

PROJECT DESIGN

TEAM ID	LTVIP2025TMID30796
PROJECT NAME	Optimizing Idee, Group, And Role Management With Access Control And Workflows

Proposed solution:

S.NO	PARAMETERS	DISCRIPTION
1	Problem statement	Modern digital systems, especially in large organizations or platforms, require efficient and secure user management
2	Idea	In modern organizations, managing access to systems and data is critical for security, compliance, and operational efficiency
3	Novelty	While access control and user management are not new concepts, this solution introduces innovations in automation, intelligence, and scalability that address the limitations of conventional systems. Here's what sets it apart:
4	Social impact	In a digitally connected world, effective access control systems are not just technical tools — they have a significant social and organizational
5	Business model	cloud-based SaaS platform that helps organizations manage users, groups, roles, and access rights with automated workflows, intelligent recommendations, and built-in

		compliance features
6	Scalability of solution	Scalability refers to the ability of the system to handle growth — in users, roles, permissions, workflows, integrations, and audit requirements — without compromising performance, usability, or security.

MILESTONE-1: Users

ACTIVITY-1 : Create users

PURPOSE :This knowledge is crucial for designing effective and user-centered experiences.

By analyzing user behavior and preferences, designers can optimize user flows, personalize interactions, and create interfaces that are both intuitive and satisfying.

USES :Users refers to individuals who interact with a product, service, or system. In the context of technology, a user is someone who utilizes a computer, software, or website

STEPS :

- 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 management interface. The top navigation bar includes 'servicenow', 'All', 'Favorites', 'History', 'Workspaces', and 'Admin'. The user profile 'User - alice p' is displayed with fields for User ID, First name, Last name, Title, Department, Email, Language, Calendar integration, Time zone, Date format, Business phone, and Mobile phone. Below these fields are checkboxes for 'Password needs reset', 'Locked out', 'Active', 'Web service access only', and 'Internal Integration User'. At the bottom, there is a table of roles assigned to the user.

Role	State	Inherited	Inheritance Count
Project member	Active	false	
u_project_table_user	Active	false	
u_task_table_2_user	Active	false	

8. Create one more user:
9. Create another user with the following details
10. Click on submit

MILESTONE -2: Groups

PURPOSE :

The purpose of creating groups varies depending on the context, but generally, groups are formed. Groups can be formal, like teams in an organization, or informal, like social clubs.

USES : Groups are used for a variety of purposes, primarily collaboration, communication, and organization. They can be used to share information, manage projects, and foster a sense of community.

ACTIVITY -1. : Create groups

STEPS :

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

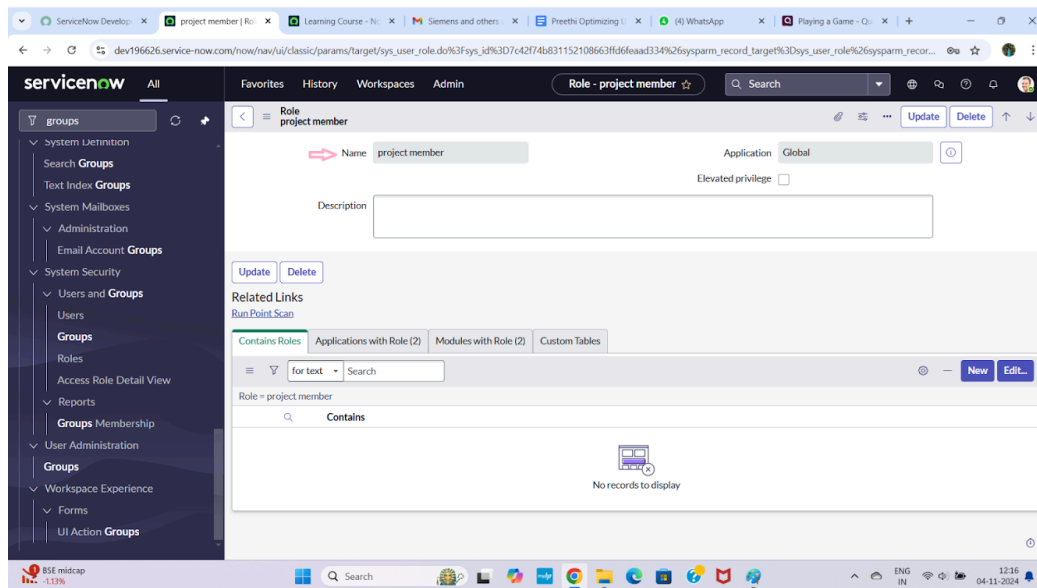
ACTIVITY -1 : Create roles

PURPOSE : Roles are a fundamental aspect of any organization or group; they provide clarity, structure, and accountability, enabling individuals to understand their specific duties and how their work aligns with the organization's goals.

