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JAIN COLLEGE - MINJUR
(Affiliated to the University of Madras)
(Accredited by NAAC)

PROJECT TITLE : Optimizing user group and role management with access control and workflows

Team Id : NM2025TMID19488

Team members: 4

Team Leader: AKASH GUPTHA H

Team member 1 : ELAVARASAN S

Team member 2 : SARAVANAN E

Team member 3 : M MOHANALAKSHMI

Project Ideation Phase

- **Project Title:** Optimizing User, Group, and Role Management with Access Control and Workflows in ServiceNow
- **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.

Requirement Analysis Phase

- **Users:** Create two users.
- **Groups:** Create two groups.
- **Roles:** Create roles for the users.
- **Tables:** Create table to store the data.
- **Assignments:** Assign users to groups, Assign roles to users and Assign Table access to application.
- **Access Control List (ACL):** Secure fields based on roles.
- **Flow:** Create a Flow to Assign Operations Ticket to Group.
- **Results:** Test outcome—verify links and field population.
- **Conclusion:** Evaluate success and readiness for deployment.

Project Planning Phase

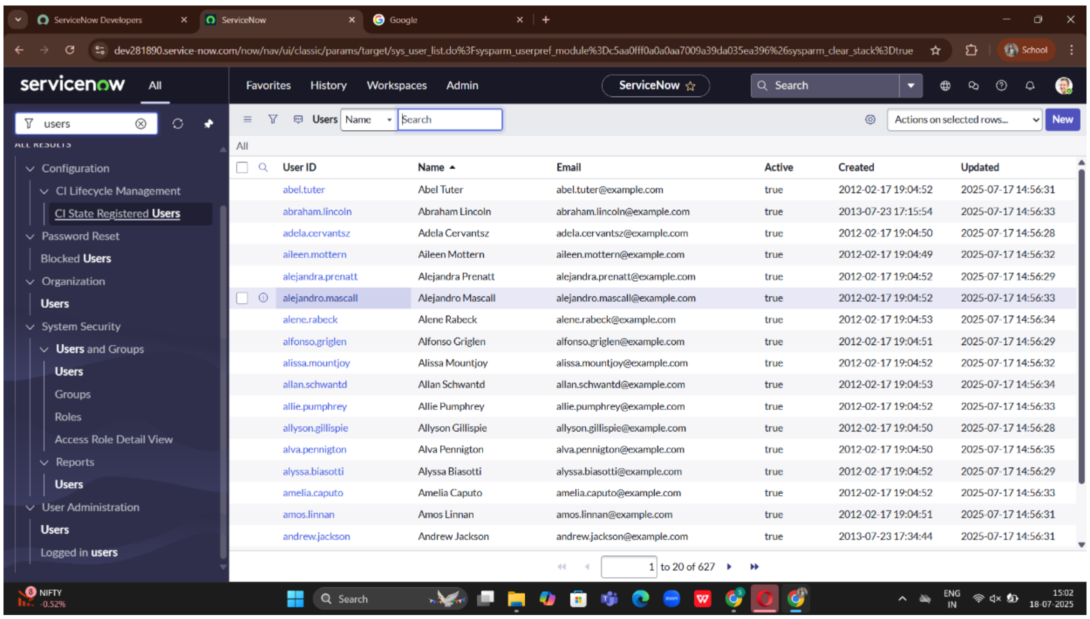
1. Project Timeline:

- Break your project into phases:
  - Ideation
  - Requirement Analysis
  - Design
  - Development (Users, Groups, Roles, Tables, ACL s and Flows)
  - Testing
  - Report generation
  - Review & Conclusion

Project Design Phase

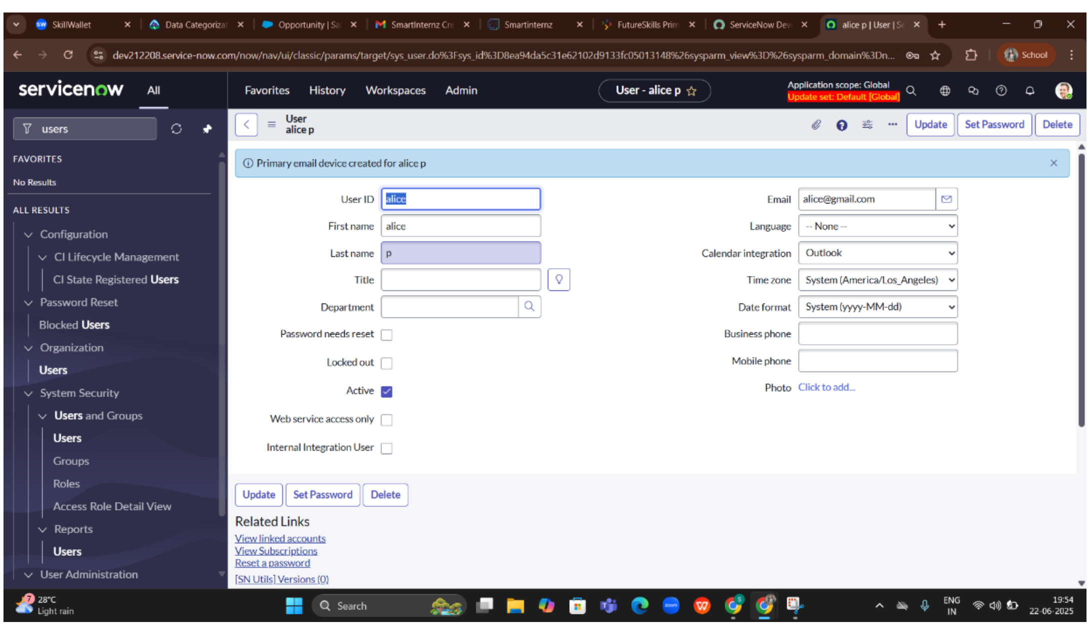
1. Create Users

- Open service now.
- Click on **All** >> search for **Users**
- Select Tables under **system security**
- Click on **New**

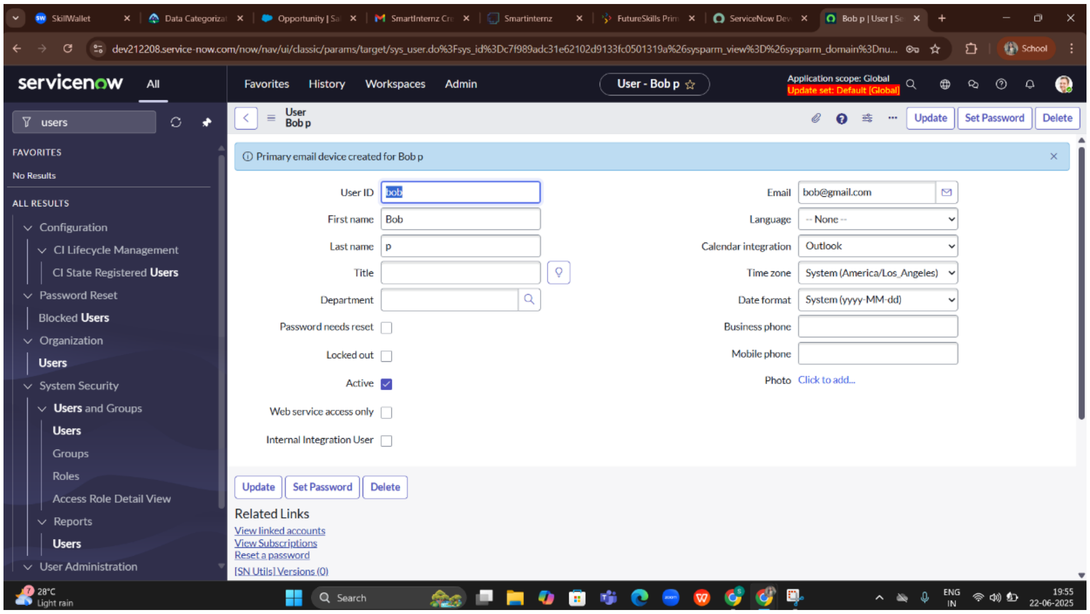


- Fill the following details to create a new users

- Create a user named as “alice p”.

