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

Team ID: NM2025TMID18272

Team Members:

Team Leader: MONIKA R

Team Member: VENKATESHWARAN K

Team Member: VICKEY R

Team Member: SRIHARI M

Table of contents

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:

The project aims to design and implement a streamlined framework for managing users, groups, and roles in an enterprise system, with robust access control policies and automated workflows. This ensures secure, efficient, and role-based access to resources, thereby improving system governance, reducing administrative overhead, and enhancing compliance with organizational and regulatory requirements.

Skills:

- **Technical Skills**: User, group, and role management, access control (RBAC), workflow automation, IAM tools (ServiceNow/Active Directory), scripting for automation, audit & compliance management.
- **Soft Skills:** Problem-solving, analytical thinking, project management, teamwork, documentation, and attention to detail

TASK INITIATION

Milestone 1 : Users

Activity 1: Create Users

1. Open service now

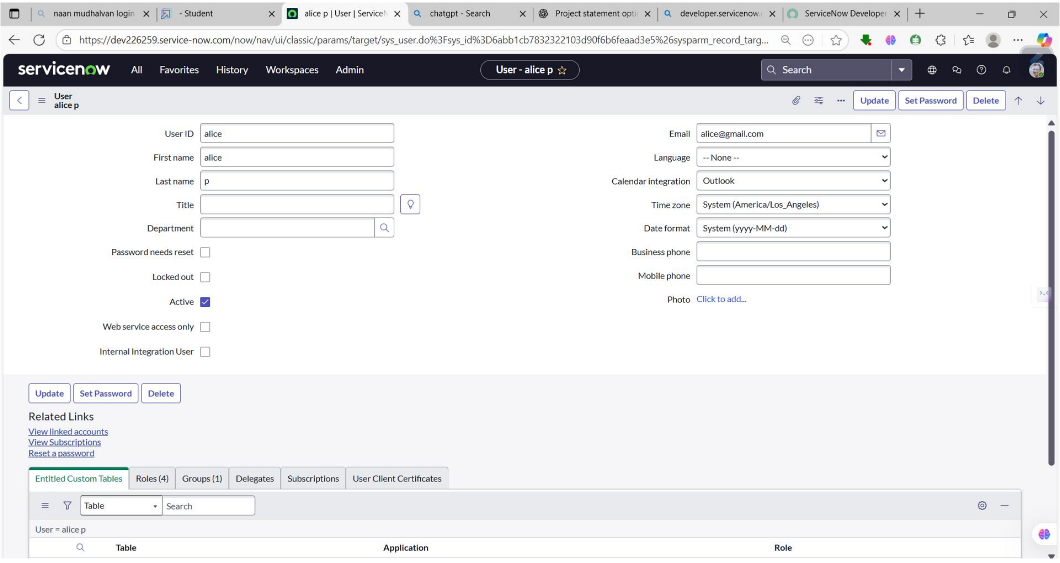
2. Click on All >> search for users

3. Select Users under system security

4. Click on new

5. Fill the following details to create a new user

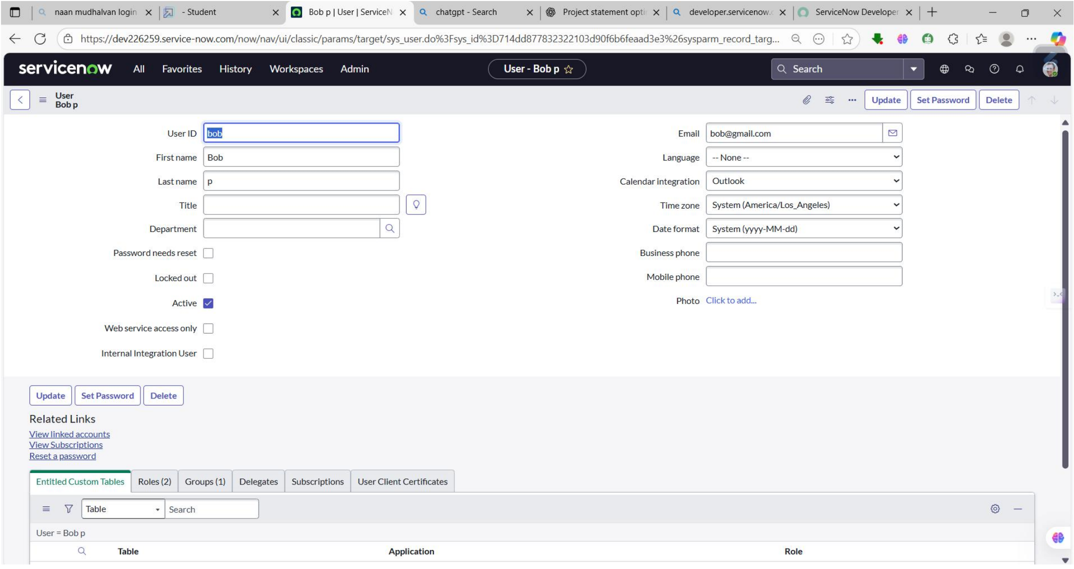
6. Click on submit



Create one more user:

7. Create another user with the following details

8. Click on submit


servicenow
All
Favorites
History
Workspaces
Admin
User - Bob p
User
Bob p
Update
Set Password
Delete
User ID
bob
First name
Bob
Last name
p
Title
Department
Password needs reset
Locked out
Active
Web service access only
Internal Integration User
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
Photo
Click to add...
Related Links
View linked accounts
View Subscriptions
Reset a password
Entitled Custom Tables
Roles (2)
Groups (1)
Delegates
Subscriptions
User Client Certificates
User = Bob p
Table
Application
Role