USES : in the context of cloud computing and security, "roles" refer to a set of permissions that define what actions an entity (like a user or an application) can perform. Additionally, "roles" can describe the different functions or responsibilities individuals or groups have in various contexts, such as in a team, organization, or even in social settings.

STEPS :

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:

7. Create another role with the following details

8. Click on submit

MILESTONE-4 : Table

ACTIVITY-1 : create tables

PURPOSE : This allows for efficient comparison and analysis of information, whether it's statistical data, text, or other forms of content. Tables also help users quickly locate specific information and can be used to identify trends and patterns.

USES : They consist of rows and columns, allowing for efficient comparison and analysis of data, and are commonly used in databases, spreadsheets, and documents. Beyond data, tables also serve as functional pieces of furniture, providing a flat surface for various activities.

STEPS :

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

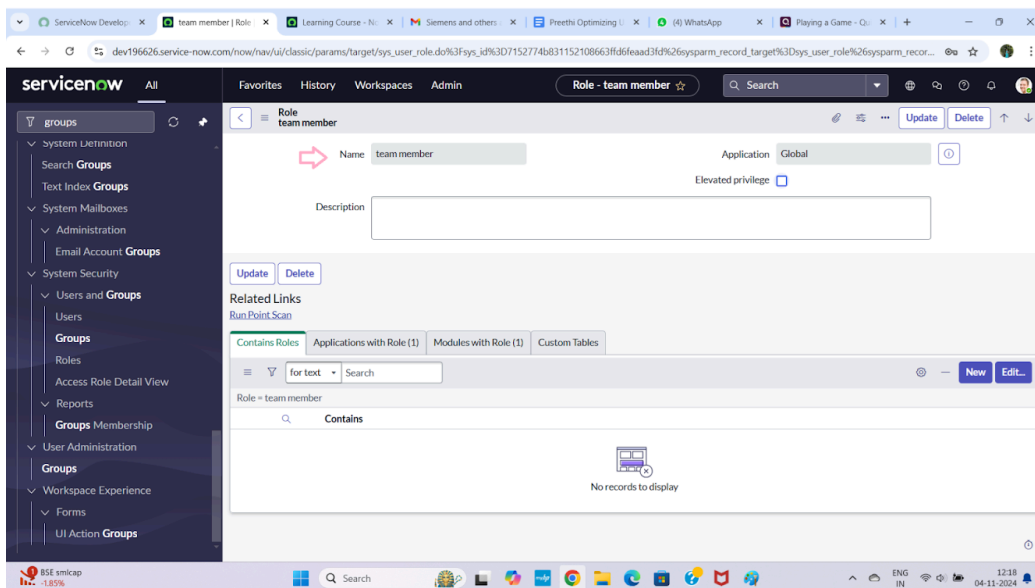
create a new table

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

servicenow All Favorites History Workspaces Table - New Record

* Name

Extends table

Create module ☒

Create mobile module ☒

Add module to menu -- Create new --

New menu name

Columns Controls Application Access

Table Columns for text Search

Column label	Type	Reference	Max length	Default value	Display
project id	Integer				false
project name	String				false
project manger	String				false
start date	Date				false
end date	Date				false
status	Choice				false
description	String				false

Activate Windows
Go to Settings to activate Windows.

Create one more table:

- . Create another table as: task table 2
and fill with following details.
- . Click on submit.

servicenow All Favorites History Workspaces Table - task table 2

Delete Update Delete All Records

Table Columns for text Search

1 to 6 of 6 New

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
Sys ID	Sys ID (GUID)	(empty)		32	false
Created by	String	(empty)		40	false
Created	Date/Time	(empty)		40	false
task id	Integer				false
task name	String				false
assigned to	String				false
due date	Date				false
status	Choice				false
comments	String				false

Insert a new row...

Delete Update Delete All Records

Activate Windows
Go to Settings to activate Windows.

MILESTONE -5 : Assign users to group.

