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

Team ID: NM2025TMID18673
Team Size: 5
Team Leader: SANGAVI S
Team member: OLYBA PRIYADHARSHINI M D
Team member: AJITH E
Team member: VELUKUMAR M
Team member: MAHESHWARAN 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:

- To design and implement efficient user, group, and role management in ServiceNow.
- To configure access control lists (ACLs) ensuring secure and role-based access.
- To automate workflows using Flow Designer for task assignment and approvals.
- To create and manage custom tables, applications, and modules for project tracking.
- To assign users to groups and roles, ensuring proper segregation of duties.
- To streamline application access and permissions for enhanced security.
- To demonstrate practical knowledge of ServiceNow platform administration.

Skills:

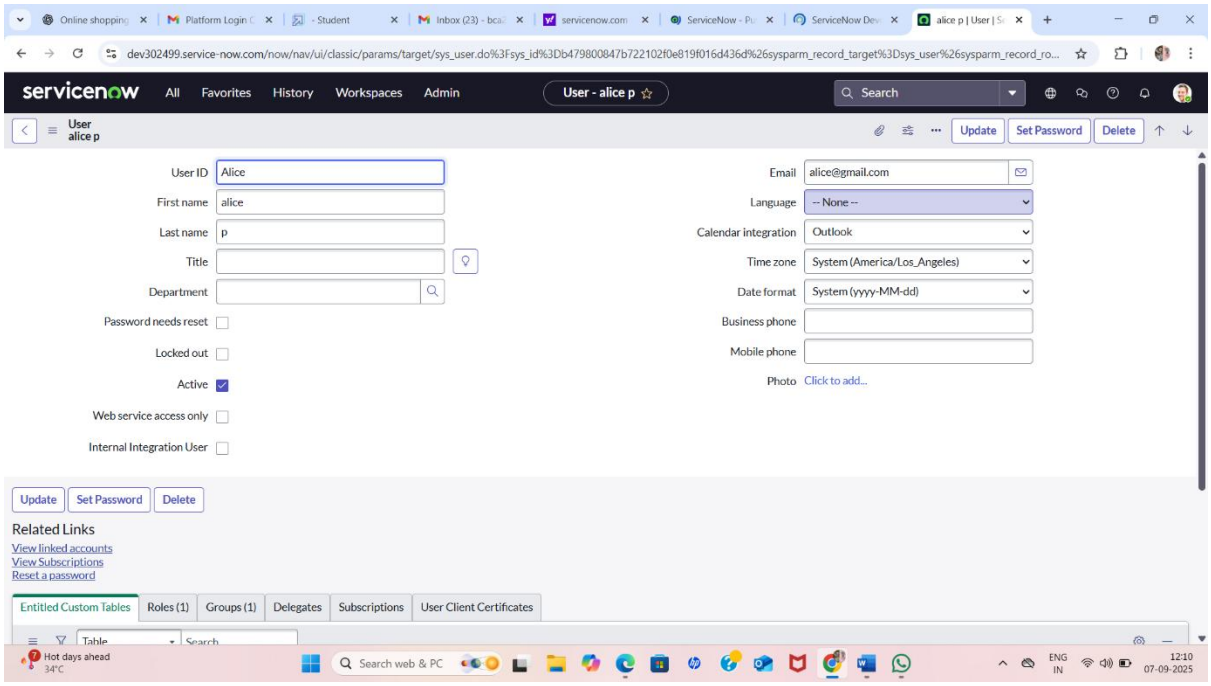
- ServiceNow platform administration and navigation.
- User, group, and role creation and management.
- Access Control List (ACL) configuration and security handling.
- Table, module, and application creation in ServiceNow.
- Workflow automation using Flow Designer.
- Role-based access implementation and testing (impersonation).
- Problem-solving and troubleshooting within ServiceNow.
- Team collaboration and project execution.

TASK INITIATION

Milestones 1 : Users

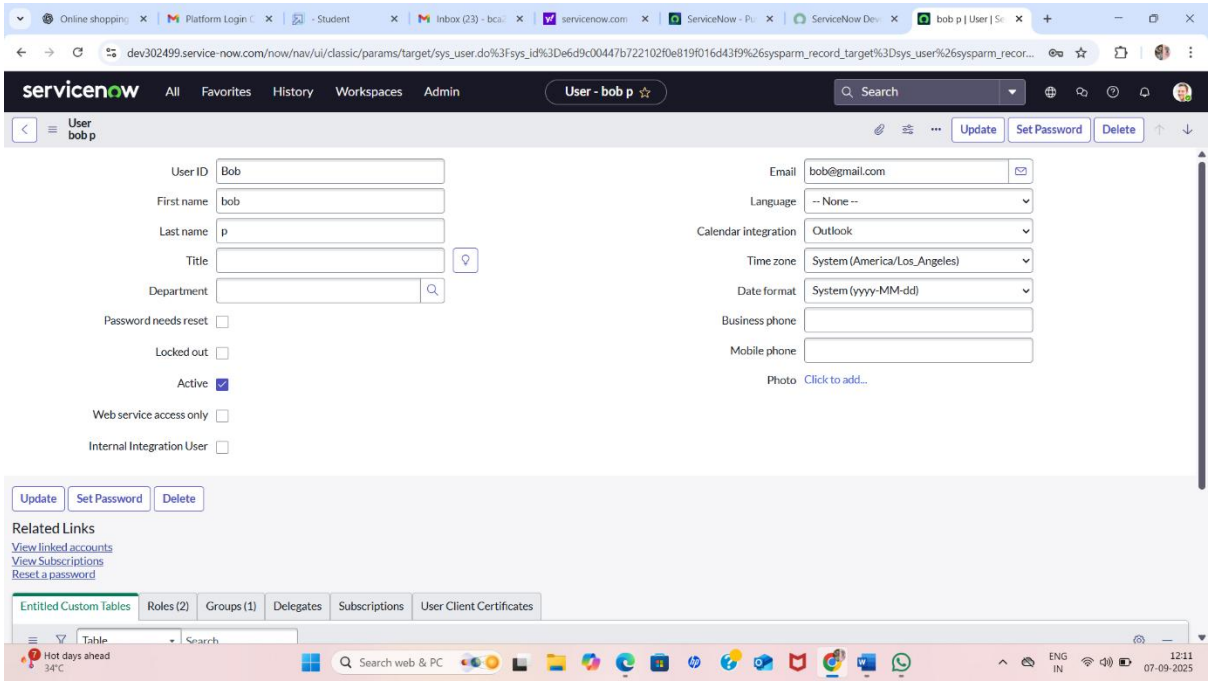
Activity 1: Create Users

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:

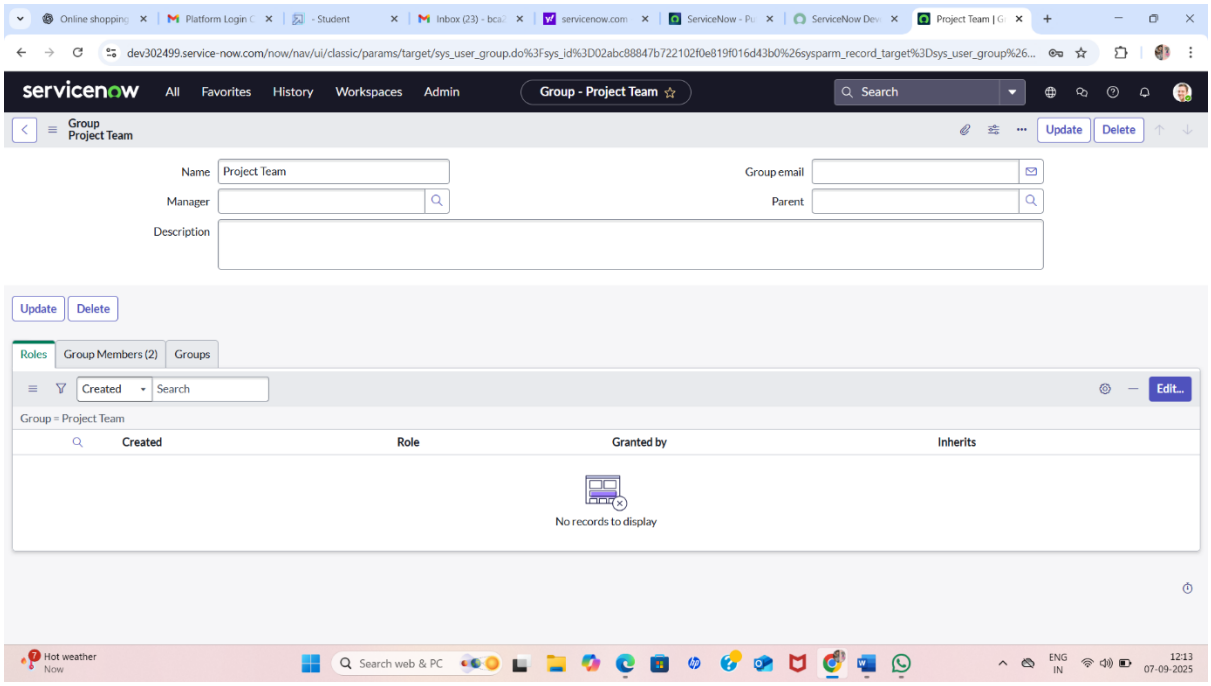
7. Create another user with the following details
8. Click on submit



Milestone 2 :

Groups Activity 1: Create Groups

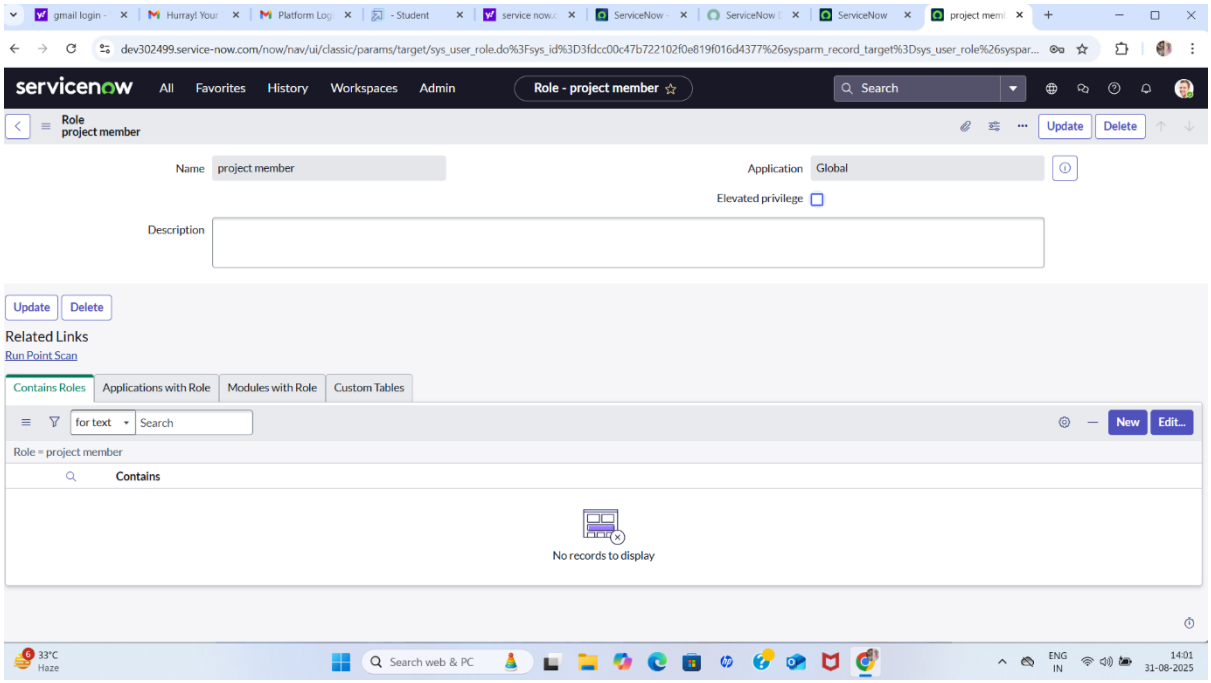
1. Open service now.
2. Click on All >> search for groups
3. Select groups under system security
4. Click on new
5. Fill the following details to create a new group
6. Click on submit



Milestone 3 :

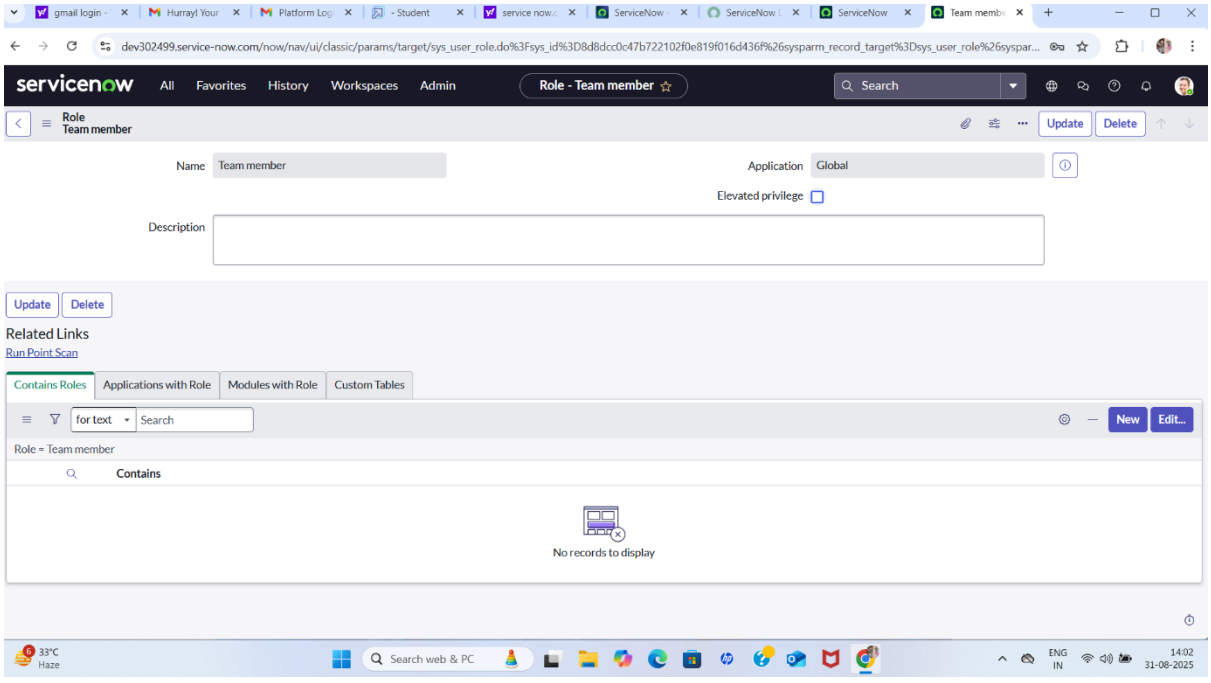
Roles Activity 1: Create Roles

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



Create one more role:

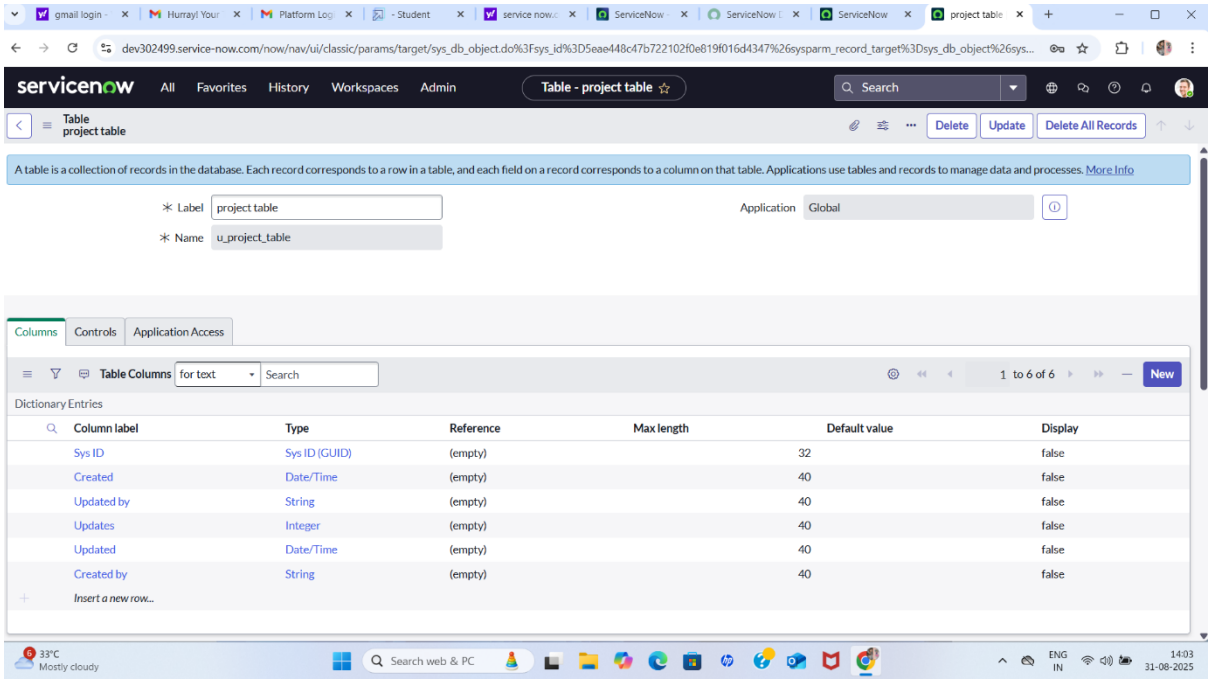
7.Create another role with the following details
8.Click on submit



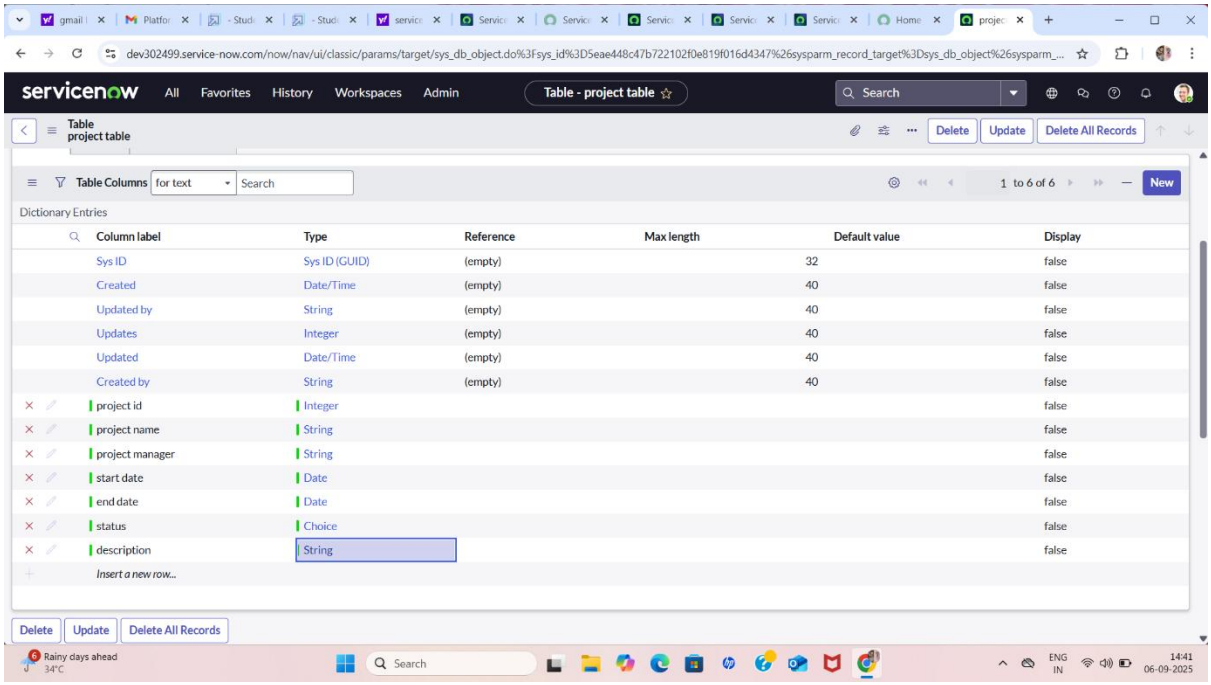
Milestone 4 :