Milestone 2 : Groups

Activity 1: Create Groups

1. Open service now.

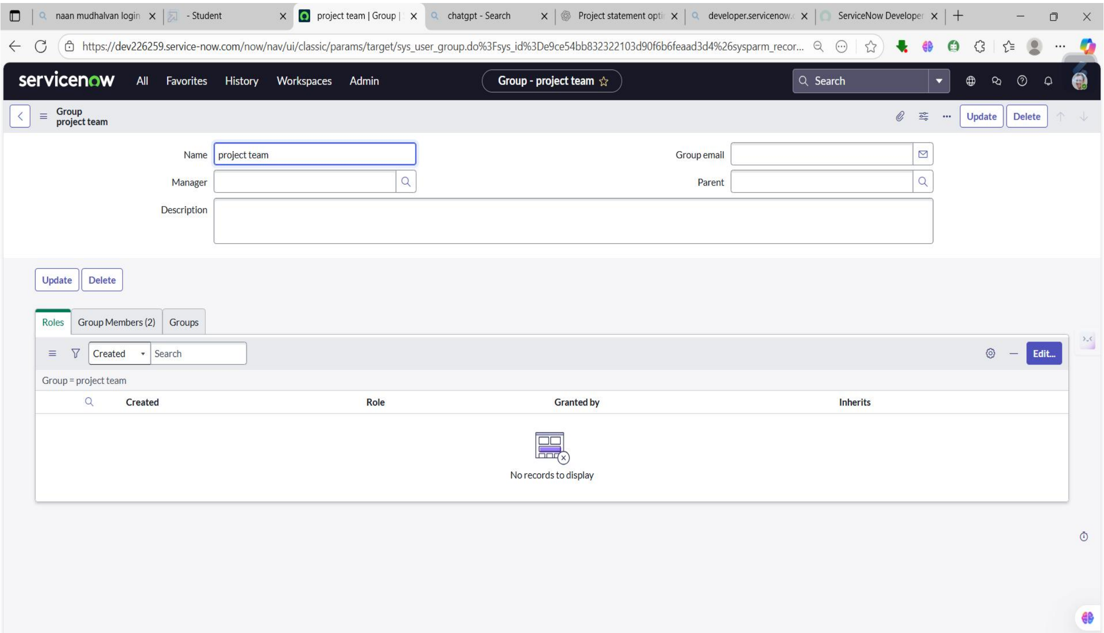
2. Click on All >> search for groups

3. Select groups under system security

4. Click on new

5. Fill the following details to create a new group

6. Click on submit **Project Title**



Milestone 3 : Roles

Activity 1: Create roles

1. Open service now.

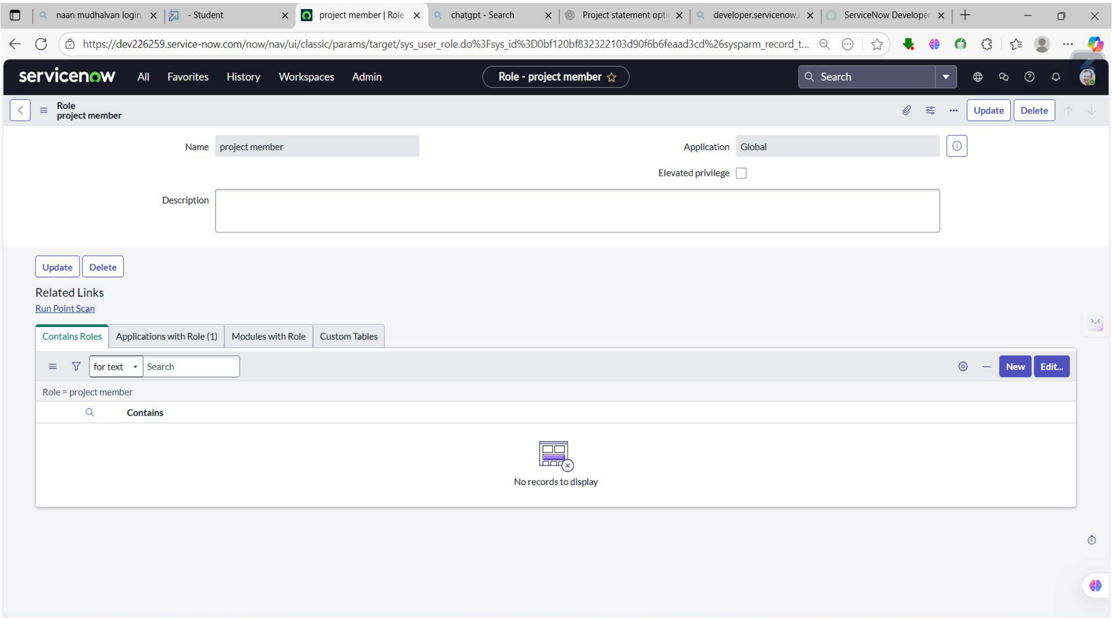
2. Click on All >> search for roles