ACTIVITY: Assign users to project team group

PURPOSE : Assigning users to groups is a method of managing access and permissions in a system by associating users with predefined roles or sets of privileges through group membership

USES :Assign users to groups to assign roles and privileges to multiple users at a time and to manage user roles and privileges

STEPS :

- 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 displays the ServiceNow 'Group Members' page for the 'project team' group. At the top, there is a breadcrumb trail: '< Group project team'. Below this, a blue notification bar states: 'Job to add or remove role(s) from user(s) of group has been queued'. The main form contains fields for 'Name' (filled with 'project team'), 'Group email', 'Manager', 'Parent', and 'Description'. Below the form are 'Update' and 'Delete' buttons. A tabbed interface shows 'Roles', 'Group Members (1)', and 'Groups'. The 'Group Members (1)' tab is active, showing a search bar with 'User' selected. Below the search bar, a list of users is displayed: 'alice p' and 'Bob P'. At the bottom, there is a pagination bar showing '1 to 1 of 1'. A 'Shipping Tool' sidebar is visible on the right side of the page.

MILESTONE - 6: Assign roles to users

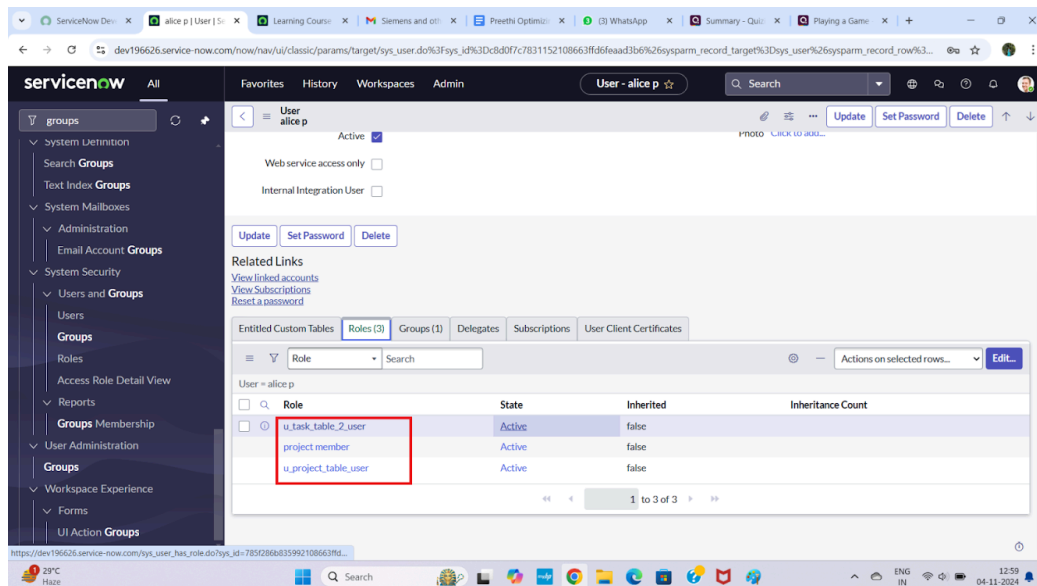
ACTIVITY -1: Assign roles to Alice users

PURPOSE: granting specific permissions and responsibilities, defining what actions users can perform within a system or application. This allows for better security management, streamlined workflows, and a more organized user experience.

USES: helps manage user access, ensuring that individuals only have the necessary privileges to perform their tasks, promoting security and organization.

STEPS:

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 users

PURPOSE: Managing access and permissions within a system. It allows administrators to define what actions users can perform, ensuring security and efficiency. Essentially, roles dictate

the specific permissions and responsibilities assigned to users, controlling what they can see, do, and manage within the system.

USES : Allows administrators to grant specific sets of privileges to users based on their responsibilities and needs, ensuring appropriate access control and security.