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

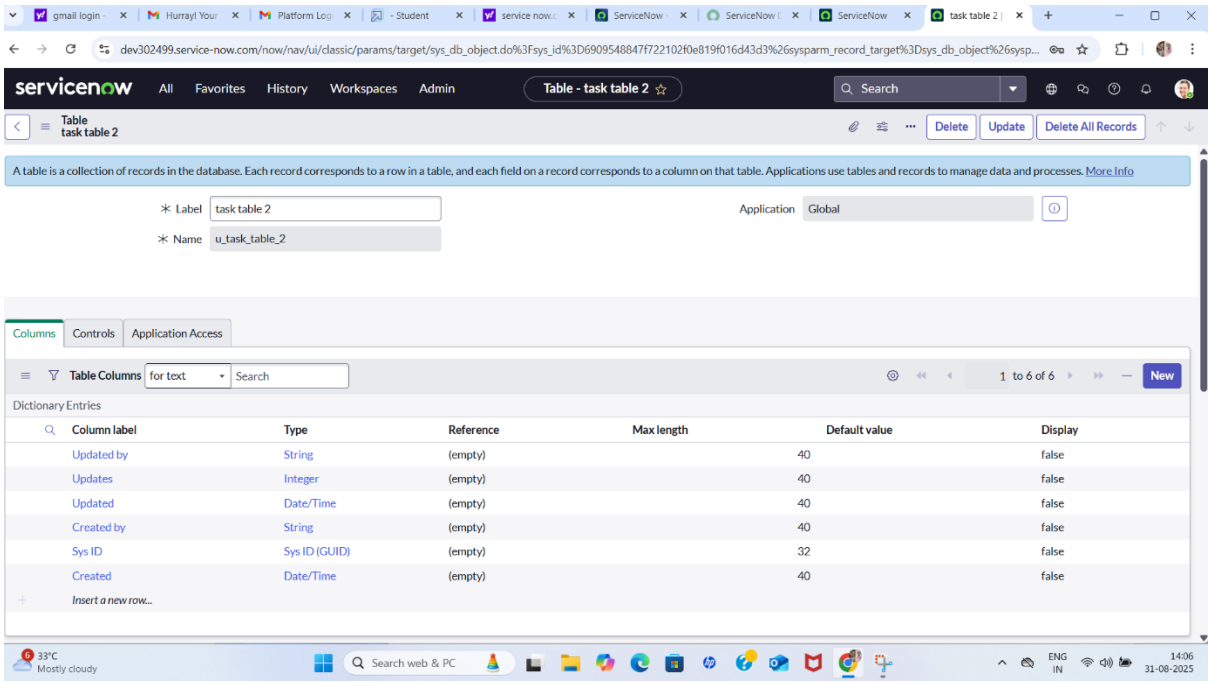


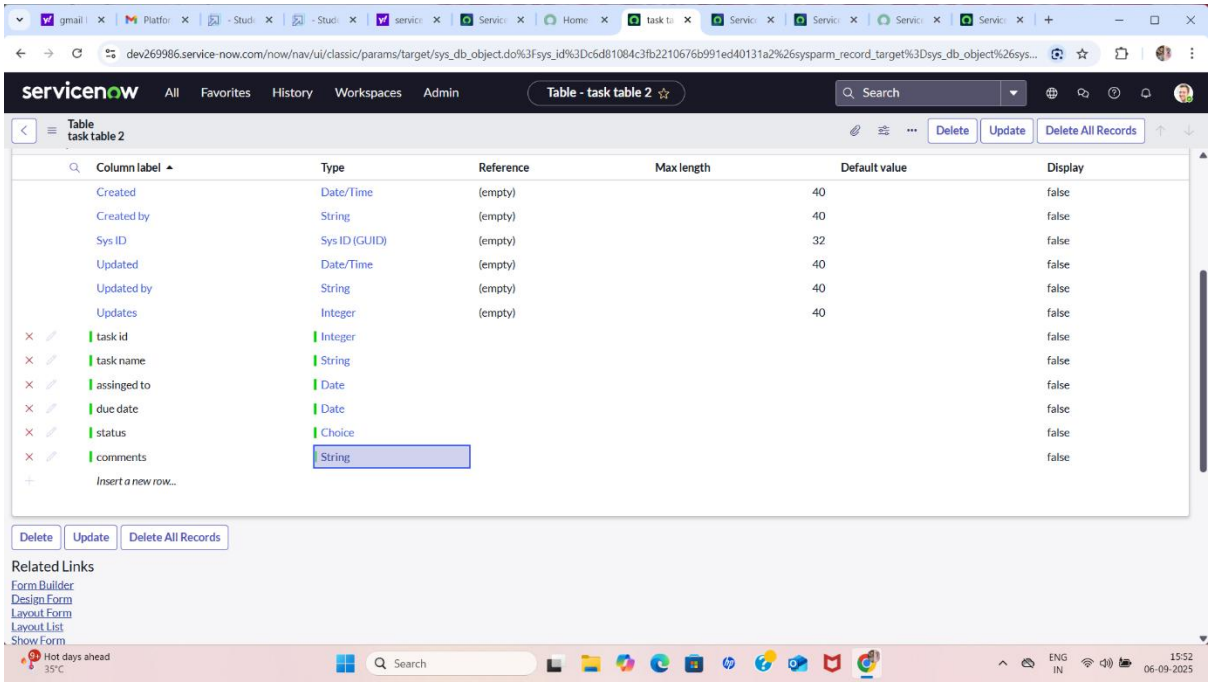
8. Click on submit



Create one more table:

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

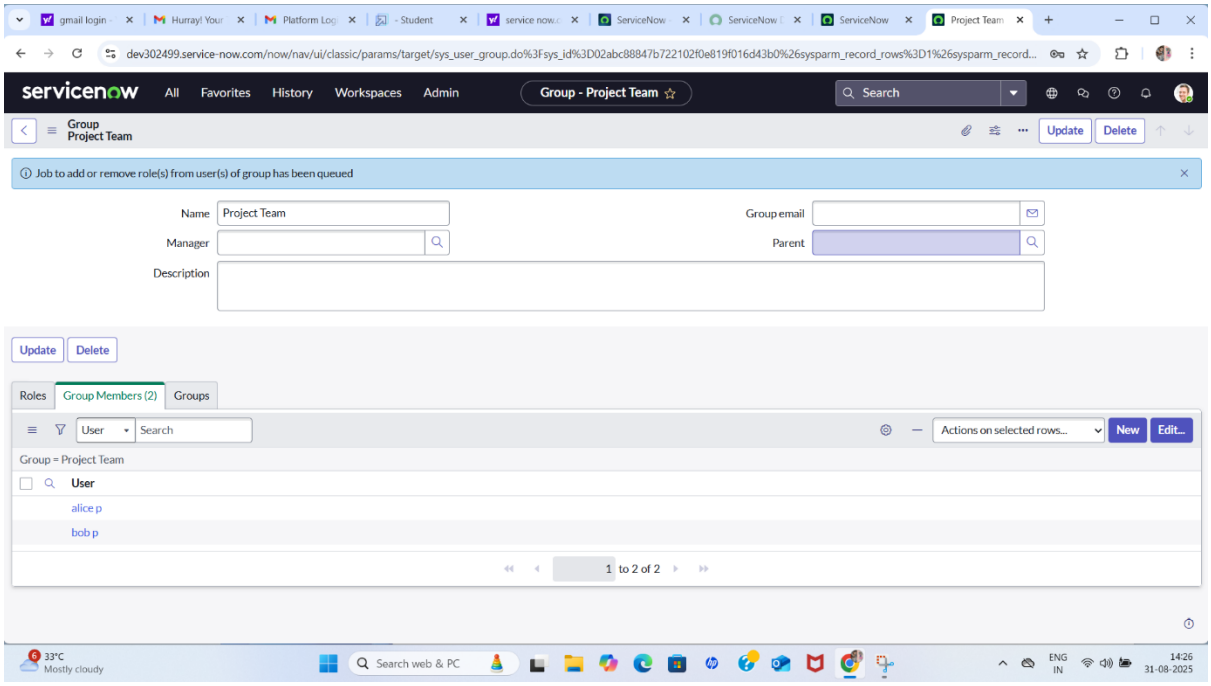




Milestone 5 : Assign users to groups

Activity 1: Assign users to project team group

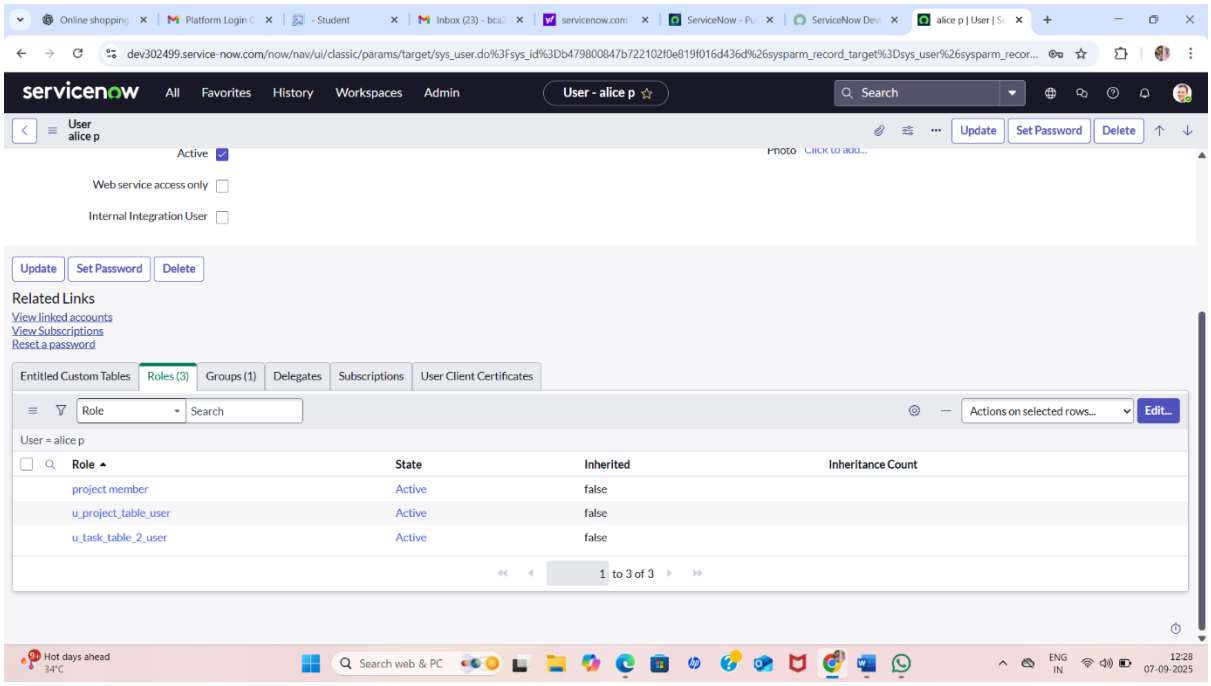
1.Open service now.
2.Click on All >> search for groups
3.Select tables under system definition
4.Select the project team group
5.Under group members
6.Click on edit
7.Select alice p and bob p and save