3. Select roles under system security

4. Click on new

5. Fill the following details to create a new role

6. Click on submit



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

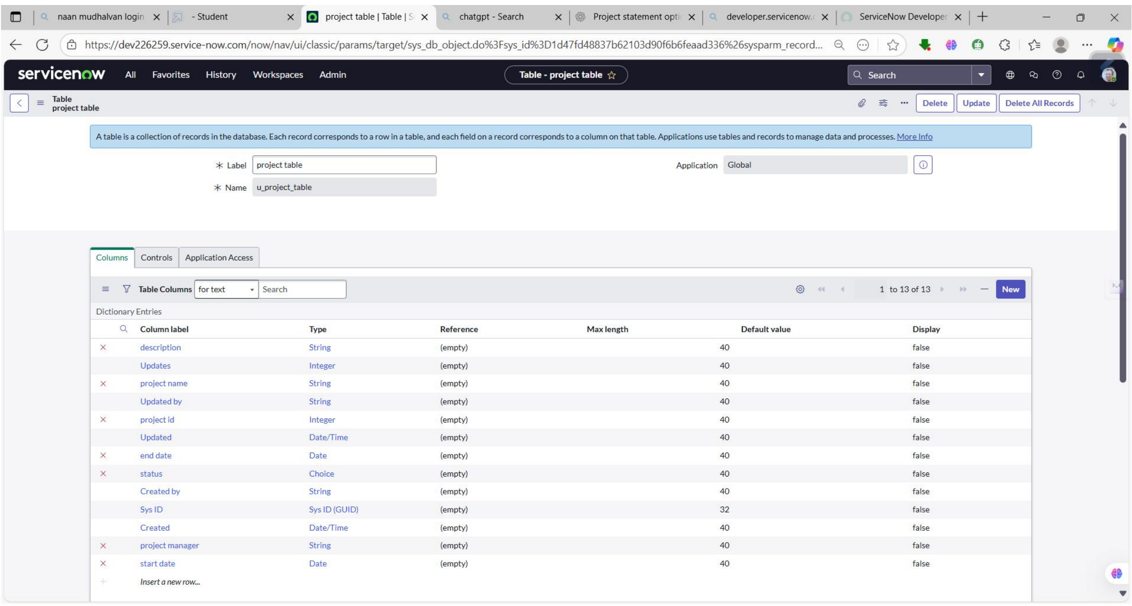
Label : project table

Check the boxes Create module & Create mobile module

6. Under new menu name : project table

7. Under table columns give the columns

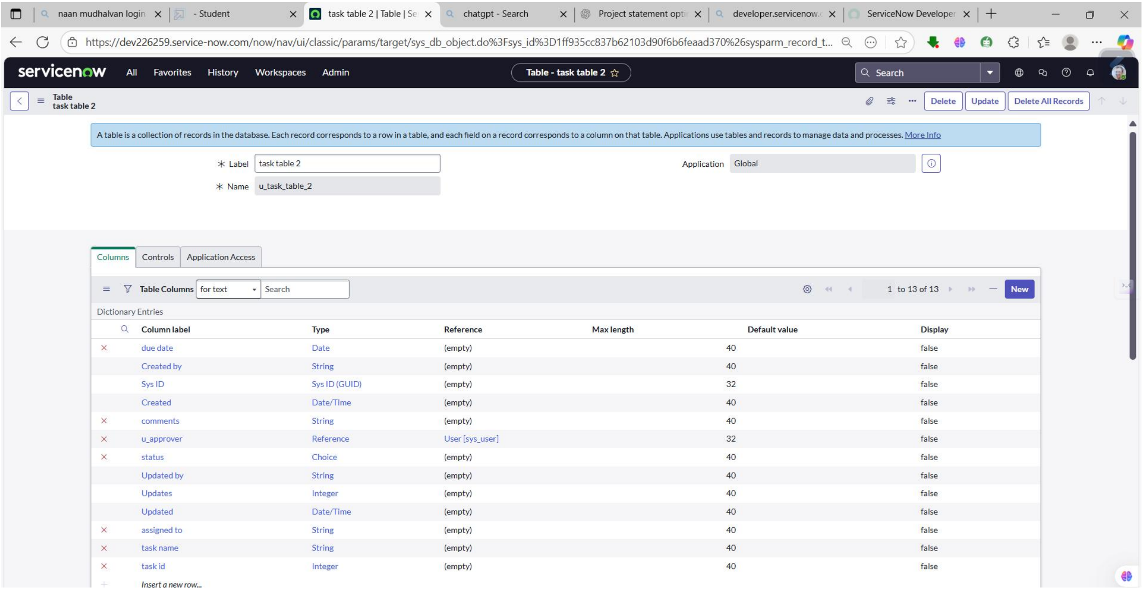
8. Click on submit



Create one more table:

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

10. Click on submit.



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

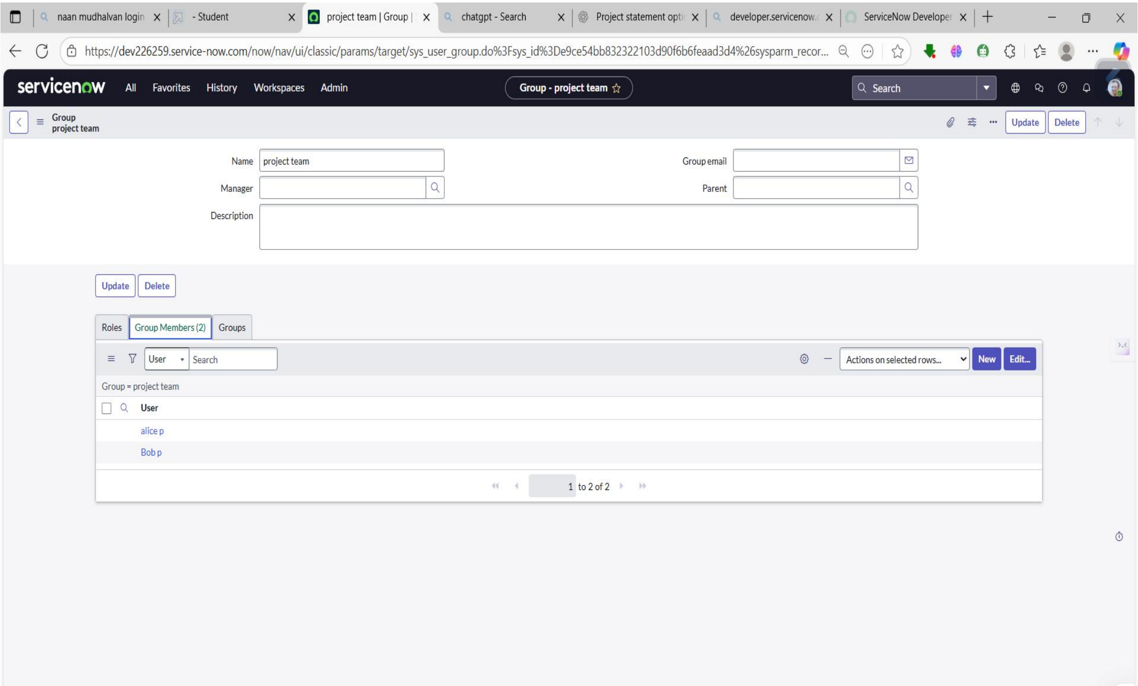
3.Select tables under system definition

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

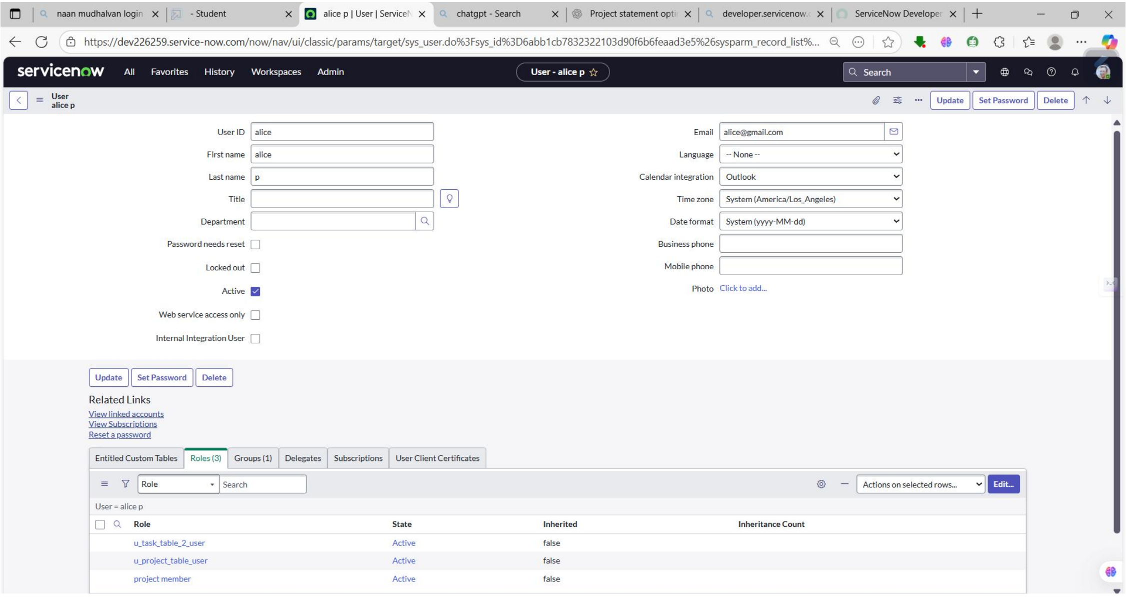
4.Under project manager

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.



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

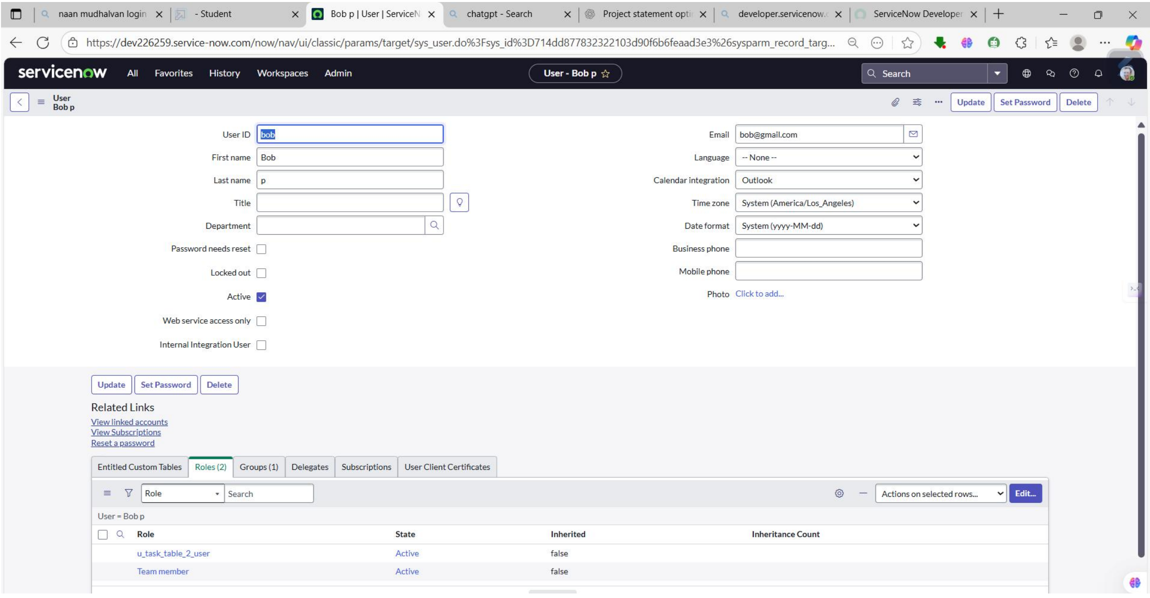
4.Under team member

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.



