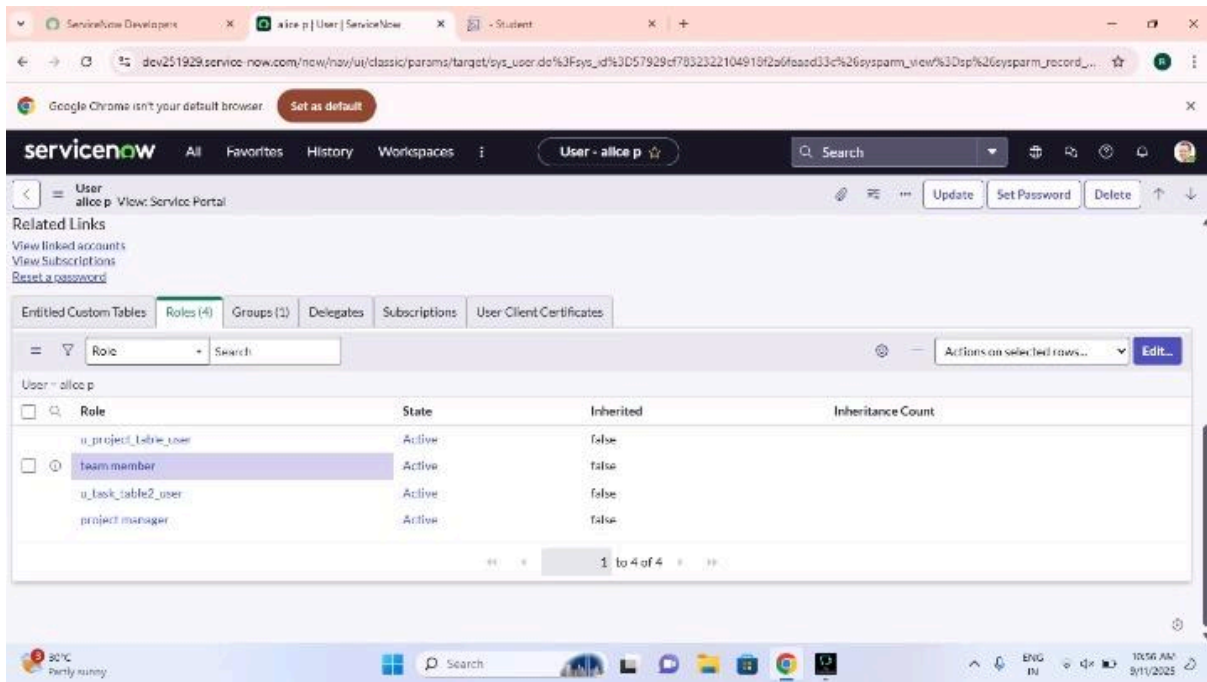
5. Under group members
6. Click on edit
7. Select alice p and bob p and save