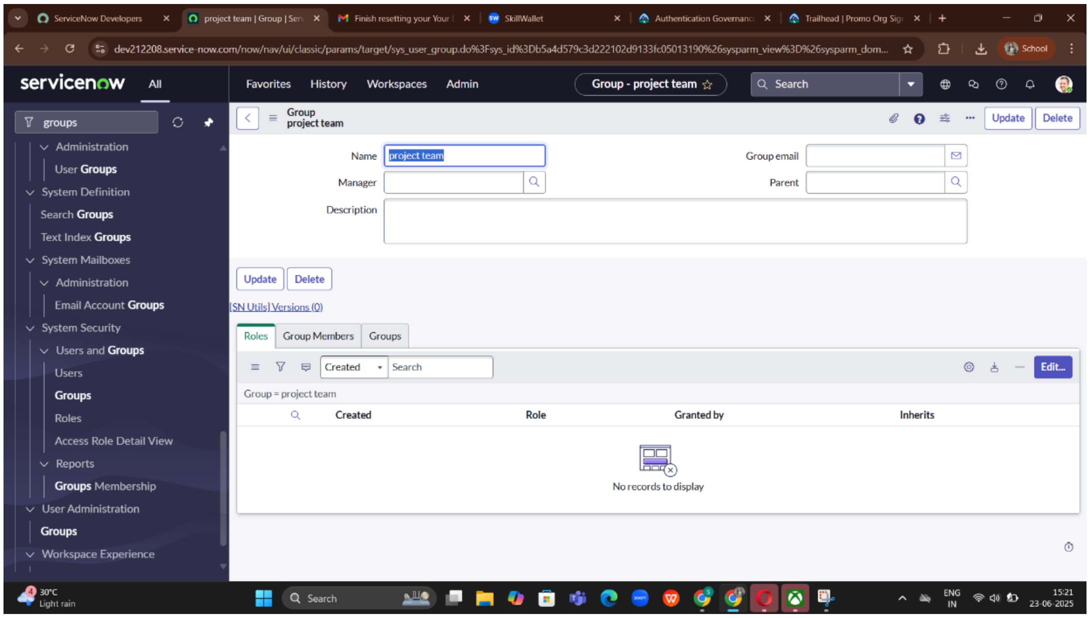


- **Create one more user:**
- Create another user with the following details
- Username: “bob p”.
- Click on submit.



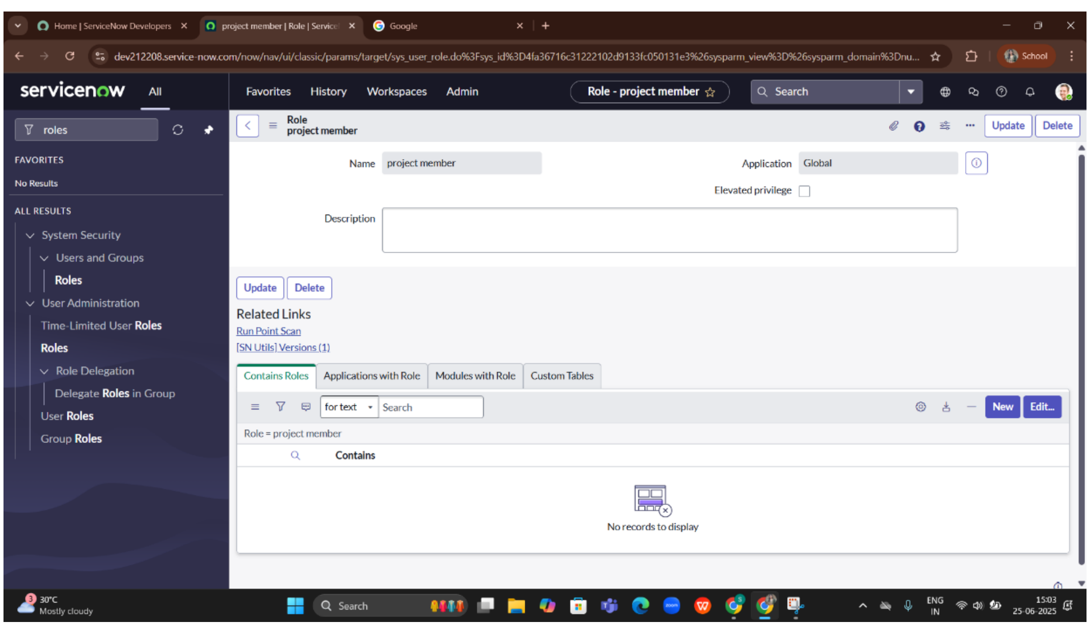
2. Create Groups

- 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
- Click on submit

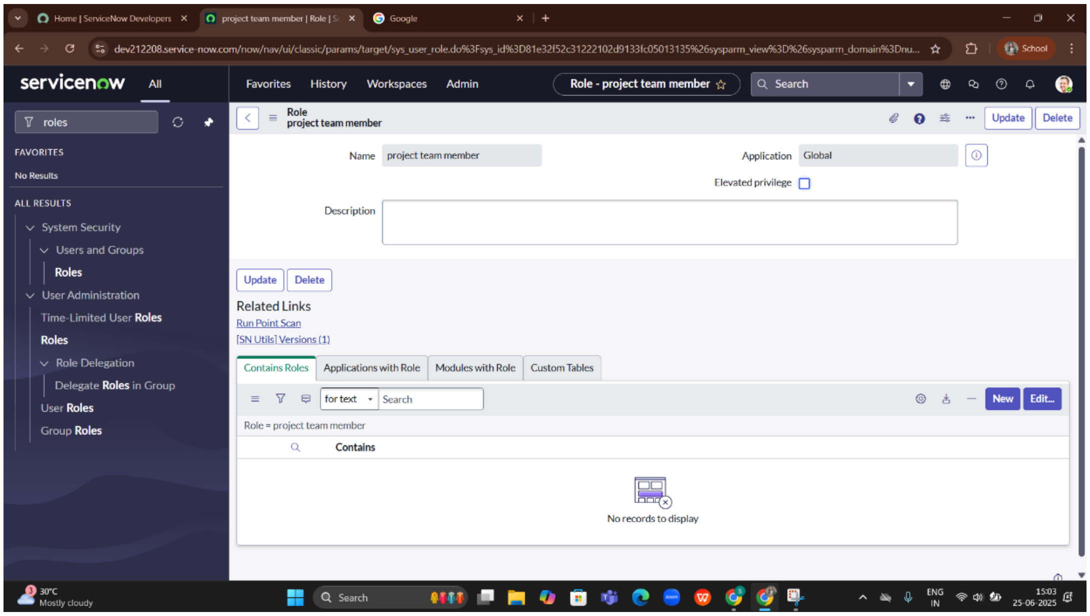


3. Create Roles

- Open service now.
- Click on All >> **search for roles**
- Select roles under system security
- Click on new
- Fill the following details to create a new role
- Click on submit