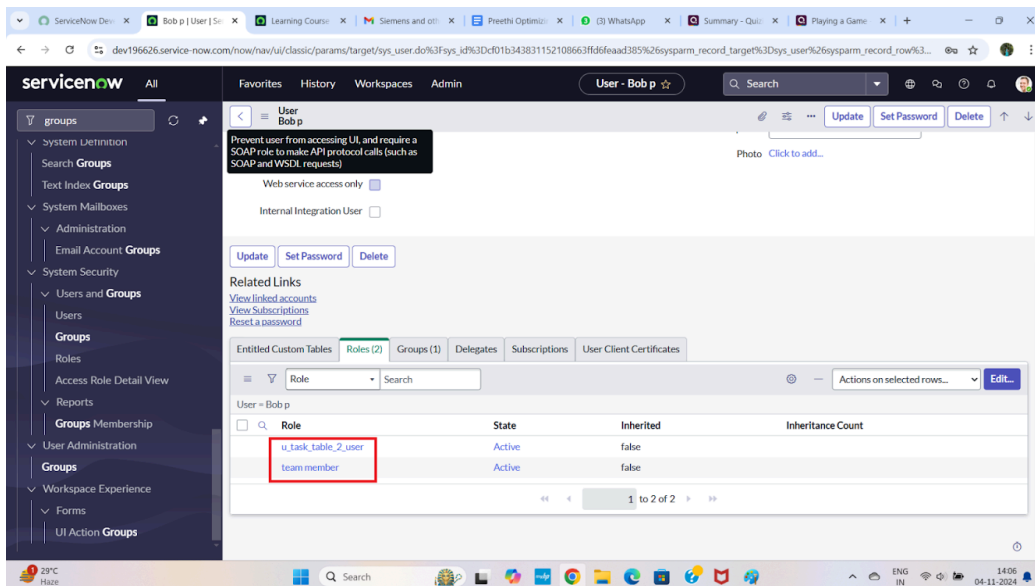
STEPS:

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.

MILESTONE - 6: Assign roles to users

ACTIVITY -1 : Assign roles to Alice users

STEPS :



The screenshot displays the ServiceNow user management interface. The left sidebar shows the navigation menu with 'Users and Groups' selected. The main content area shows the 'User - Bob p' profile. The 'Roles' tab is active, displaying a table of roles assigned to the user. The table has columns for 'Role', 'State', 'Inherited', and 'Inheritance Count'. Two roles are listed: 'ui_task_table_2_user' and 'team member', both with a state of 'Active'. The 'ui_task_table_2_user' role is highlighted with a red box.

Role	State	Inherited	Inheritance Count
ui_task_table_2_user	Active	false	
team member	Active	false	

MILESTONE-7: Application Access

ACTIVITY -1: Assign table to Access to application

PURPOSE:Control which users or roles have access to which data. It allows for granular control over data visibility and modification, ensuring that users only interact with the information relevant to their roles and responsibilities.

USES :Controlling access and ensuring data security. Access to tables is typically managed through roles, which define the level of access users or groups have to the data.

STEPS:

- 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 page has a dark header with the ServiceNow logo and navigation tabs: All, Favorites, History, Admin. The main title is 'Application Menu - project table'. Below the title, there's a search bar and 'Update' and 'Delete' buttons. The main content area is divided into several sections:

- Title:** 'project table' (with a required asterisk).
- Application:** 'Global' (with a dropdown arrow).
- Active:** Checked (checkbox).
- Roles:** A list containing 'project member' (with an edit icon).
- Category:** 'Custom Applications' (with a search icon and a dropdown arrow).
- Hint:** An empty text input field.
- Description:** An empty text input field.

At the bottom, there are 'Update' and 'Delete' buttons. An 'Activate Windows' watermark is visible in the bottom right corner.

servicenow All Favorites History Admin Application Menu - task table 2 Search

Application Menu - task table 2

Active ☒

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

Roles u_task_table_2_user, project member, team member

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

Modules Order Search

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

Access Control Rules have two decision types, and these types will behave differently depending on conditions.

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

Access Controls

Name Search

Actions on selected rows... New

All > Created on Today

Name	Decision Type	Operation	Type	Active	Updated by	Updated
u_leave_request	Allow If	delete	record	true	admin	2024-10-22 02:27:59
u_leave_request	Allow If	create	record	true	admin	2024-10-22 02:27:59
u_task_table	Allow If	read	record	true	admin	2024-10-22 04:21:28
u_task_table	Allow If	write	record	true	admin	2024-10-22 04:20:15
u_task_table.u_assigned_to	Allow If	write	record	true	admin	2024-10-22 04:33:53
u_task_table.u_due_date	Allow If	write	record	true	admin	2024-10-22 04:33:14
u_task_table.u_task_id	Allow If	write	record	true	admin	2024-10-22 04:27:47
u_task_table.u_task_name	Allow If	write	record	true	admin	2024-10-22 04:31:14
u_task_table_2	Allow If	write	record	true	admin	2024-10-22 21:05:07
u_task_table_2	Allow If	read	record	true	admin	2024-10-22 21:26:57
u_task_table_2	Allow If	read	record	true	admin	2024-10-22 21:05:07
u_task_table_2	Allow If	write	record	true	admin	2024-10-22 21:28:27
u_task_table_2	Allow If	create	record	true	admin	2024-10-22 21:05:06
u_task_table_2	Allow If	delete	record	true	admin	2024-10-22 21:05:07
u_task_table_2.u_assigned_to	Allow If	write	record	true	admin	2024-10-22 21:31:20