Milestone 6 : Assign roles to users

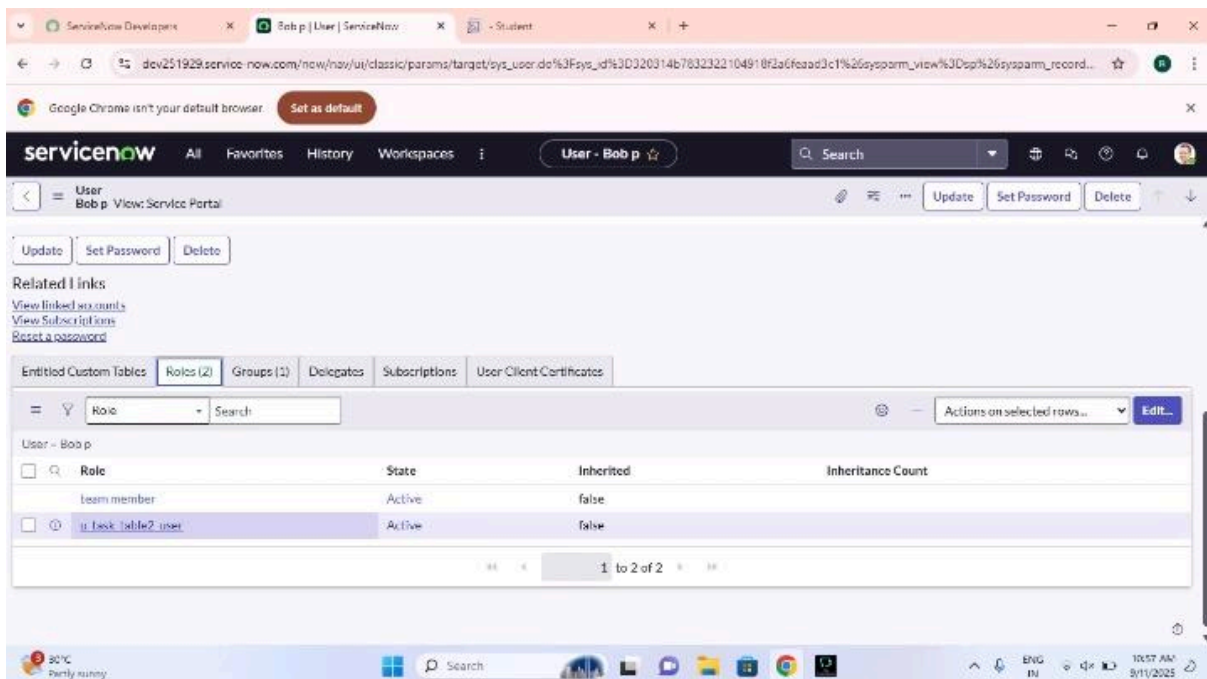
Activity 1: Assign roles to alice user

1. Open servicenow. Click on All >> search for user
2. Select users under system definition
3. select the alice p user
4. select roles
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 users under system definition
3. Select the bob p user
4. select roles
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 application menu
3. Search project table application
4. Click on edit module
5. Give project member roles to that application
6. Search for task table2 and click on edit application.
7. Give the project member and team member role for task table 2 application

The screenshot shows the ServiceNow web interface for configuring an application menu. The browser tabs include 'ServiceNow Developers' and 'project table | Application Menu'. The URL is a long alphanumeric string. The page title is 'Application Menu - project table'. The main content area has a light blue header with a search bar and navigation links. Below the header, there's a section titled 'Application Menu - project table' with 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](#)'. The form includes fields for 'Title' (project table), 'Application' (Global), 'Active' (checked), 'Roles' (project manager), 'Category' (Custom Applications), 'Hint', and 'Description'. The bottom of the page shows the Windows taskbar with the time 9:51 PM on 9/12/2025.

ServiceNow Developers x project table | Application Menu x +

dev251929.service-now.com/now/nav/ui/classic/params/target/sys_app_application.do?3Fsys_id%3De5d5783383e322104918f2a6feaad39%26sysparm_record_target%3Dsy...

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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 project table Application Global

Active ☒

Restricts access to the specified roles. Otherwise, all users can view the application menu when it is active.

Roles project manager

Specifies the [menu category](#), which defines the navigation menu style. The default value is Custom Applications.

Category Custom Applications

The text that appears in a tooltip when a user points to this application menu

Hint

Description

9:51 PM 9/12/2025

The screenshot shows the ServiceNow 'Application Menu' configuration page for 'task table 2'. The browser address bar shows the URL: `dev251929.service-now.com/now/nav/ui/classic/params/target/sys_app_application.do%3Fsys_id%3Dce3bb03b83e322104918f2a6feaad338%26sysparm_record_target%...`. The page title is 'Application Menu - task table 2'. The configuration form includes the following fields and sections:

- Title:** `task table 2`
- Application:** `Global`
- Active:** ☒
- Roles:** `u_task_table2_user, team member, project manager`
- Category:** `Custom Applications`
- Hint:** (Empty text field)
- Description:** (Empty text field)

Helpful text boxes provide context: '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](#)' and 'Restricts access to the specified roles. Otherwise, all users can view the application menu when it is active.'

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

Application: Global

Active: ☒

Advanced: ☐

Admin overrides: ☒

Protection policy: -- None --

* Name: task table 2 [u_task_table_2]

task id: task id

Description:

Applies To: No. of records matching the condition: 6

Add Filter Condition Add *OR* Clause

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

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 5 acl for the following fields
12. status & comments acl for team member role
13. Other 4(task id,task name, assign ed to,due date) for project manager

ServiceNow Developers x Access Controls | ServiceNow x

dev251929.service-now.com/now/nav/ui/classic/params/target/sys_security_acl_list.do%3Fsysparm_first_row%3D1%26sysparm_query%3DGOTOname%253E%253Du_tas...