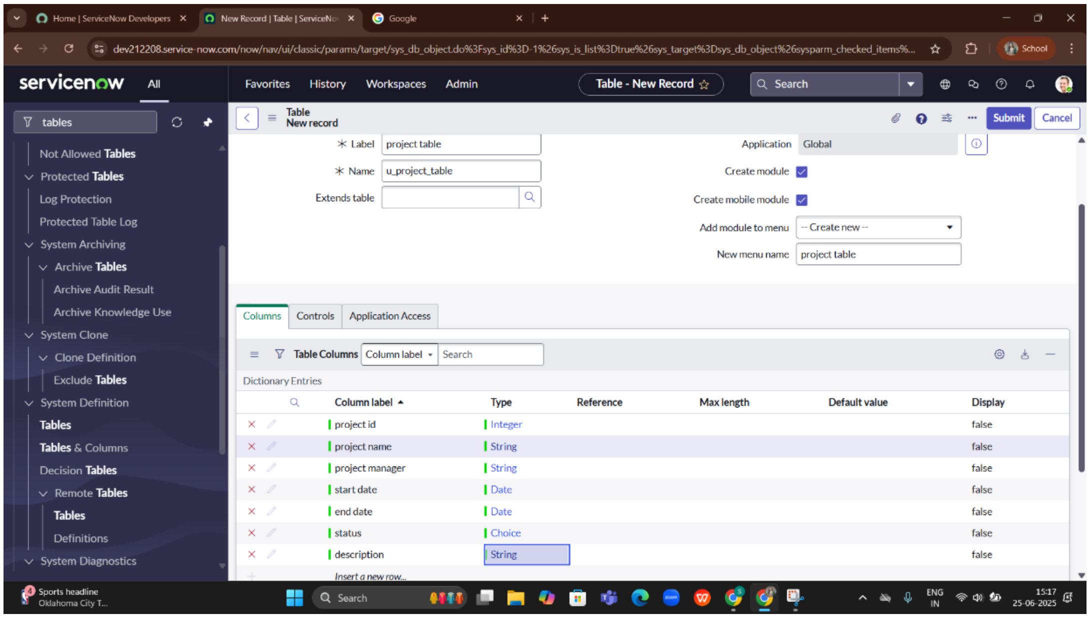


- **Create one more role:**
- Create another role with the following details
- Click on submit

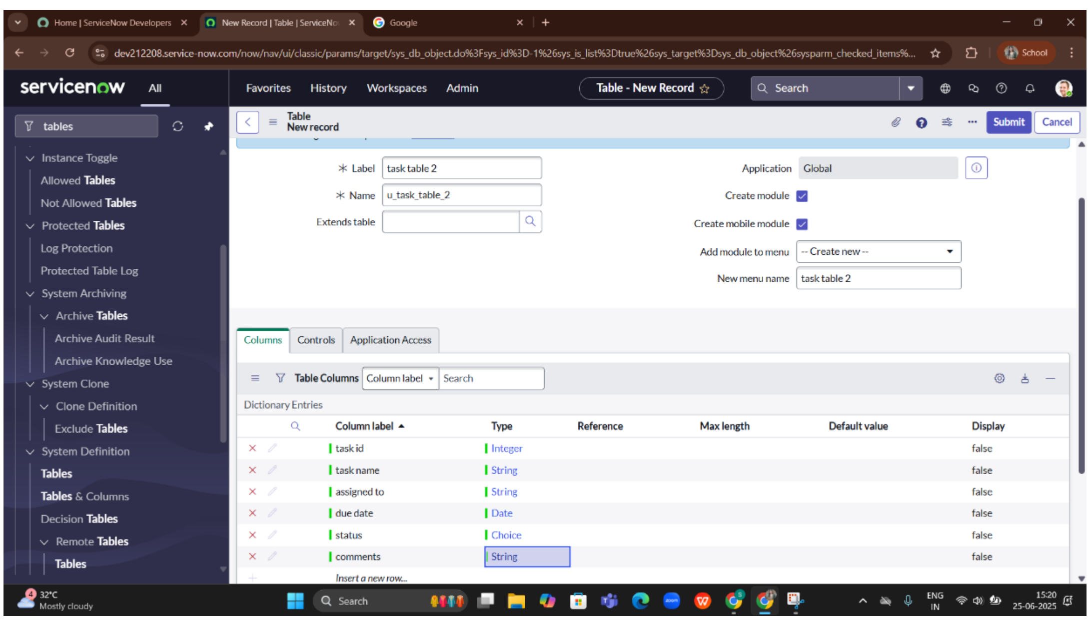


4. Create Tables

- Open service now.
- Click on All >> **search for tables**
- Select tables under system definition
- Click on **new**
- Fill the following details to create a new table
  Label : **project table**
  Check the boxes Create module & Create mobile module
- Under new menu name : **project table**
- Under table columns give the columns

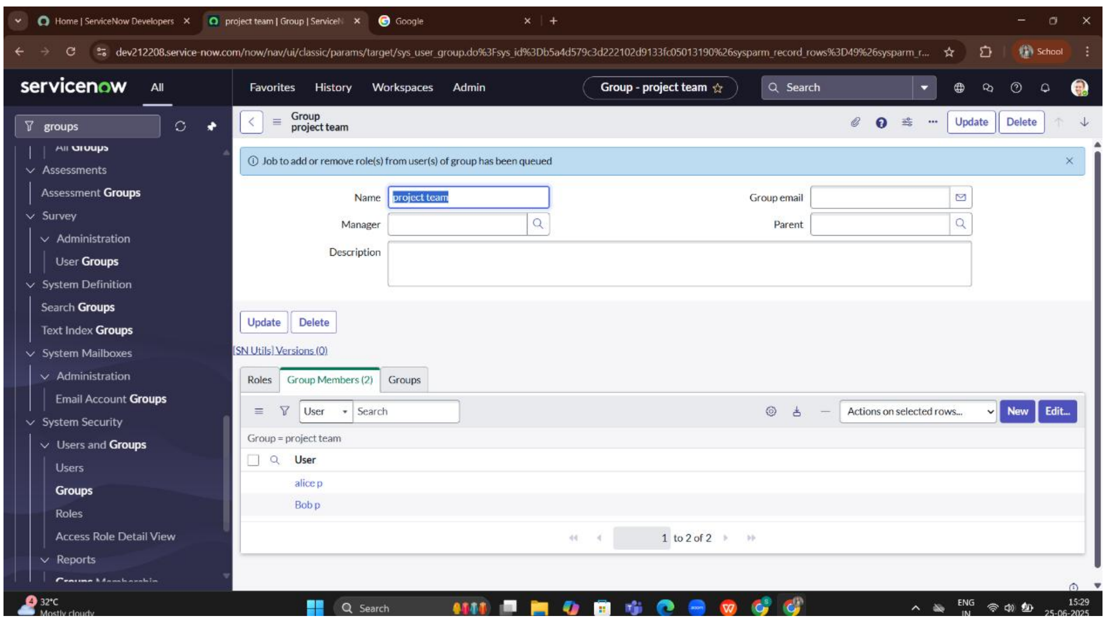


- Click on submit
- **Create one more table:**
- Create another table as:task table 2 and fill with following details.
- Click on **submit**.