Milestone 6 : Assign roles to users

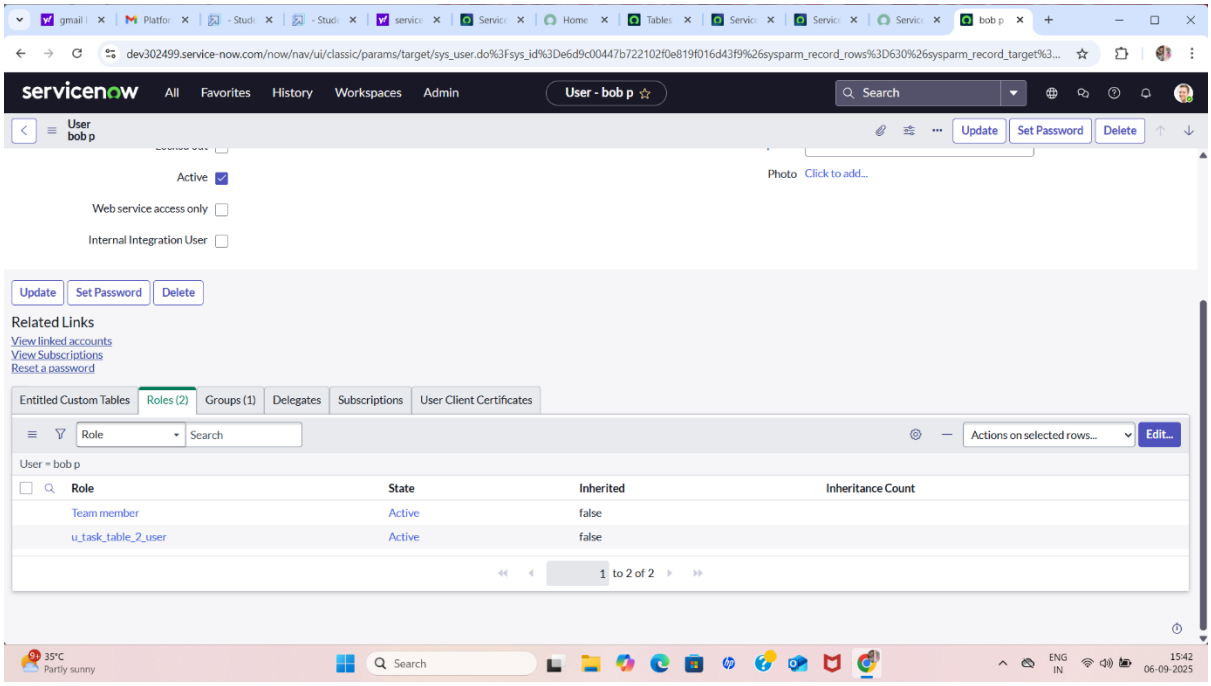
Activity 1: Assign roles to alice user

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

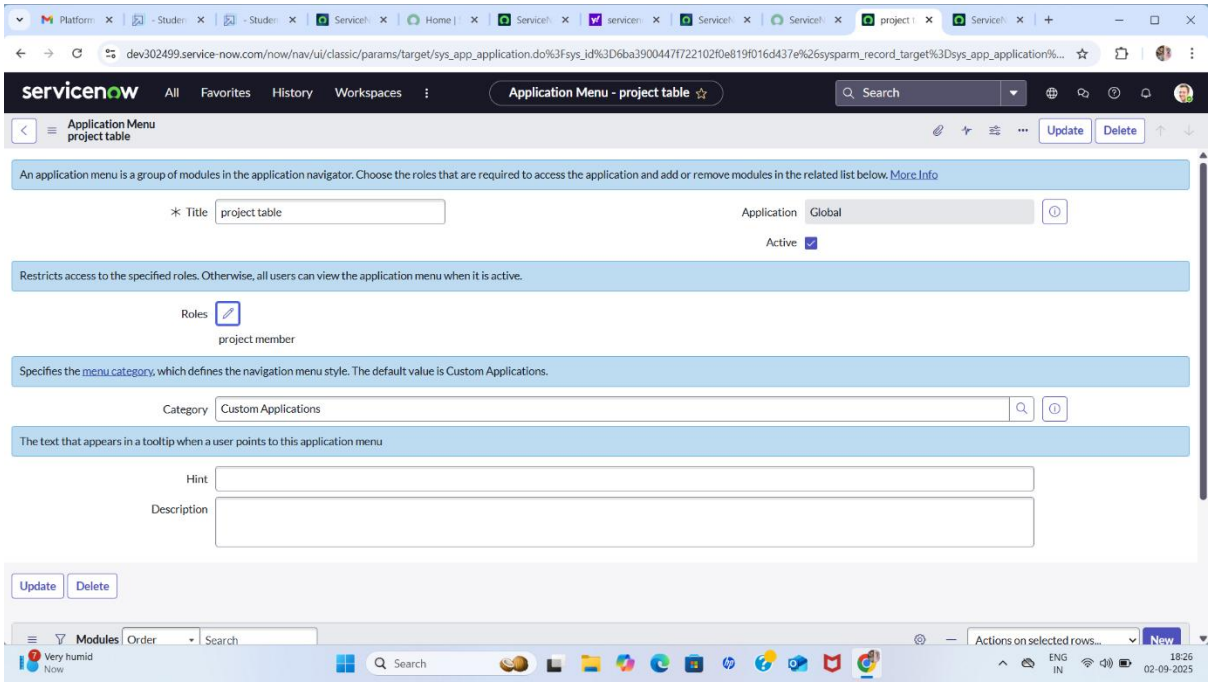
1. Open servicenow.Click on All >> search for user
2.Select tables under system definition
3.Select the bob p user
4.Under team member
5.Click on edit
6.Select team member and give table role and save
7. Click on profile icon Impersonate user to bob
8. We can see the task table2.