naan mudhalvan login
- Student
Bob p | User | ServiceN
chatgpt - Search
Project statement opti
developer.servicenow.
ServiceNow Develope
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servicenow
All
Favorites
History
Workspaces
Admin
User - Bob p
Search
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Bob p
Update
Set Password
Delete
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bob
First name
Bob
Last name
p
Title
Department
Password needs reset
Locked out
Active
Web service access only
Internal Integration User
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
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...
User = Bob p
Role
State
Inherited
Inheritance Count
u_task_table_2_user
Active
false
Team member
Active
false

Milestone 7 : Application access

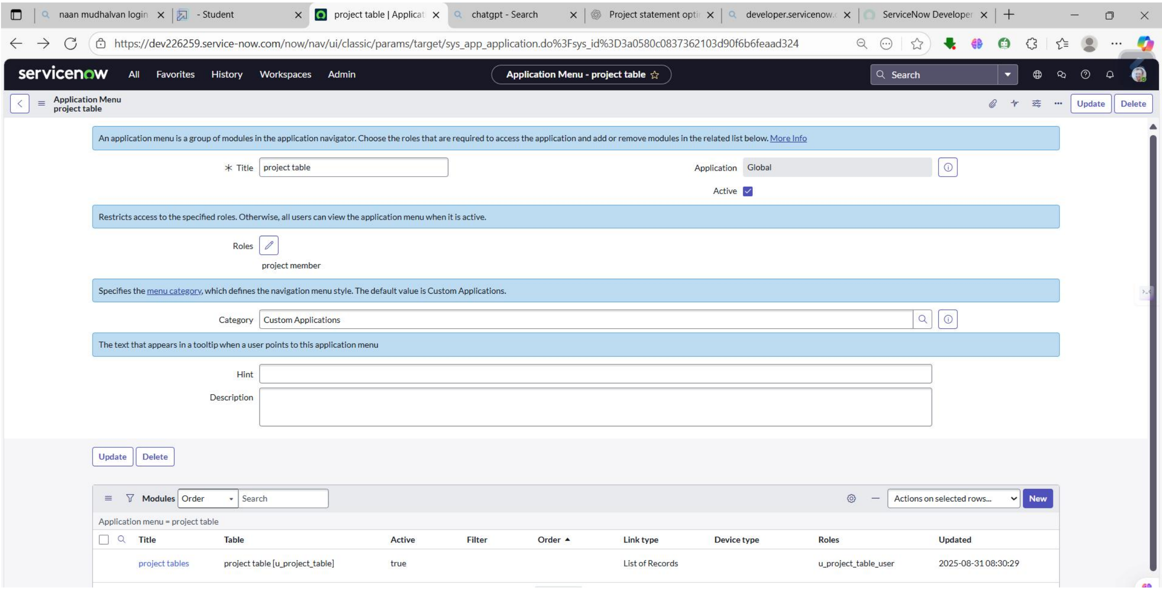
Activity 1: Assign table access to application