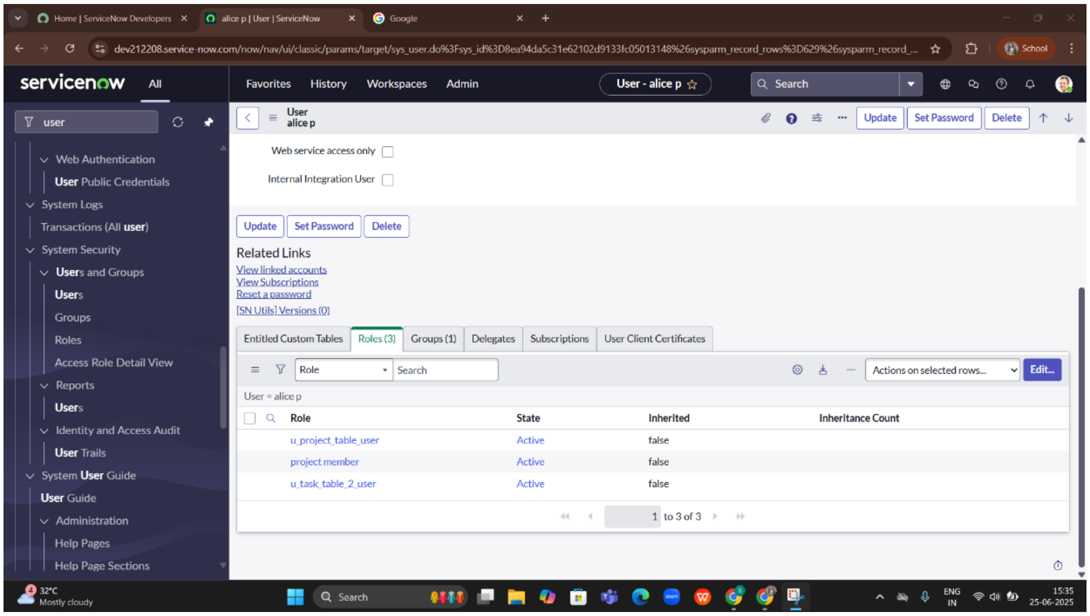
5. Assign users to project team group

- Open service now
- Click on All >> **search for groups**
- Select tables under system definition
- Select the project team group
- Under group members
- Click on edit
- Select **alice p** and **bob p** and save.

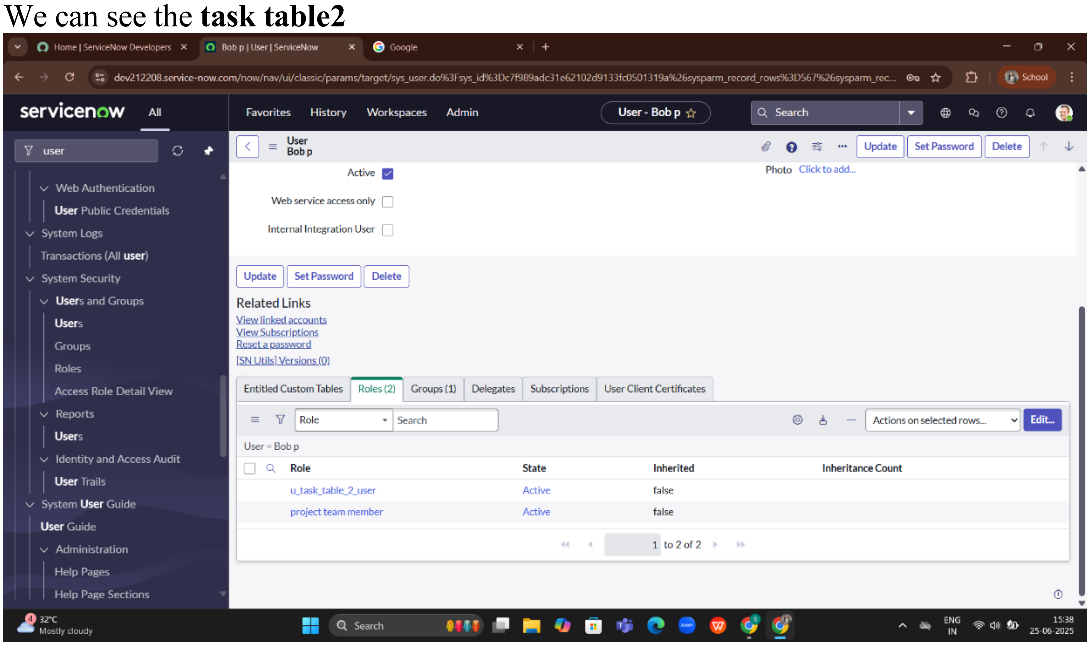


6. Assign roles to users

- **Assign roles to alice user**
- Open servicenow
- Click on All >> **search for user**
- Select tables under system definition
- Select the **project manager user**
- Under **project manager**
- Click on edit
- Select **project member** and save
- Click on edit add **u_project_table** role and **u_task_table** role
- Click on **save** and **update** the form.