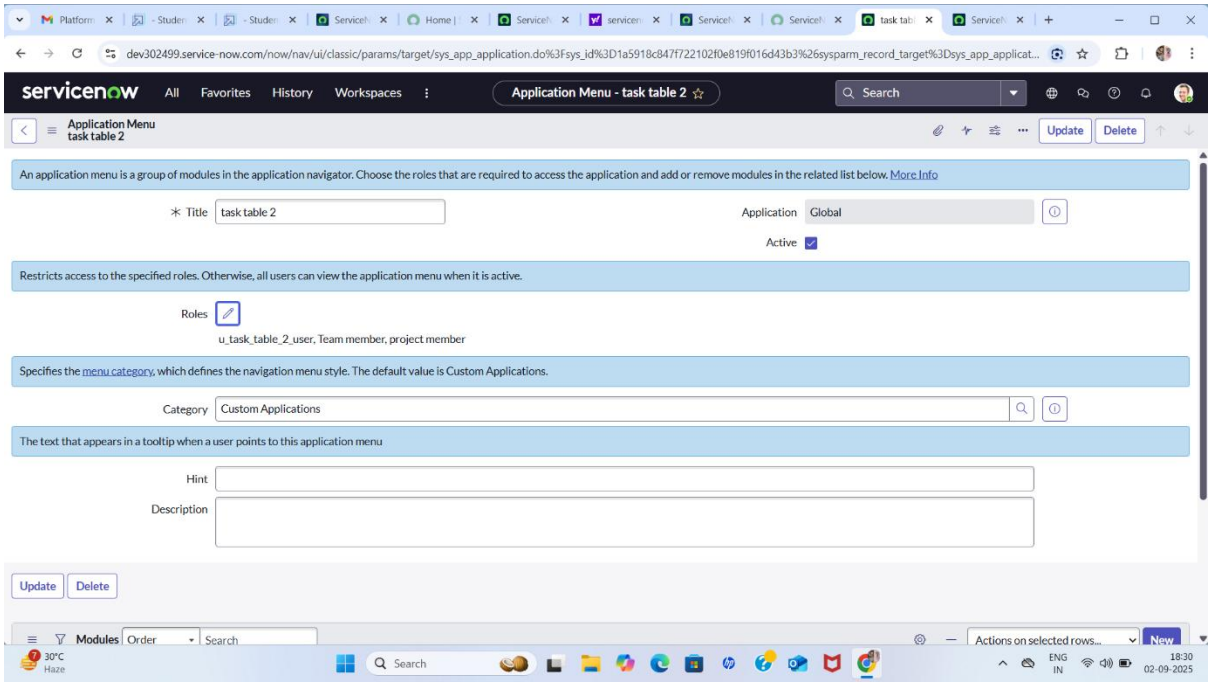


Milestone 7 : Application access

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

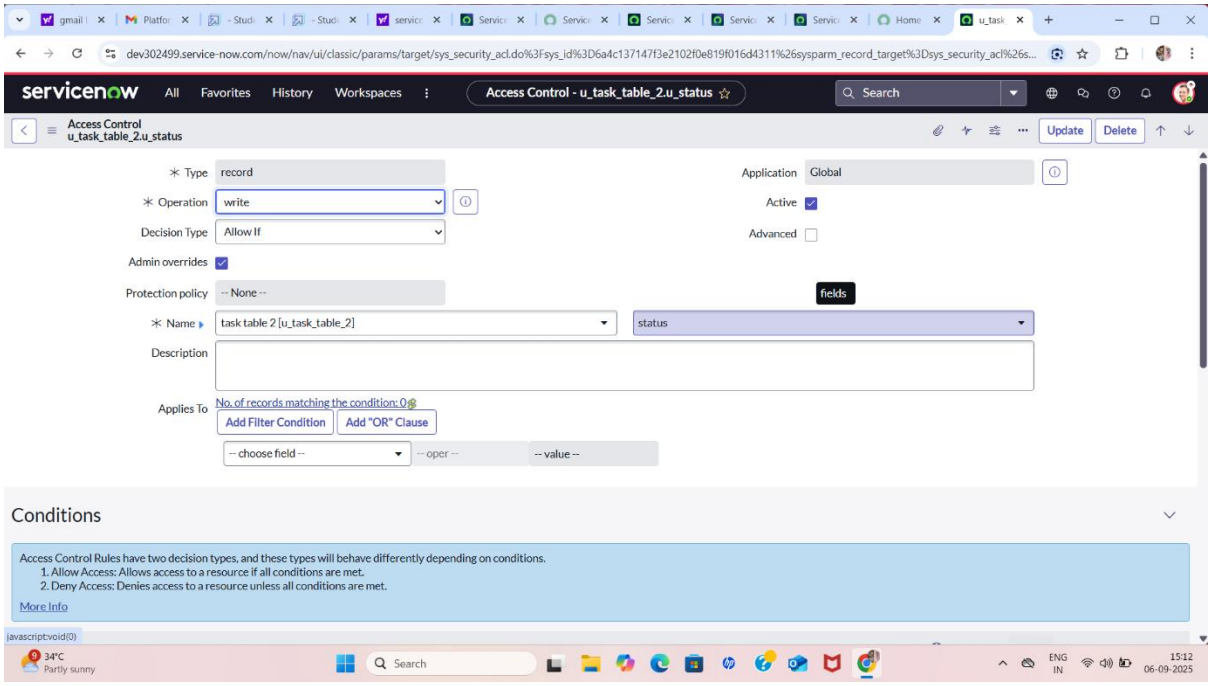




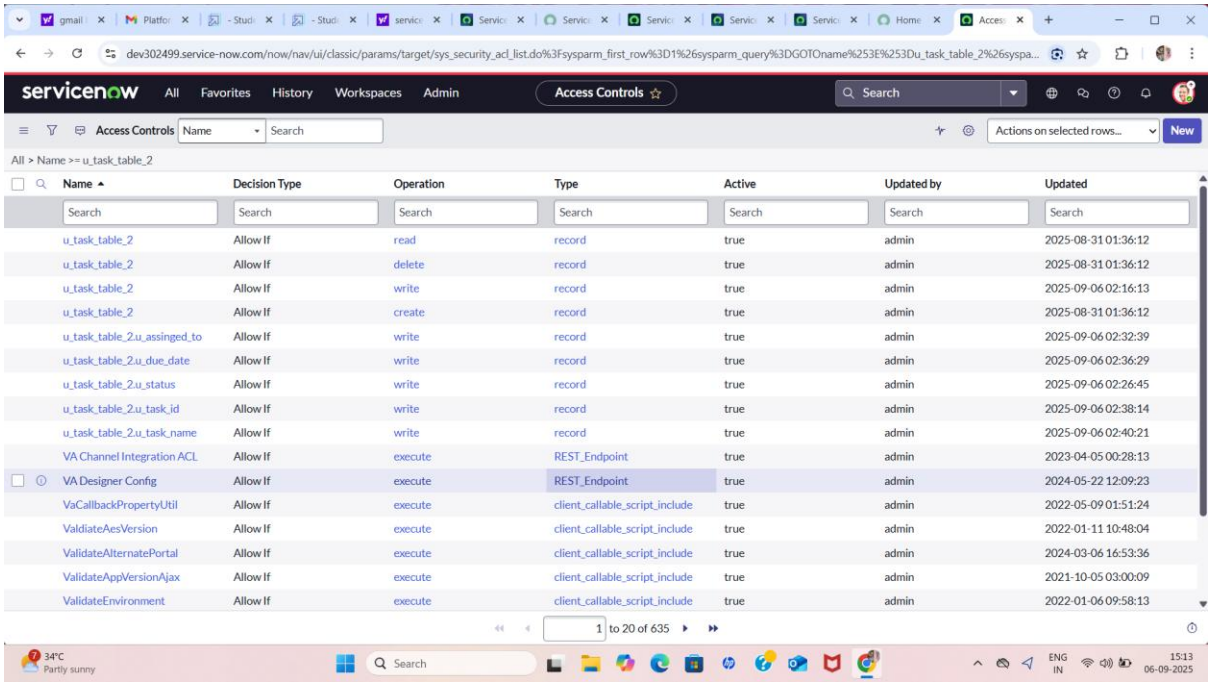
Milestone 8 :Access control list

Activity 1: Create ACL

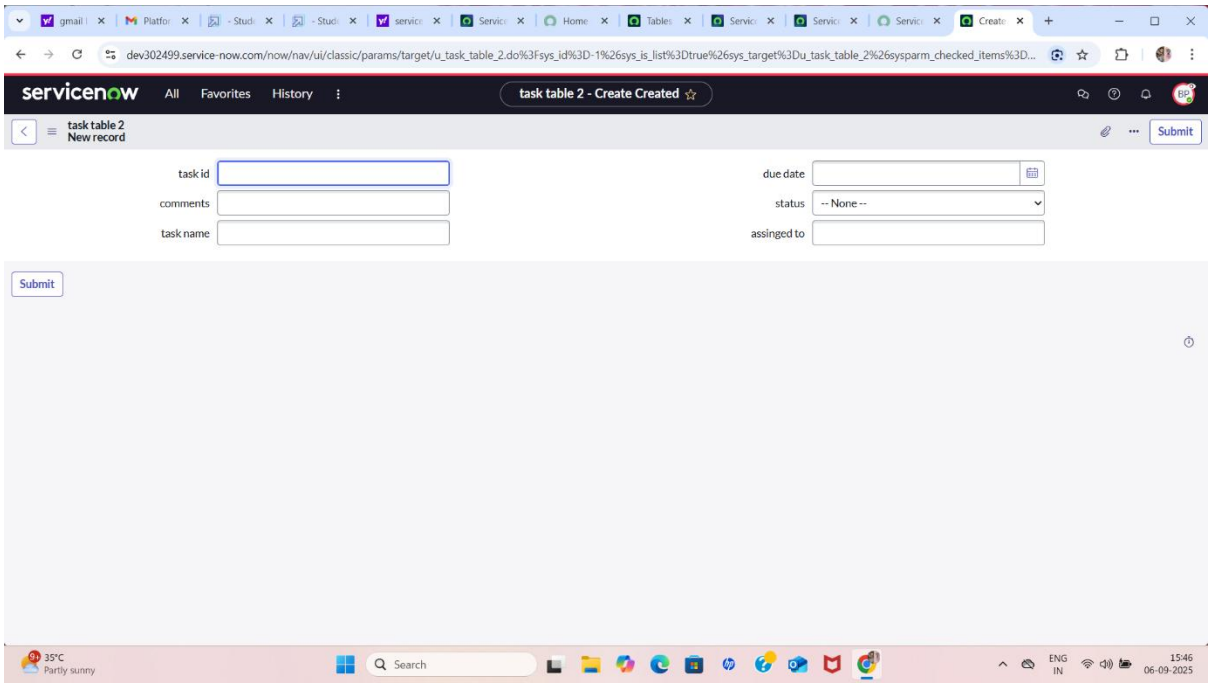
1. Open service now.
2. Click on All >> search for ACL