1 to 20 of 23

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 a web browser window with the ServiceNow interface. The browser tabs include 'Copy of template - Google I...', 'ServiceNow Developers', 'ServiceNow', 'Create Created | task table 2', and 'ChatGPT'. The address bar shows the URL: 'dev196626.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_check...'. The ServiceNow header shows 'task table 2 - Create Created' with a star icon. The form fields are: 'task id' (text input), 'task name' (text input), 'status' (dropdown menu with '-- None --'), 'assigned to' (text input), 'comments' (text input), and 'due date' (text input). A 'Submit' button is located at the bottom left of the form area. An 'Activate Windows' watermark is visible in the bottom right corner of the browser window.

MILESTONE-9: Flow

ACTIVITY : create A flow to assign operations ticket to groups

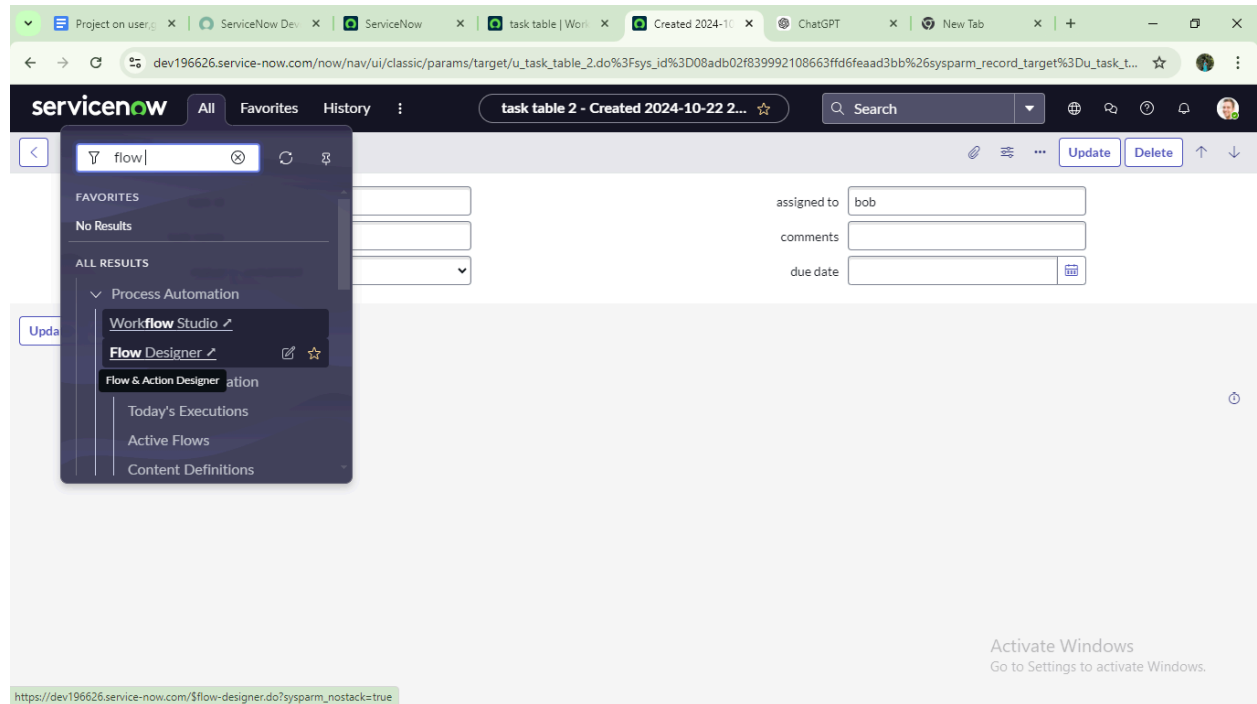
PURPOSE : Automate and streamline the process of distributing incoming tickets to the appropriate teams or individuals based on predefined criteria. This ensures efficient workload distribution, minimizes manual effort, and ultimately improves response times and overall operational efficiency.

USES : leveraging workflow automation tools. This can streamline operations, improve efficiency, and ensure tickets are handled by the appropriate teams.