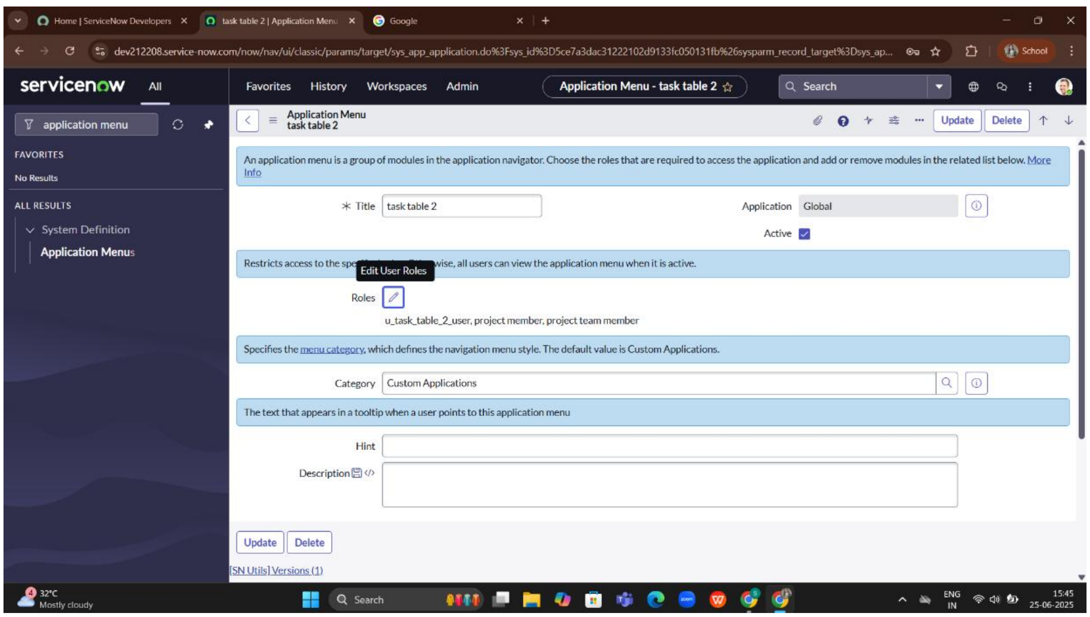


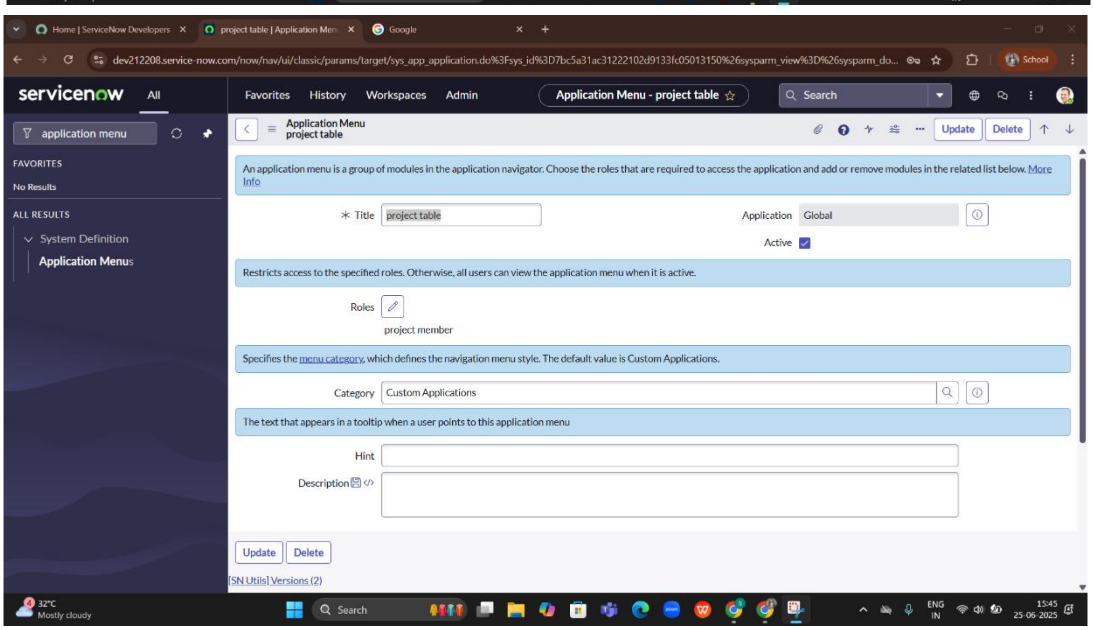
- **Assign roles to bob user**
- Open servicenow
- Click on All >> **search for user**
- Select tables under system definition
- Select the **bob p** user
- Under **team member**
- Click on edit
- Select **team member** and give **table role** and save
- Click on profile icon **Impersonate user to bob**
- We can see the **task table2**



7. Application access

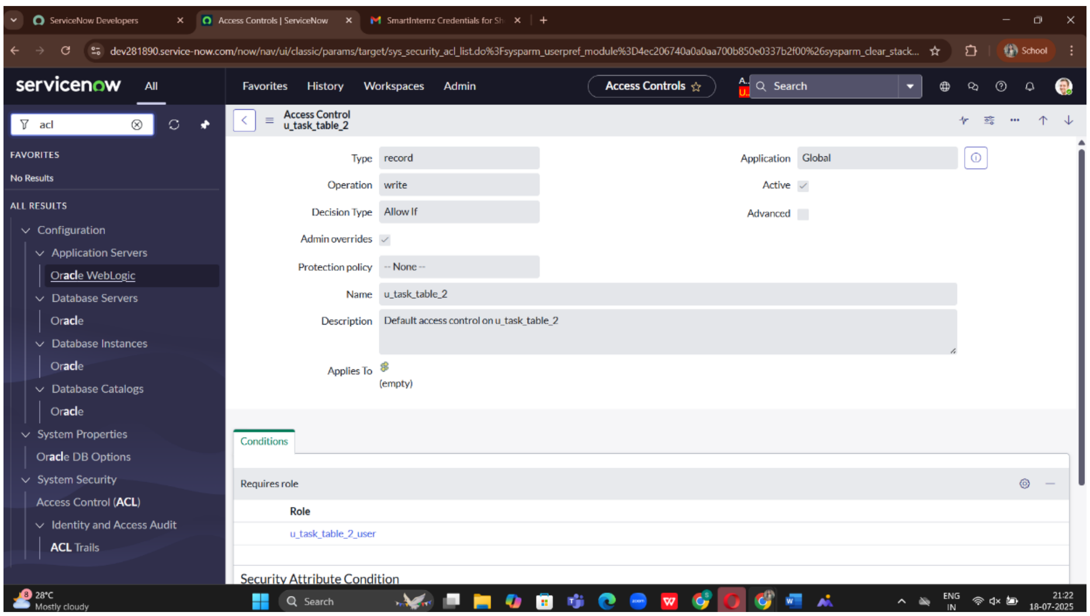
- **Assign table access to application**
- While creating a table it automatically create a application and module for that table
- Go to application navigator search for search project table application
- Click on edit module
- Give project member roles to that application
- Search for task table2 and click on edit application.
- Give the project member and team member role for task table 2 application.



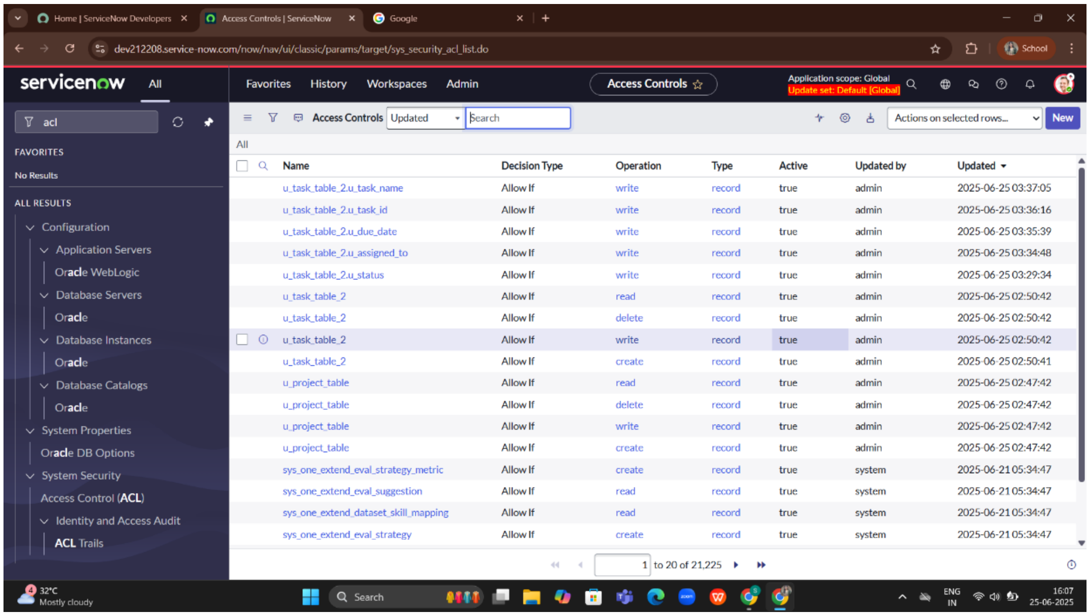


8. Access control list

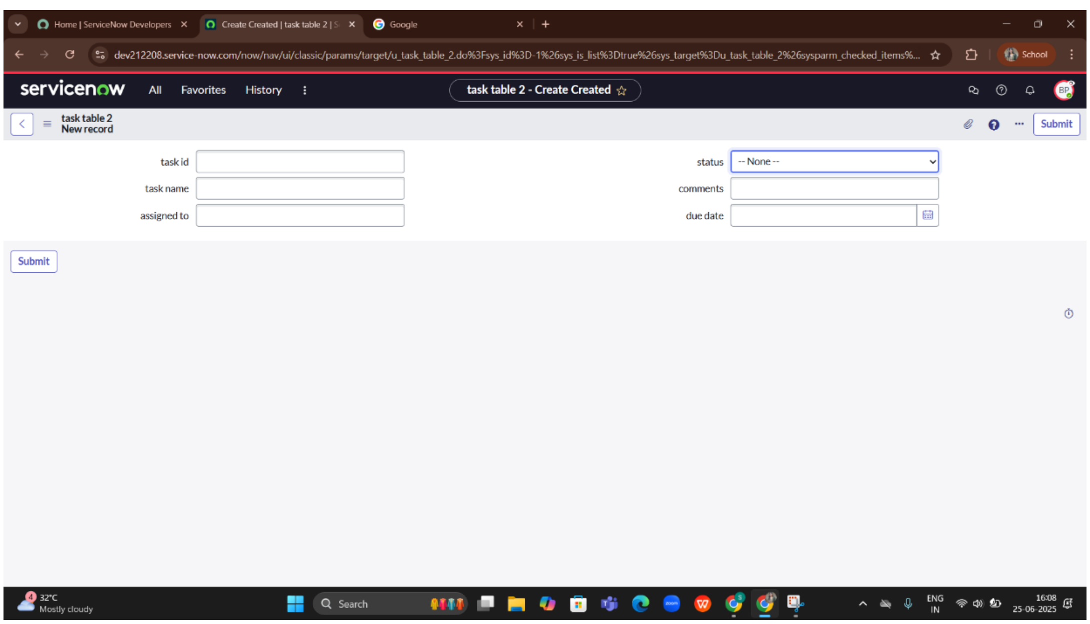
- **Create ACL**
- Open service now.
- Click on All >> **search for ACL**
- Select **Access Control(ACL)** under system security
- Click on elevate role
- Click on new
- Fill the following details to create a new ACL