3. Select Access Control(ACL) under system security
4. Click on elevate role
5. Click on new



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



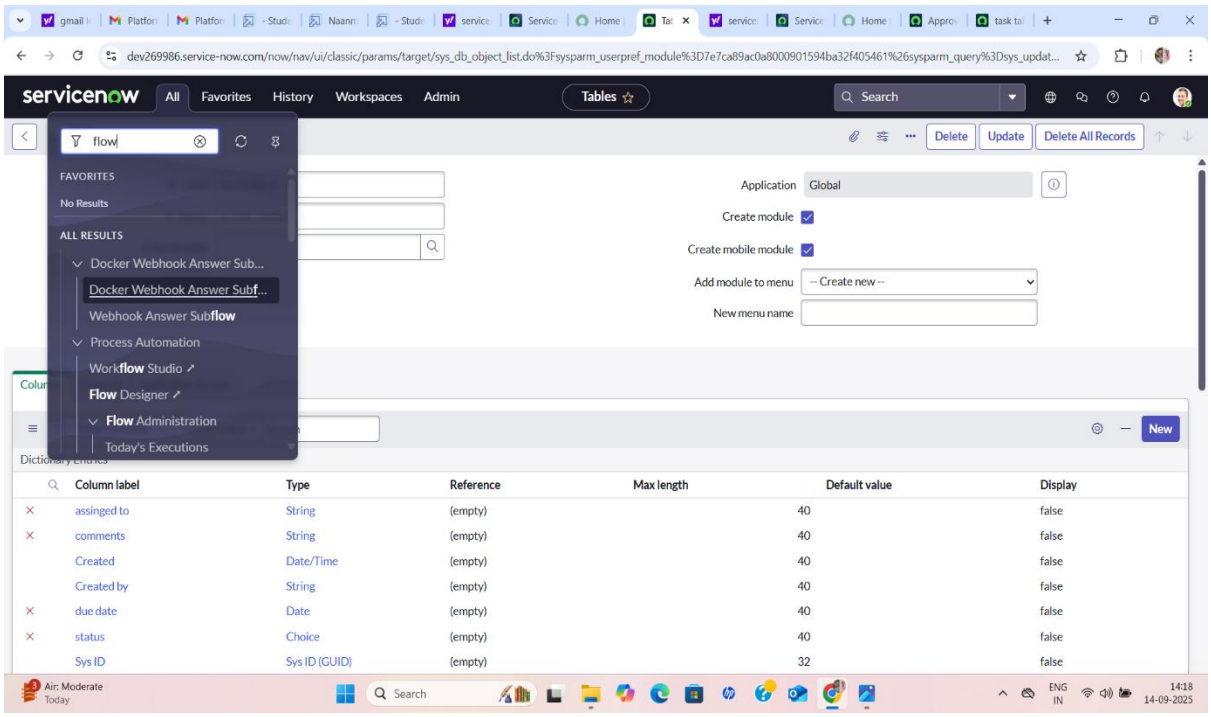
12.Click on profile on top right side
13.Click on impersonate user
14.Select bob user
15.Go to all and select task table2 in the application menu bar
16. Comment and status fields are have the edit access