STEPS :

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

task table Flow

Homepage Operations Integrations

Playbooks **Flows** Subflows Actions Decision tables

Flows 39
Last refreshed just now

Name	Application	Status	Active	Update
Benchmark Recommendation Evaluator	Benchmarks Spoke	Published	true	2024-09-11 07:08:05
Business process approval flow	Global	Published	true	2020-09-11 07:08:05
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

Pick up where you left off

- task table
Last updated: 14 min. ago by Syst...
- Create Flow Data
Last updated: 5 months ago by Sy...
- Steps
Last updated: 5 months ago by Sy...

Latest updates

- System Administrator modified task table
14 min. ago
- System Administrator modified Create Flow Data
5 months ago
- System Administrator modified Steps Settings to activate Windows.
5 months ago

Workflow Studio

task table Flow

Operations New Flow | Worl...

Let's get the details for your flow

Flow name *
task table

Description
Describe your flow.

Application *
Global

> Show additional properties

Activate Windows
Go to Settings to activate Windows.
Cancel Build flow

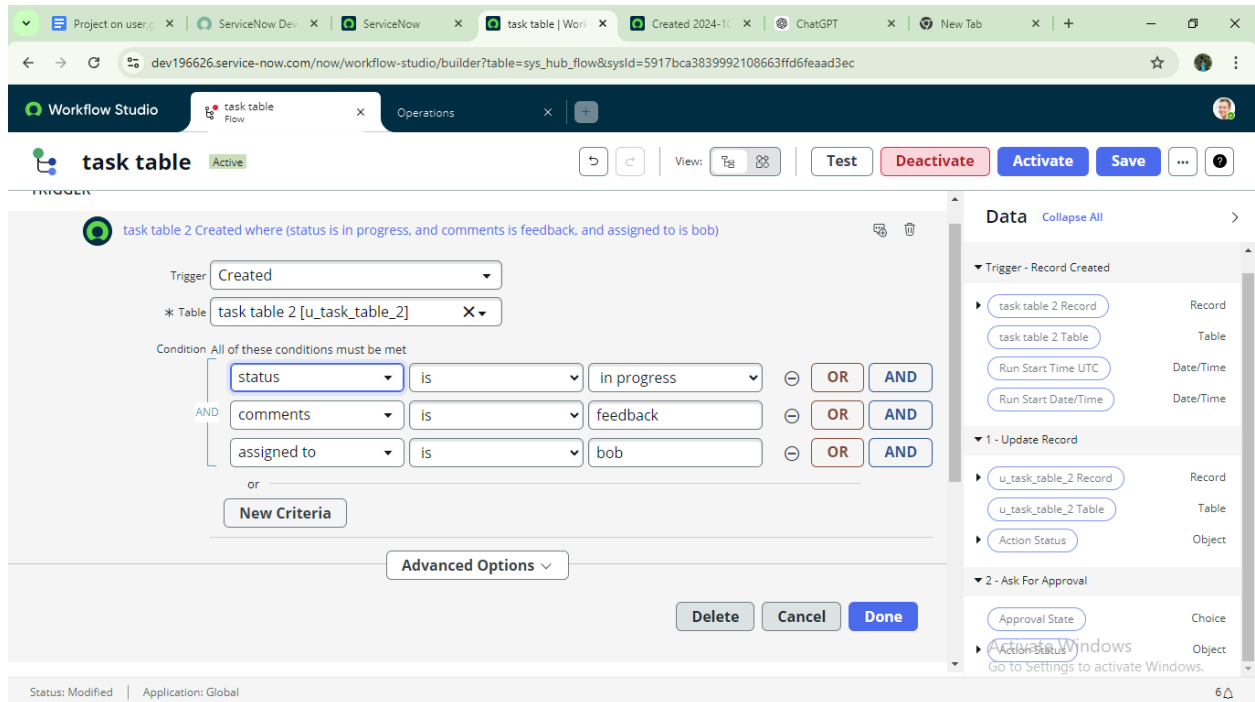
1. Click on Add a trigger
2. Select the trigger in that Search for "create record" and select that.
3. Give the table name as task table
4. Give the Condition as Field : status

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.