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servicenow All Favorites History Workspaces Access Controls

Search

Actions on selected rows... New

All > Name >= u_task

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_2u_assigned_to	Allow If	write	record	true	admin	2025-08-31 05:55:39
u_task_table_2u_comments	Allow If	write	record	true	admin	2025-09-11 08:40:12
u_task_table_2u_due_date	Allow If	write	record	true	admin	2025-09-05 00:28:57
u_task_table_2u_status	Allow If	write	record	true	admin	2025-09-11 08:38:24
u_task_table_2u_task_id	Allow If	write	record	true	admin	2025-09-05 00:25:22
u_task_table_2u_task_name	Allow If	write	record	true	admin	2025-08-31 05:57:00
VA Channel Integration ACL	Allow If	execute	REST_Endpoint	true	admin	2023-04-05 00:28:13

1 to 20 of 636

Search

ENG IN 9:54 PM 9/12/2025

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

ServiceNow Developers x Create Created | task table 2 | x

dev251929.service-now.com/now/nav/ui/classic/params/target/u_task_table_2.do%3Fsys_id%3D-1%26sys_is_list%3Dtrue%26sys_target%3Du_task_table_2%26sysparm_c...

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servicenow All Favorites History task table 2 - Create Created

task table 2 New record

Submit

task id

task name

assigned to bob

comments feedback

due date

status in progress

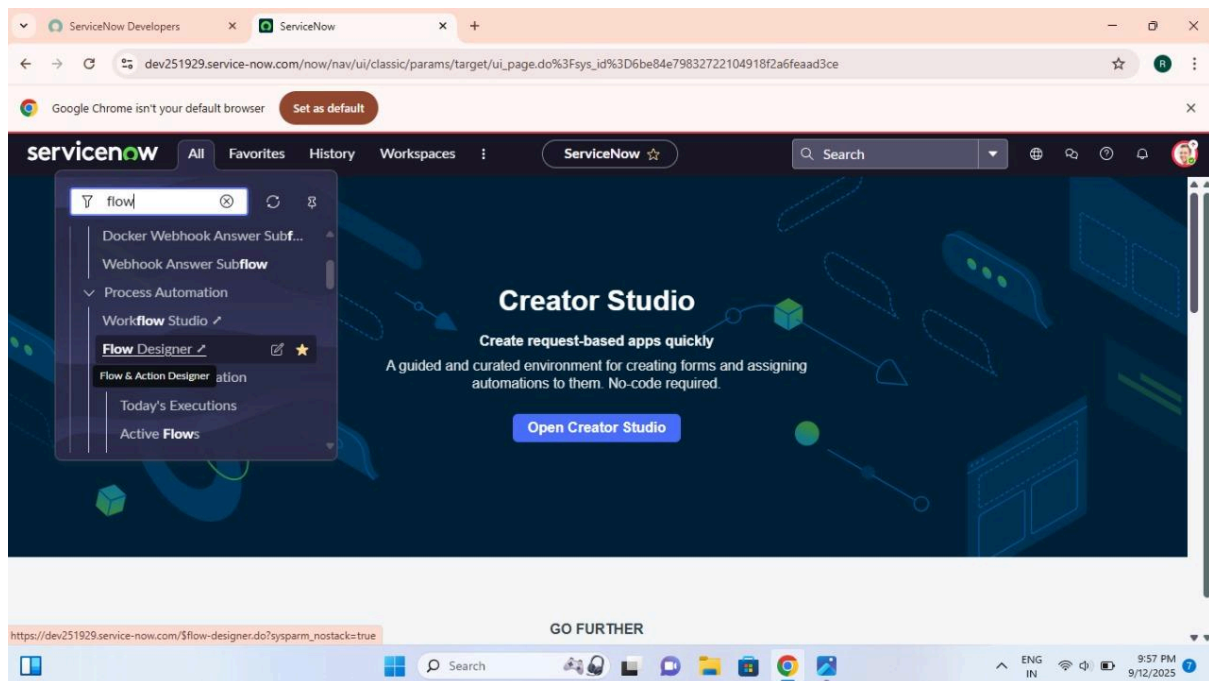
Submit

ENG IN 9:56 PM 9/12/2025

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.