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

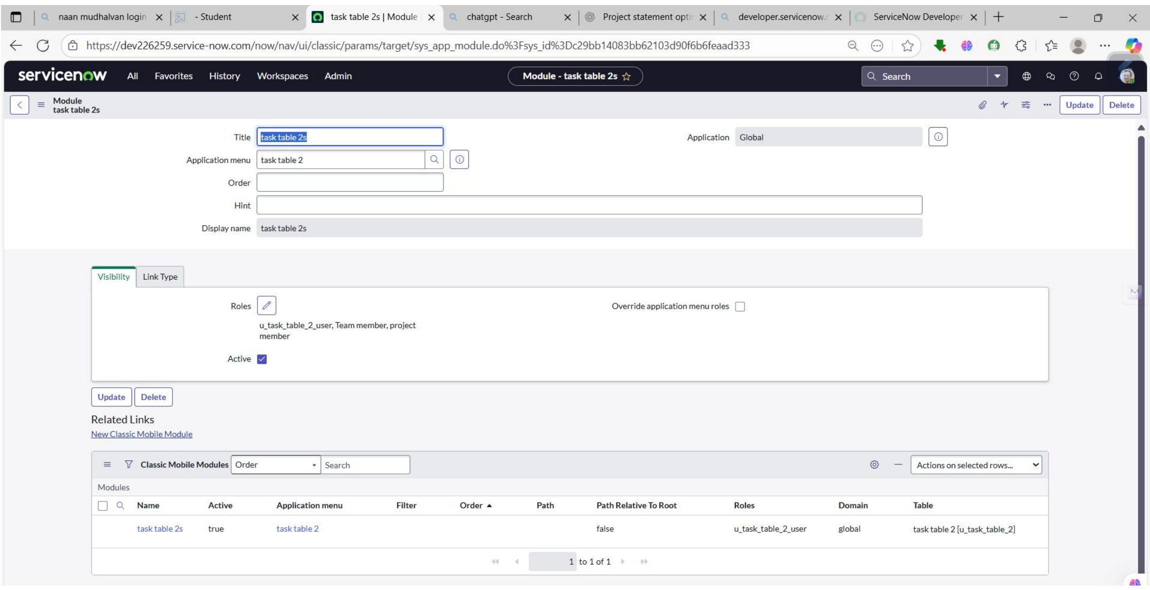
3. Click on edit module

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



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

6. Fill the following details to create a new ACL

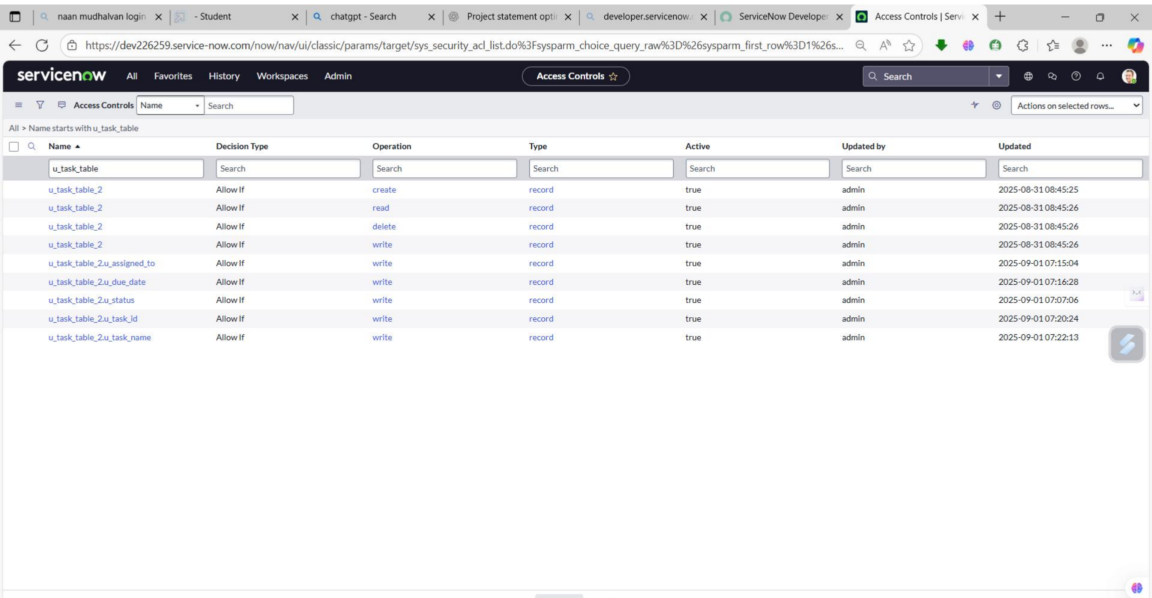
7. Scroll down under requires role

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



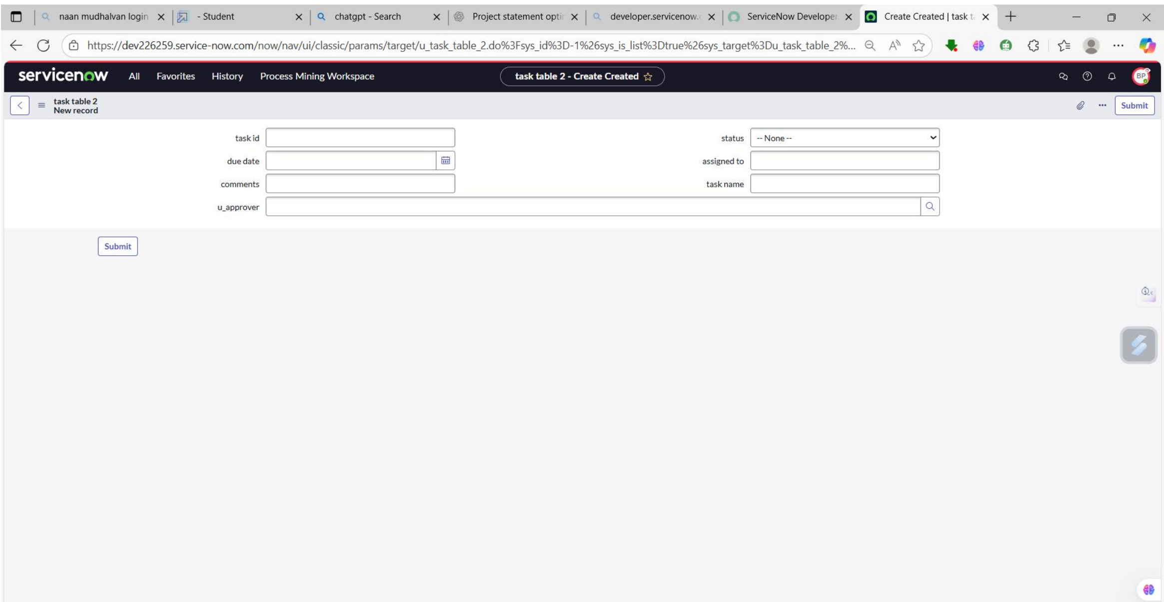
12.Click on profile on top right side

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 are have the edit access


naan mudhalvan login
- Student
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Project statement opti
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https://dev226259.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%...
servicenow
All
Favorites
History
Process Mining Workspace
task table 2 - Create Created
task table 2
New record
Submit
task id
status
-- None --
due date
assigned to
comments
task name
u_approver
Submit