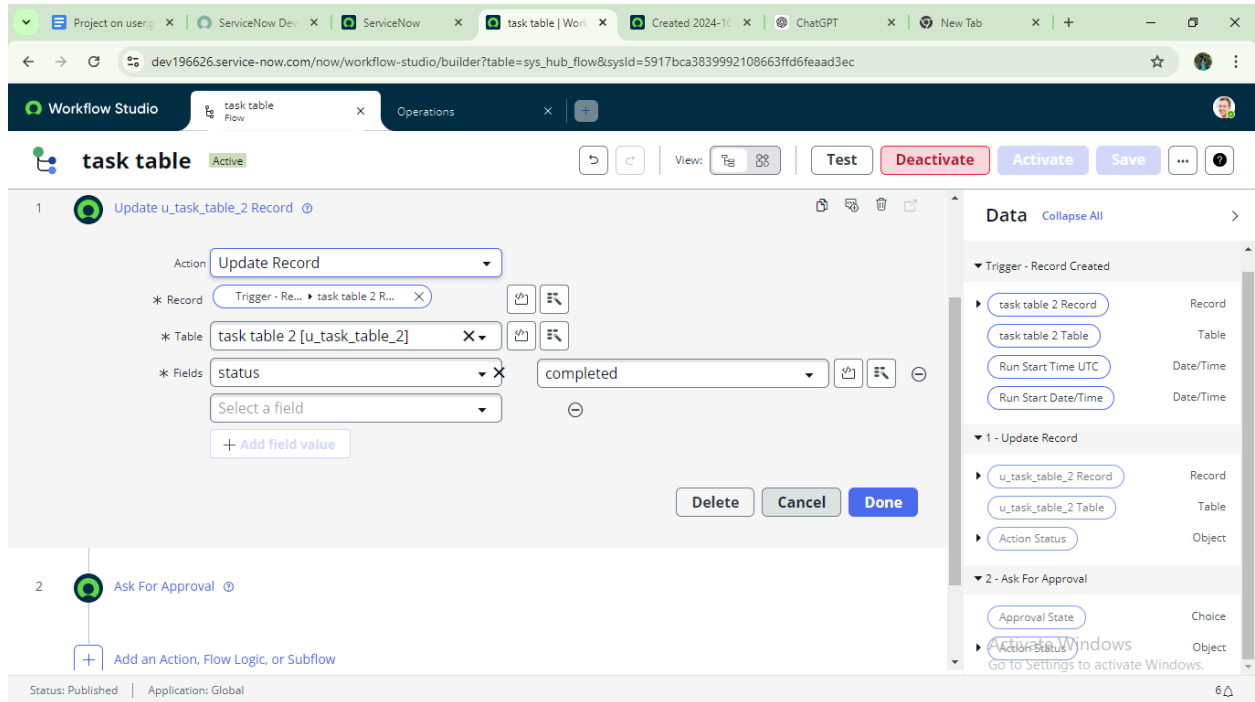
2.Select action in that ,search for “ update records”.

3.In Record field drag the fields from the data navigation from Right Side(Data pill)

4.Table will be auto assigned after that

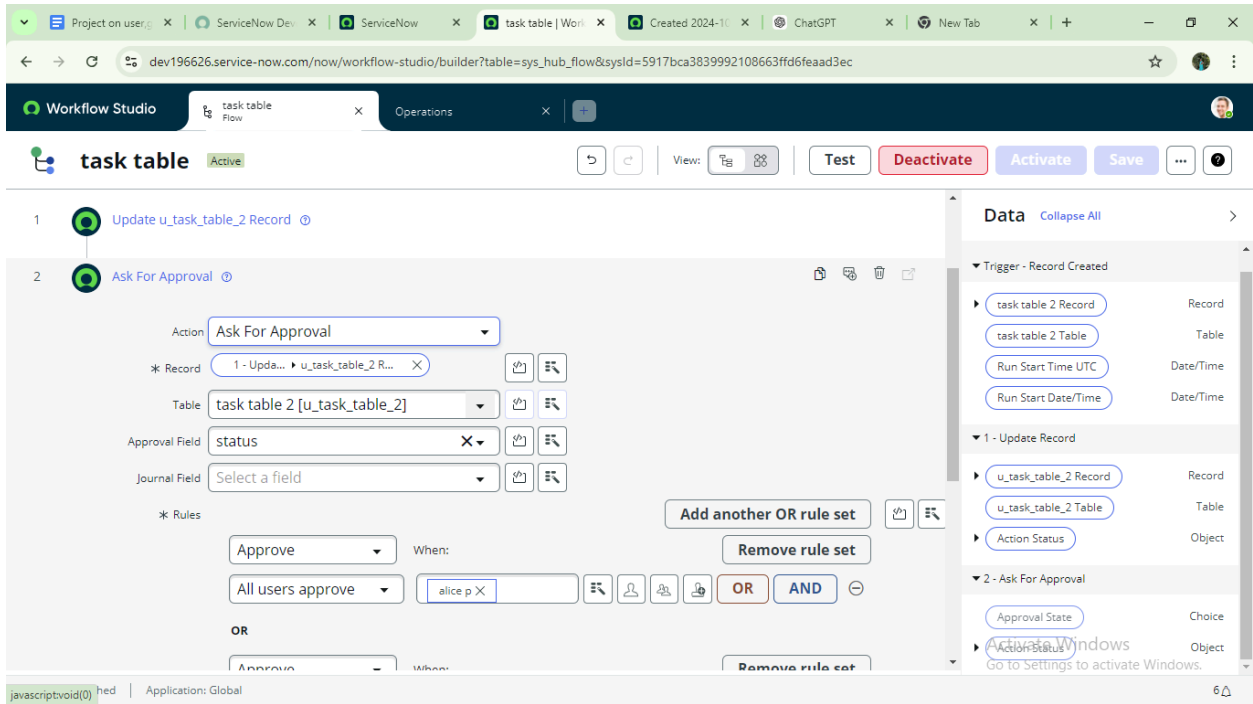
5.Add fields as “status” and value as “completed”