- Scroll down under requires role
- Double click on insert a new row
- Give task table and team member role
- Click on submit
- Similarly create 4 **acl** for the following fields

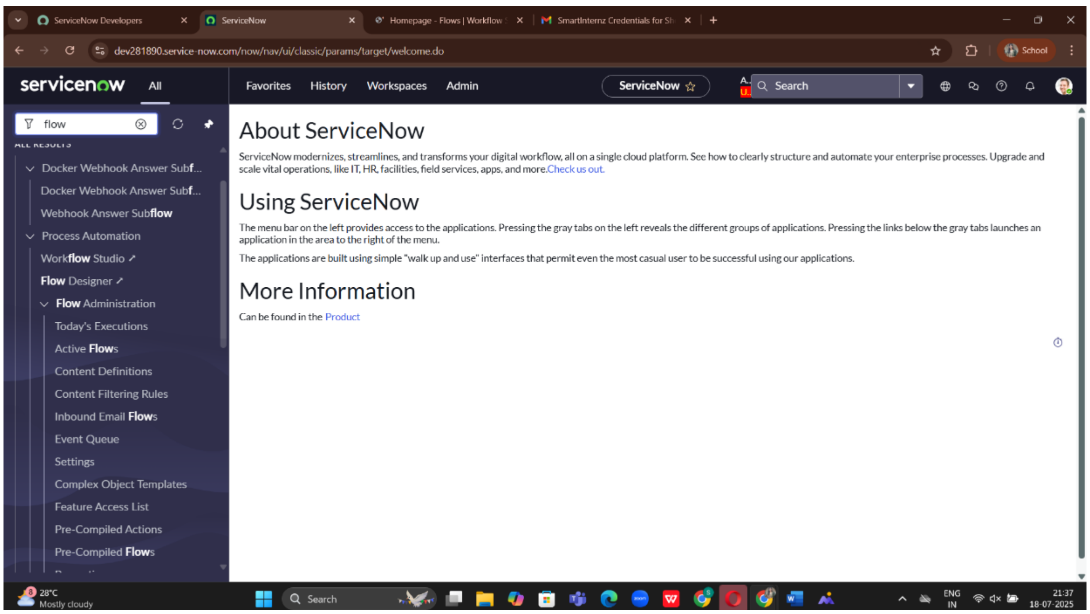


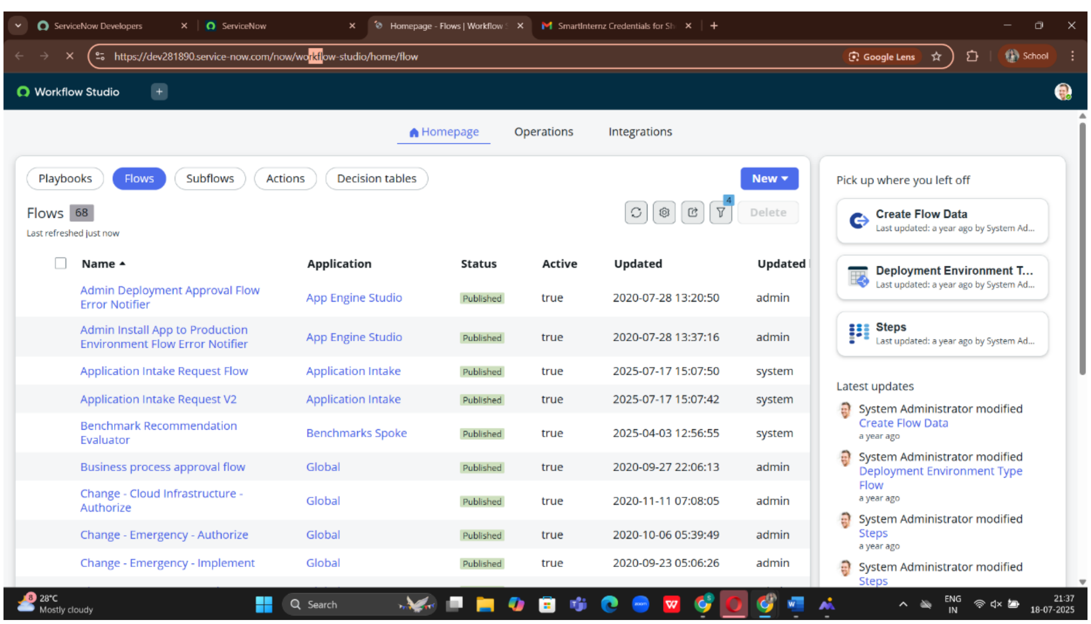
- Click on profile on top right side
- Click on **impersonate user**
- Select **bob** user
- Go to all and select **task table2** in the application menu bar
- Comment and status fields are have the edit access