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

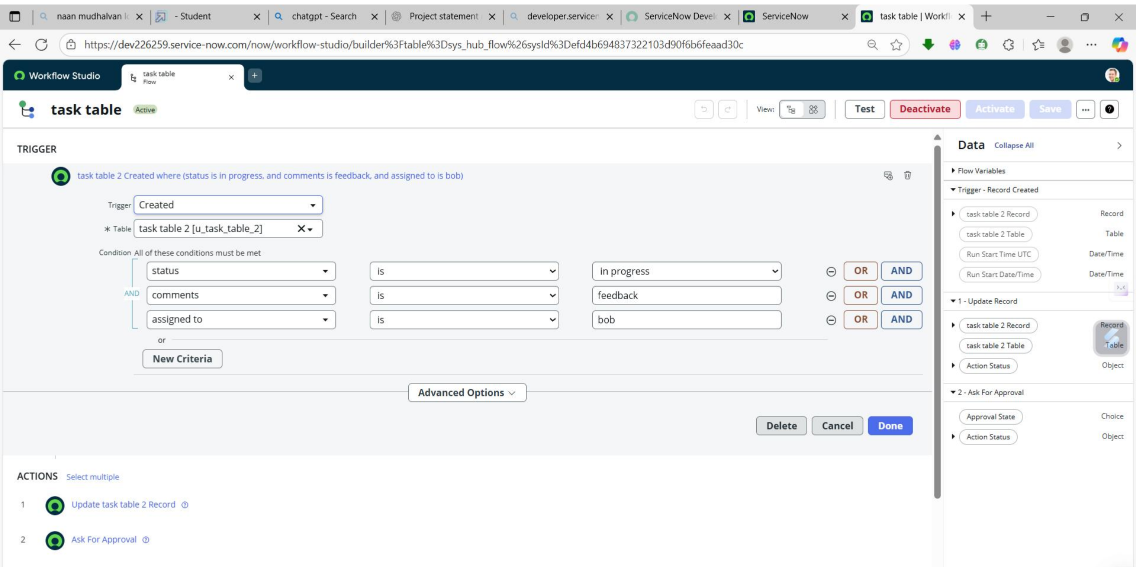
2. Select the trigger in that Search for “create record” and select that.

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.

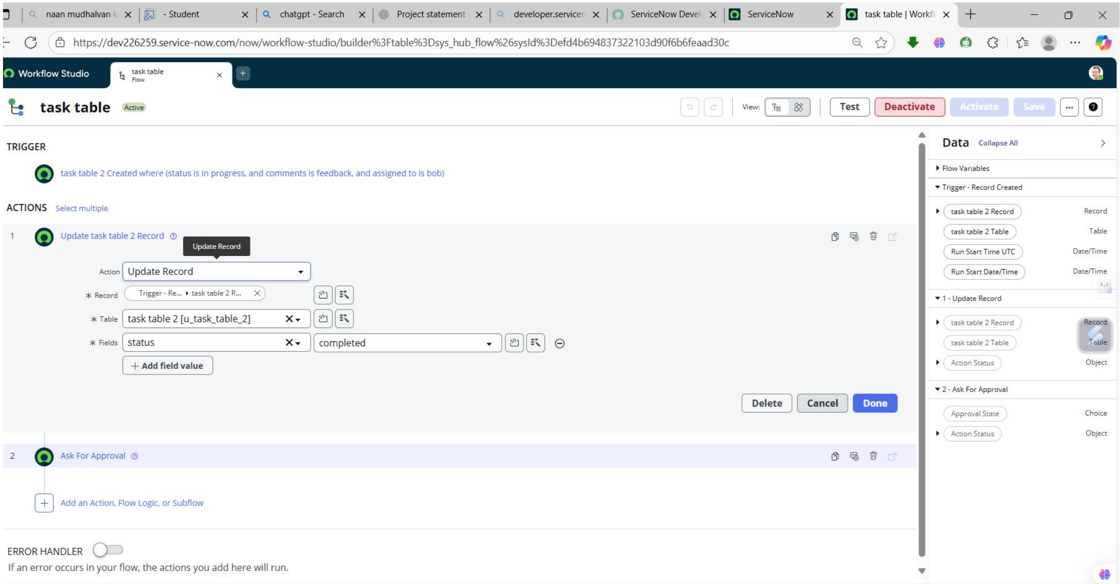
2. Select action in that ,search for “ update records”.

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.

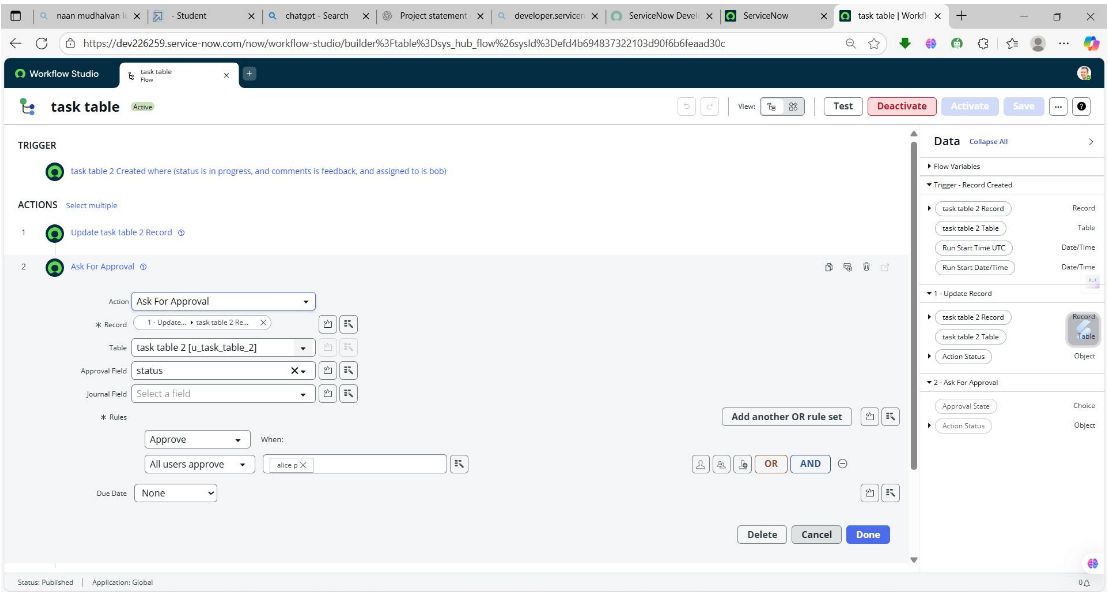
3. Select action in that ,search for “ ask for approval ”.