ServiceNow Developers | ServiceNow | Homepage - Flows | Workflow

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Workflow Studio

Homepage | Operations | Integrations

Playbooks | **Flows** | Subflows | Actions | Decision tables

Flows 69
Last refreshed just now

New ▾

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

Pick up where you left off

- task table
Last updated: 7 d. ago by System ...
- Create Flow Data
Last updated: a year ago by System ...
- Deployment Environme...
Last updated: a year ago by System ...

Latest updates

- System Administrator modified task table
7 d. ago
- System Administrator modified Create Flow Data

Name	Application	Status	Active	Updated
Admin Deployment Approval Flow Error Notifier	App Engine Studio	Published	true	2020-07-28 13:37:1
Admin Install App to Production Environment Flow Error Notifier	App Engine Studio	Published	true	2020-07-28 13:37:1
Application Intake Request Flow	Application Intake	Published	true	2025-08-24 09:30:4
Application Intake Request V2	Application Intake	Published	true	2025-08-24 09:30:4
Benchmark Recommendation Evaluator	Benchmarks Spoke	Published	true	2025-07-24 02:47:4
Business process approval flow	Global	Published	true	2020-09-27 22:06:1

ServiceNow Developers | ServiceNow | New Flow | Workflow Studio

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Workflow Studio

New Flow

Let's get the details for your flow

Flow name *

Application *

Description

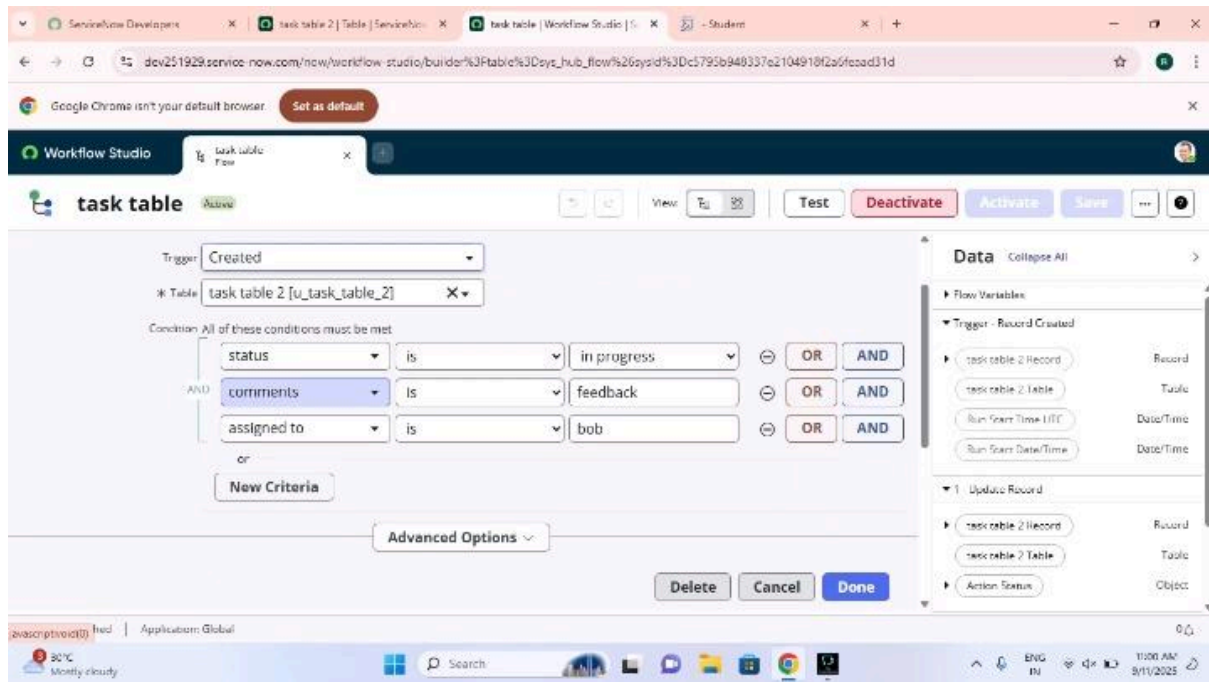
> Show additional properties

Cancel Build flow

next step:

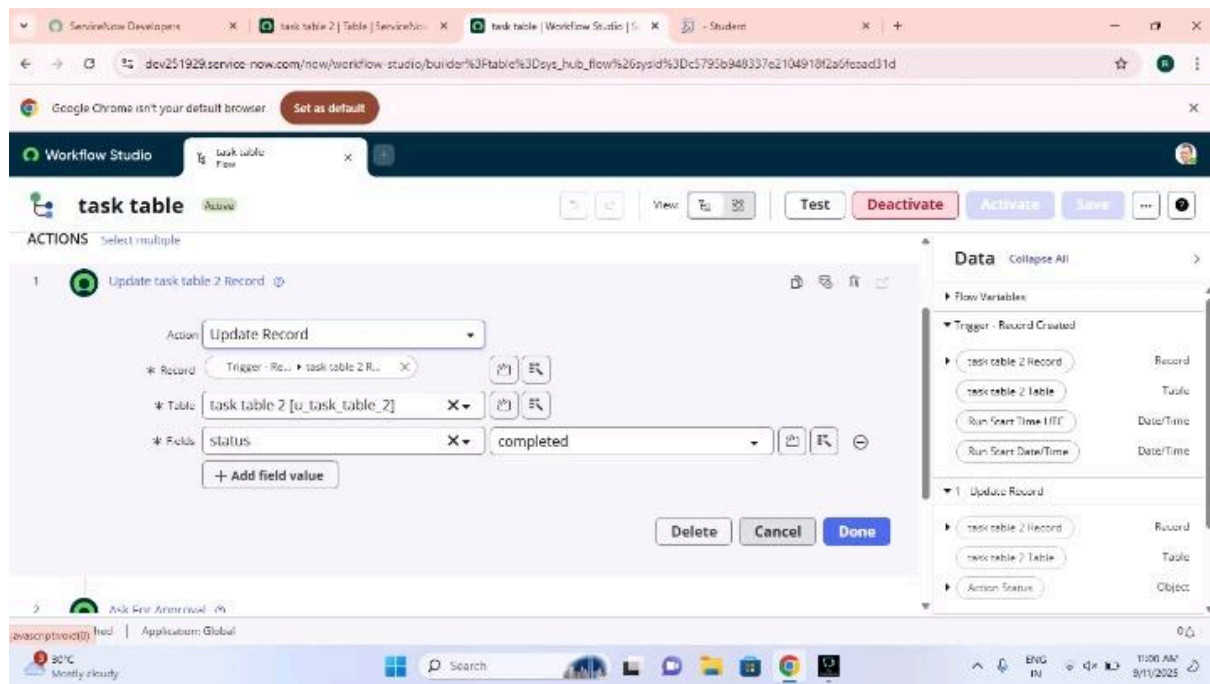
1. Click on Add a trigger
2. Select the trigger in that Search for "create record" and select that.

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.



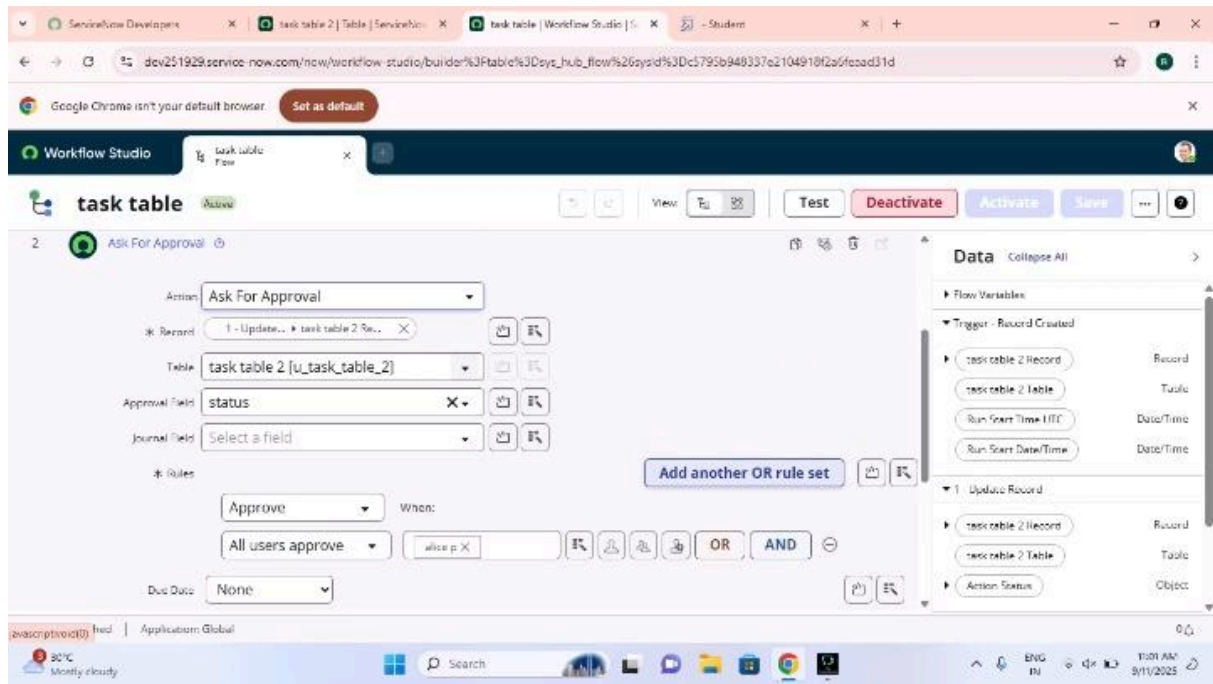
Next step:

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.



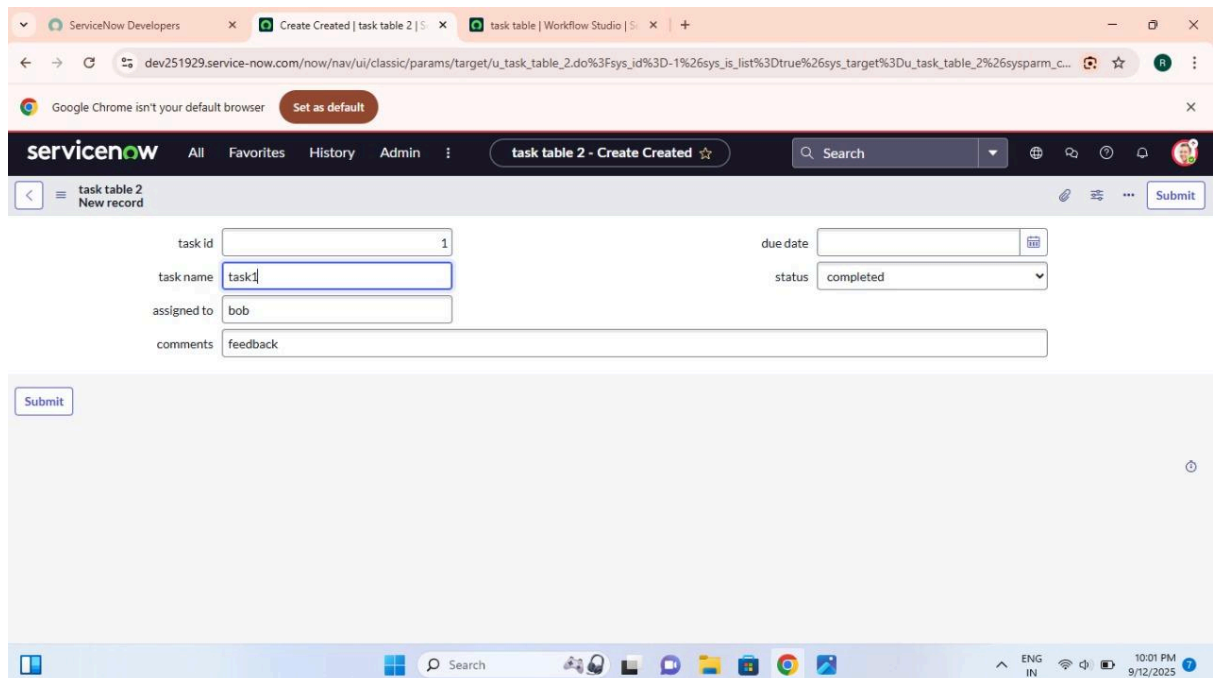
Next step:

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.select all

14. Alice p got approval request then right click on requested then select approved

	Approver	Comments	Approval for	Created
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 23:14:47
Requested	alice p		(empty)	2025-09-12 09:25:45
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
Approved	alice p		(empty)	2025-09-04 23:59:10
No Longer Required	alice p		(empty)	2025-09-01 22:47:09

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.