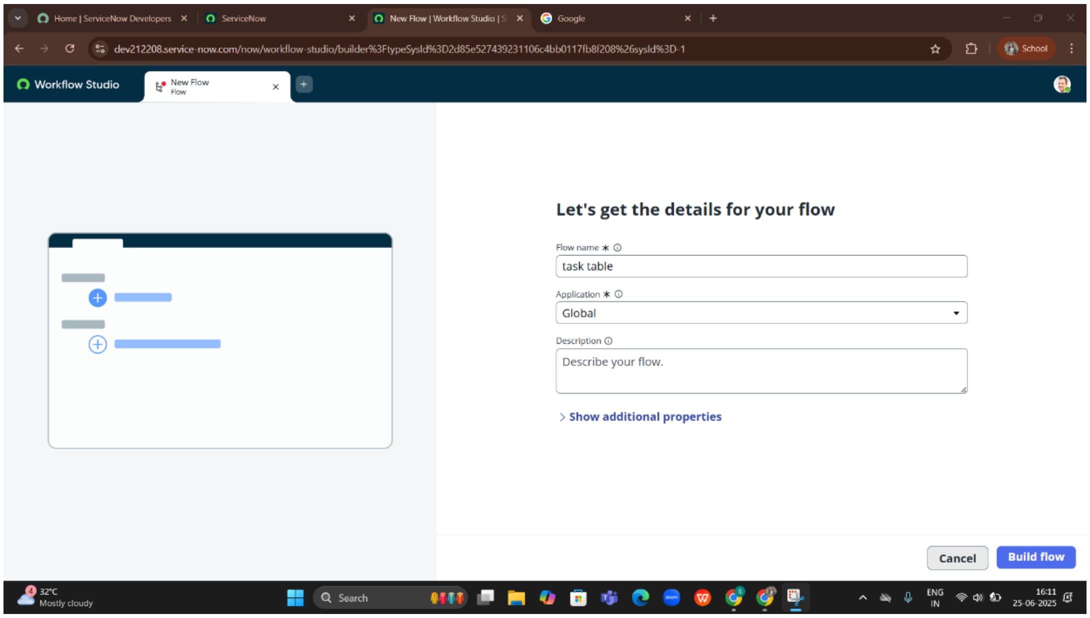


9. Flow

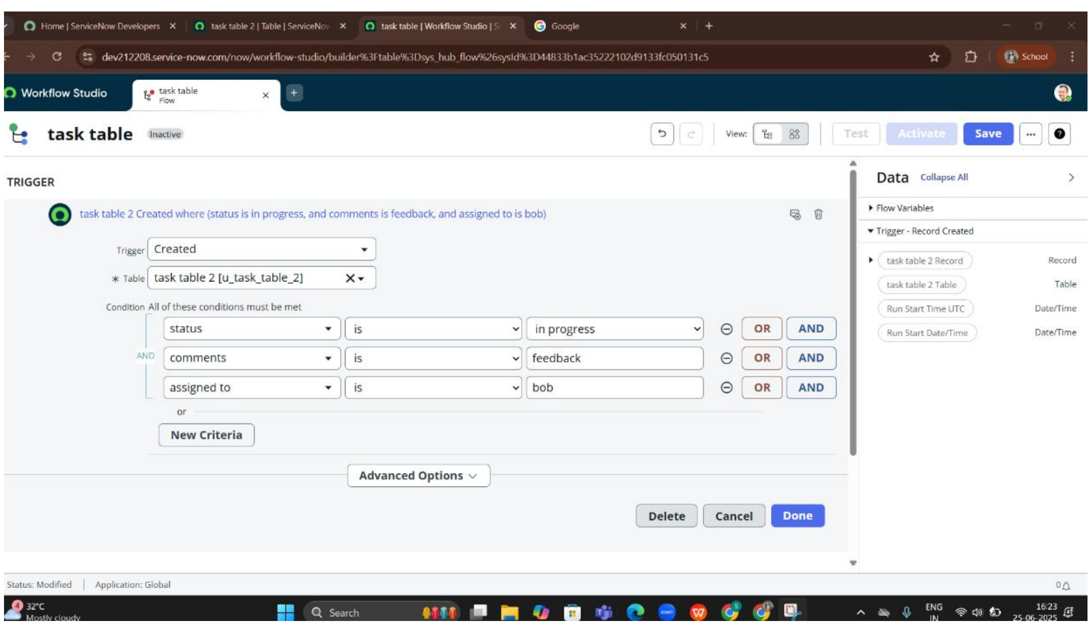
- **Create a Flow to Assign operations ticket to group**
- Open service now.
- Click on All >> search for **Flow Designer**
- Click on Flow Designer under Process Automation.
- After opening Flow Designer Click on new and select Flow.
- Under Flow properties Give Flow Name as “ **task table**”.
- Application should be **Global**.
- Click build flow.



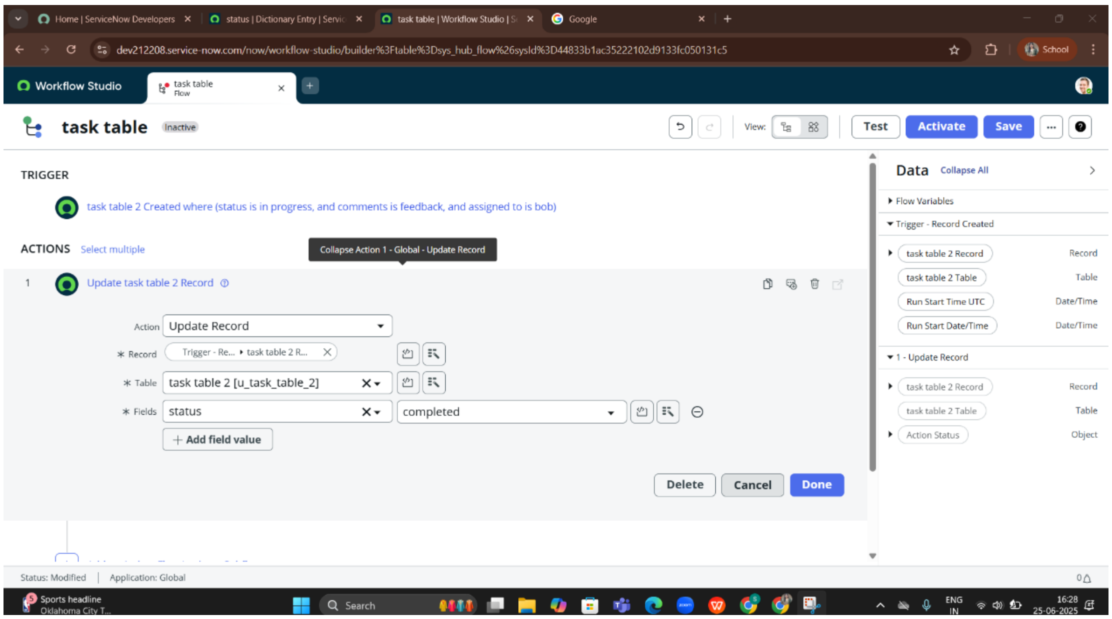




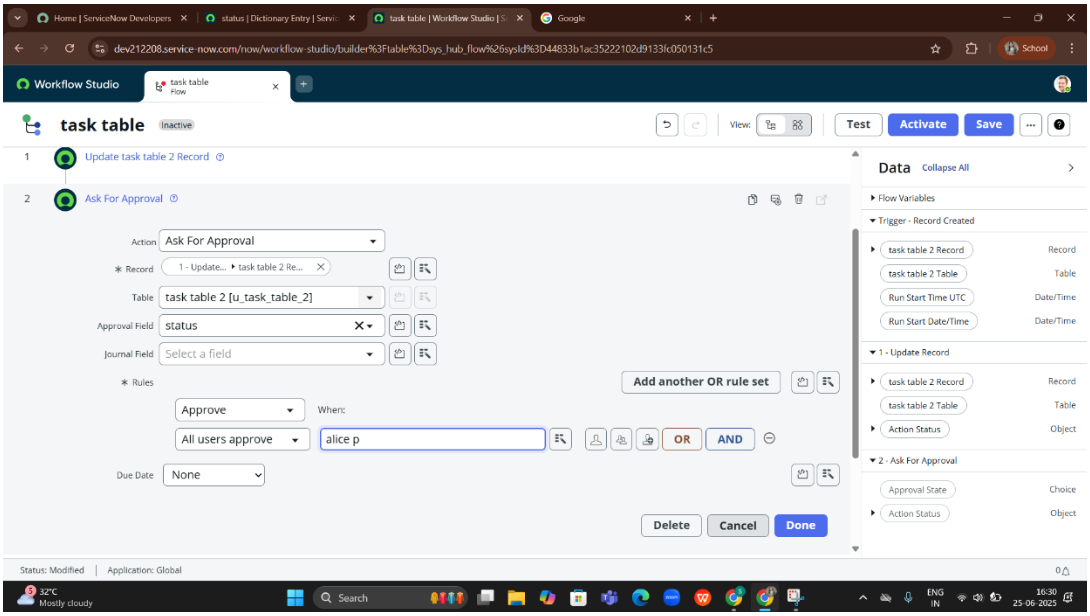
- Define ACL (Employees) Click on Add a trigger
- Select the trigger in that Search for “**create record**” and select that.
- Give the table name as “ **task table** ”.
- Give the Condition as:
- Field : status Operator :is Value : in progress
- Field : comments Operator :is Value : feedback
- Field : assigned to Operator :is Value : bob
- After that click on Done.