4. In Record field drag the fields from the data navigation from Right side

5. Table will be auto assigned after that

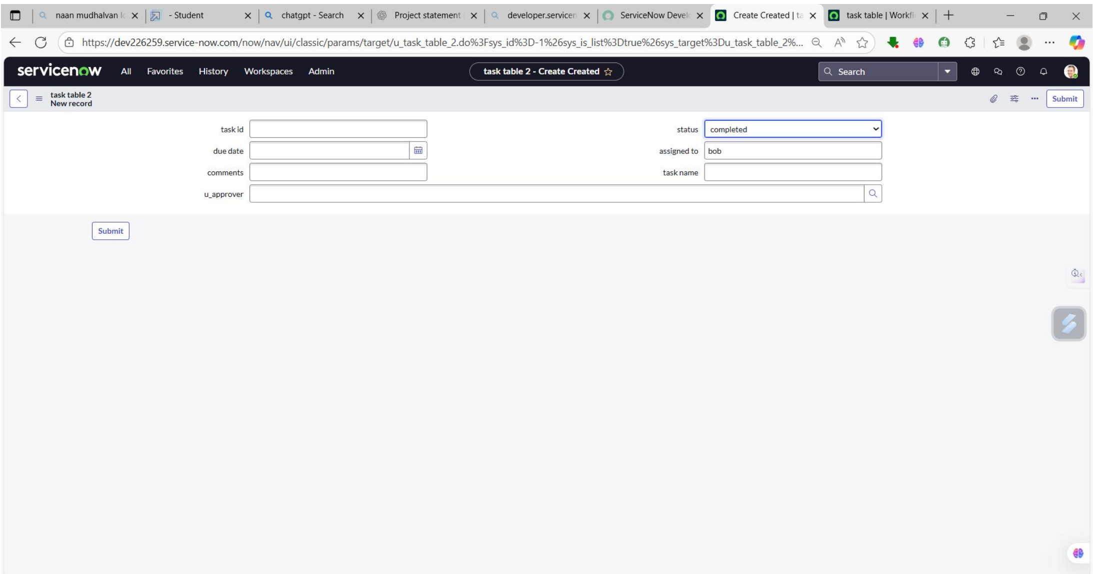
6. Give the approve field as “ status” 7. Give approver as alice p

8. Click on Done.



9.Go to application navigator search for task table.

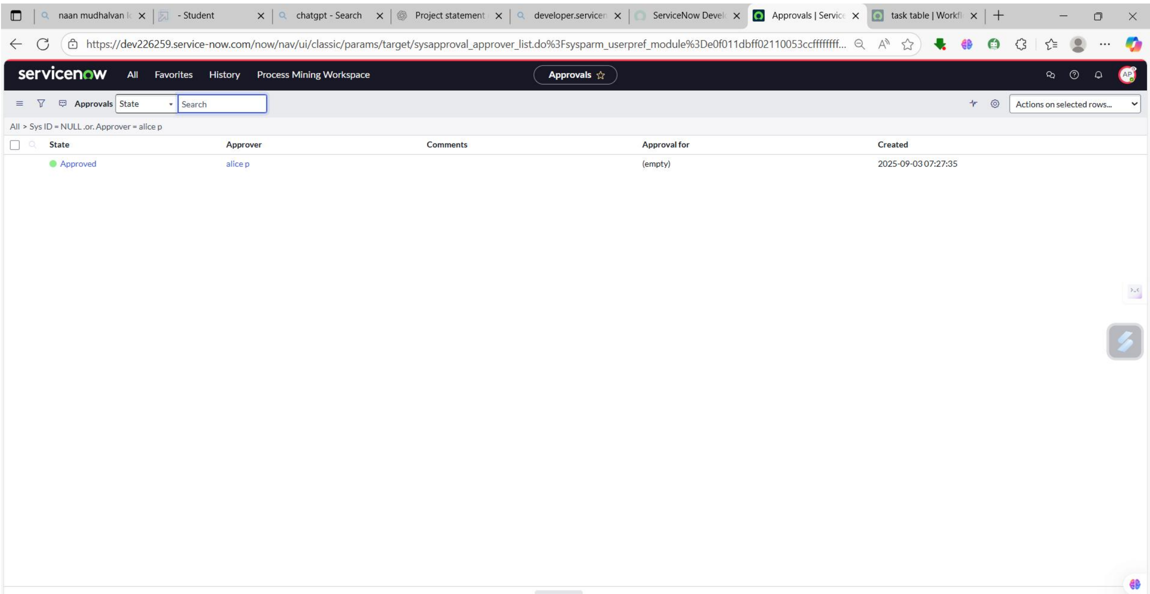
10.It status field is updated to completed



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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servicenow
All
Favorites
History
Process Mining Workspace
Approvals
Approvals
State
Search
Actions on selected rows...
All > Sys ID = NULL .or. Approver = alice p
State
Approver
Comments
Approval for
Created
Approved
alice p
(empty)
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Conclusion :

This project on **optimizing user, group, and role management with access control and workflows** has shown the importance of establishing a structured approach to identity and access management within organizations. By implementing role-based access control (RBAC), the system ensures that users receive the right access at the right time, reducing the risks of unauthorized activities and maintaining the principle of least privilege.

The introduction of **workflow automation** further enhanced efficiency by streamlining processes such as onboarding, approvals, and de-provisioning. This not only reduced manual effort but also improved accuracy and accountability, while audit trails and compliance features provided greater transparency for governance. Together, these elements strengthened security while improving overall productivity.

In conclusion, the project demonstrates that effective user and role management is not just a technical necessity but a strategic requirement for modern organizations. By combining access control with automated workflows, organizations can achieve scalability, compliance, and operational efficiency, creating a secure and sustainable framework for managing digital identities.