Click on Done.

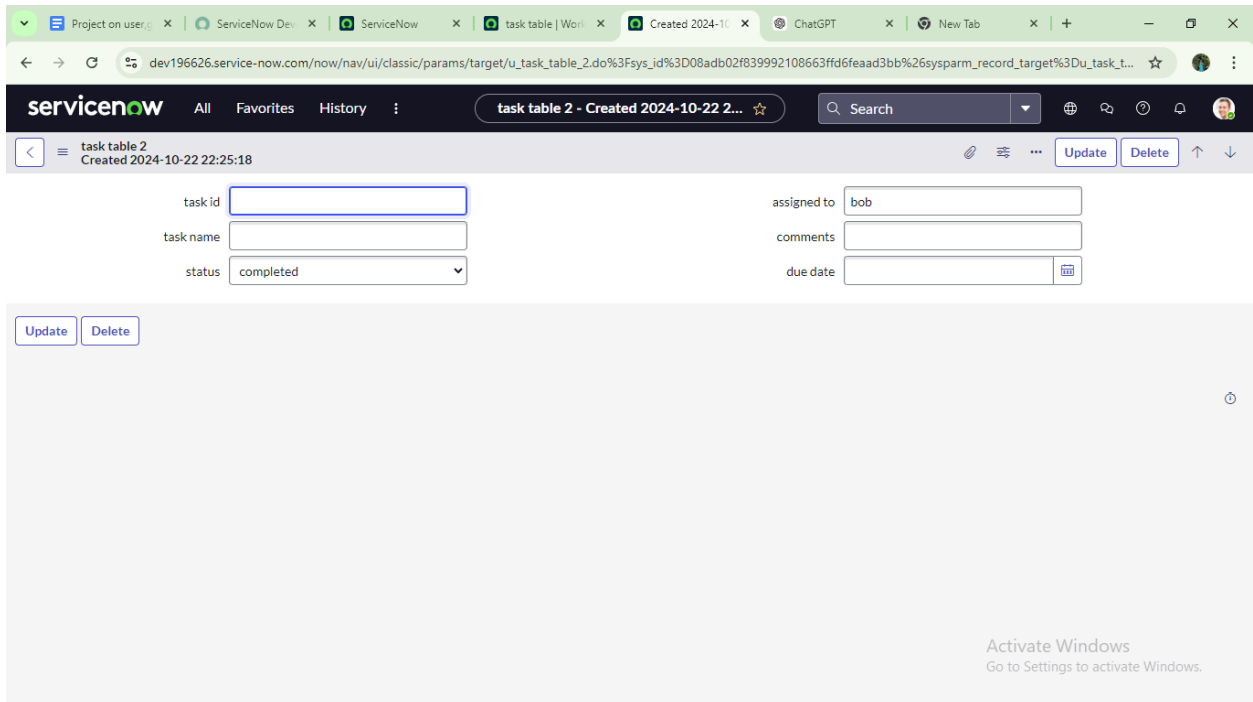


Next step:

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 search for task table.
- 2.It status field is updated to completed



- 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.