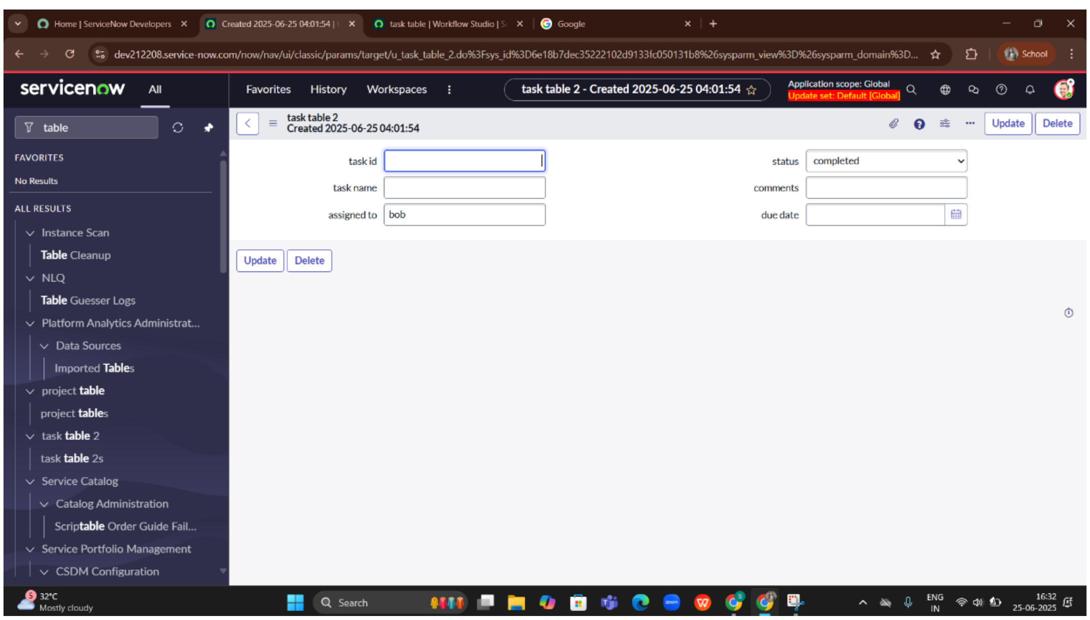
- Click on Add an action.
- Select action in that ,search for “ **update records**”.
- In Record field drag the fields from the data navigation from Right Side(Data pill)
- Table will be auto assigned after that
- Add fields as “**status**” and value as “**completed**”
- Click on Done.



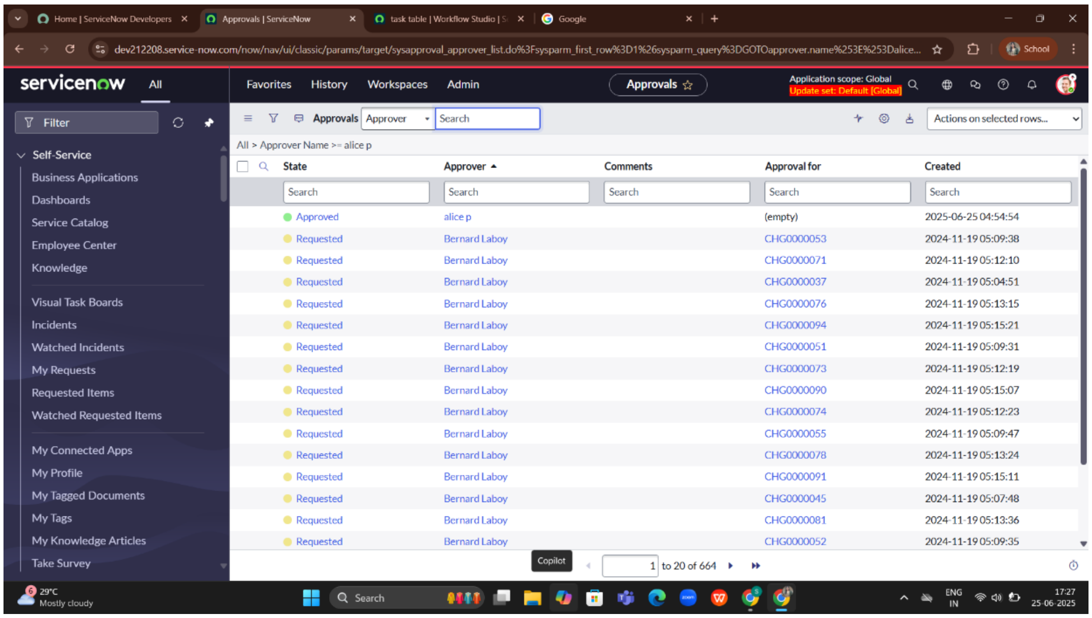
- Now under Actions.
- Click on Add an action.
- Select action in that ,search for “ **ask for approval** ”.
- In Record field drag the fields from the data navigation from Right side
- Table will be auto assigned after that
- Give the approve field as “ **status**”
- Give approver as **alice p**
- Click on Done.

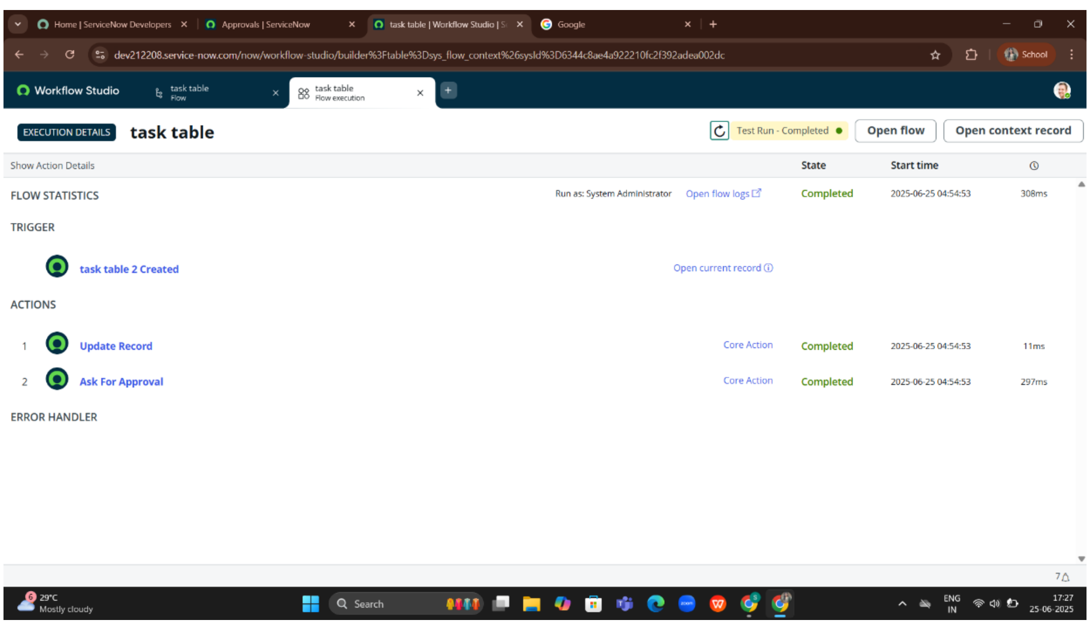


- Go to application navigator search for task table.
- It status field is updated to completed



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





Final Conclusion

Effective optimization of user, group, and role management—combined with robust access control and streamlined workflows—is essential for maintaining data security, enforcing compliance, and enhancing operational efficiency. By defining clear roles, automating user provisioning, and applying granular access policies, organizations can minimize risks, reduce administrative overhead, and ensure that the right individuals have access to the right resources at the right time. Ultimately, a well-structured identity and access management strategy supports scalability, improves user experience, and aligns IT processes with business goals.