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
All
Favorites
History
Workspaces
Admin
Tables
Search
flow
FAVORITES
No Results
ALL RESULTS
Docker Webhook Answer Sub...
Docker Webhook Answer Subf...
Webhook Answer Subflow
Process Automation
Workflow Studio
Flow Designer
Flow Administration
Today's Executions
Delete
Update
Delete All Records
Application
Global
Create module
Create mobile module
Add module to menu
-- Create new --
New menu name
New
Column label
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Reference
Max length
Default value
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comments
String
(empty)
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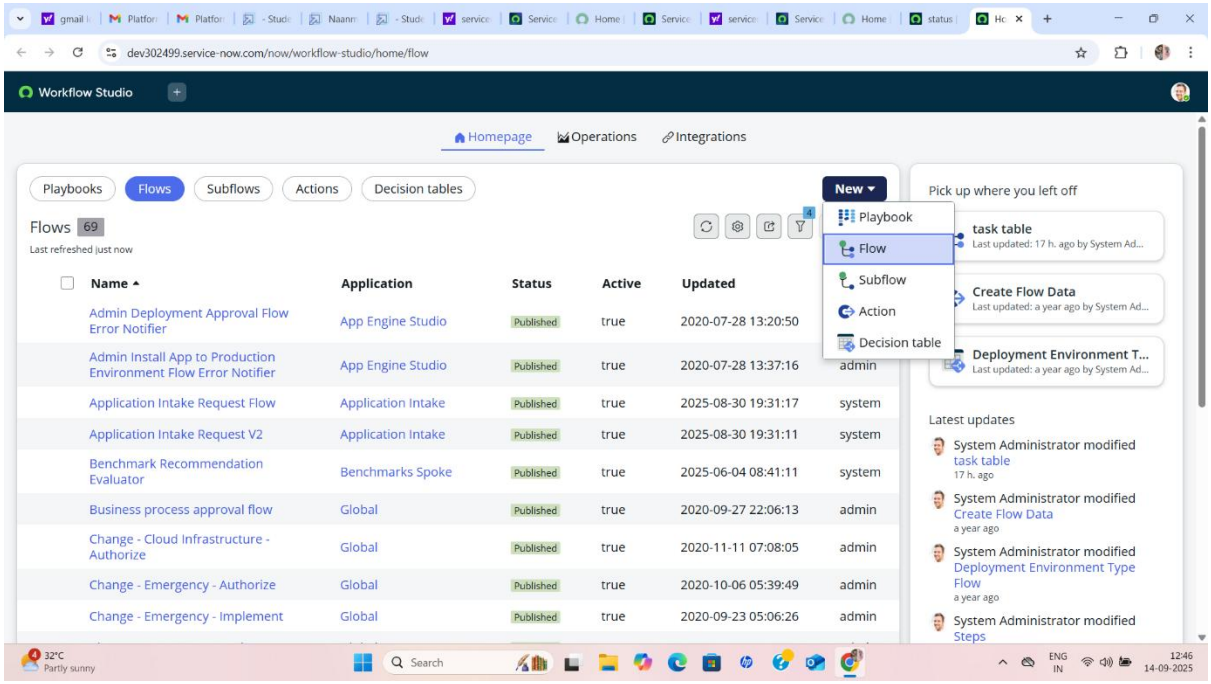
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Workflow Studio
Homepage
Operations
Integrations
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Flows
Subflows
Actions
Decision tables
New
Playbook
Flow
Subflow
Action
Decision table
Flows 69
Last refreshed just now
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Application
Status
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Updated
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system
Benchmark Recommendation Evaluator
Benchmarks Spoke
Published
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system
Business process approval flow
Global
Published
true
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admin
Change - Cloud Infrastructure - Authorize
Global
Published
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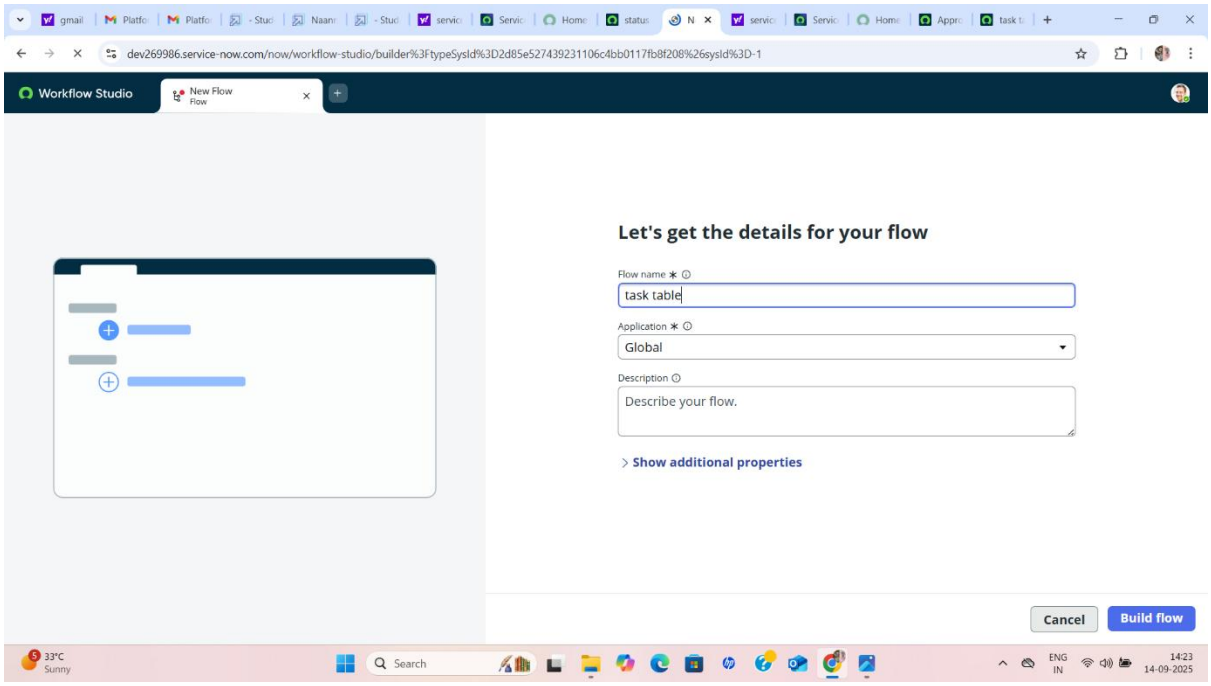
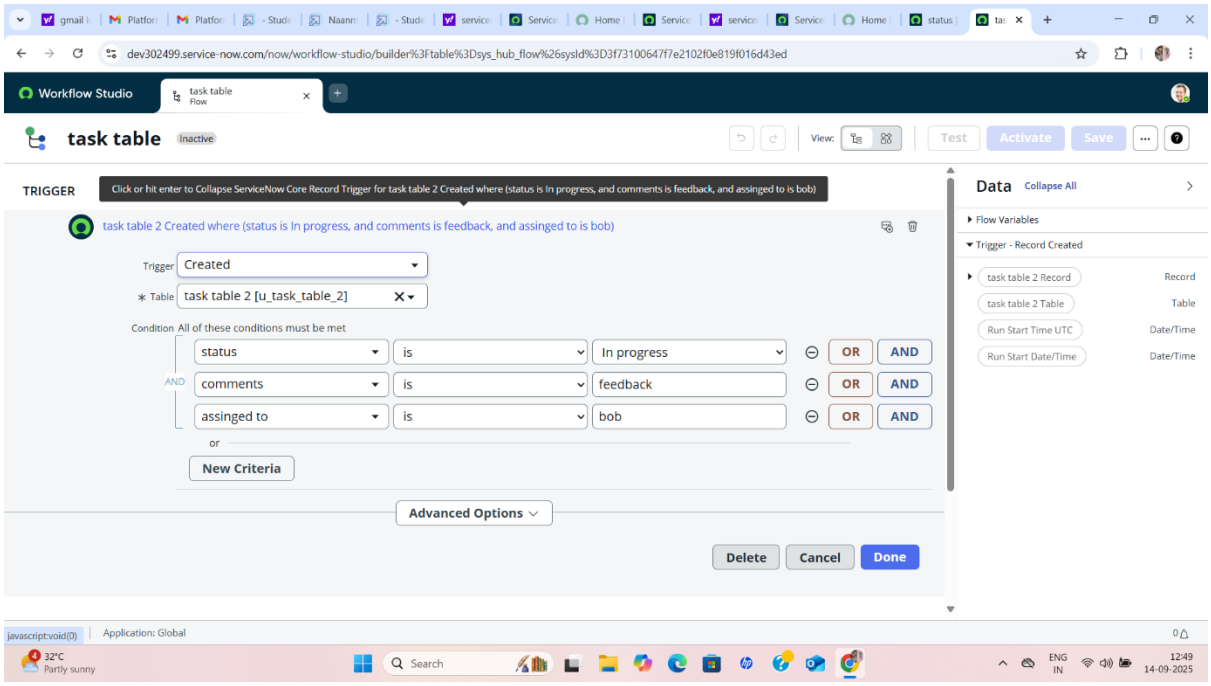
2020-11-11 07:08:05
admin
Change - Emergency - Authorize
Global
Published
true
2020-10-06 05:39:49
admin
Change - Emergency - Implement
Global
Published
true
2020-09-23 05:06:26
admin
Pick up where you left off
task table
Last updated: 17 h. ago by System Ad...
Create Flow Data
Last updated: a year ago by System Ad...
Deployment Environment T...
Last updated: a year ago by System Ad...
Latest updates
System Administrator modified task table
17 h. ago
System Administrator modified Create Flow Data
a year ago
System Administrator modified Deployment Environment Type Flow
a year ago
System Administrator modified Steps



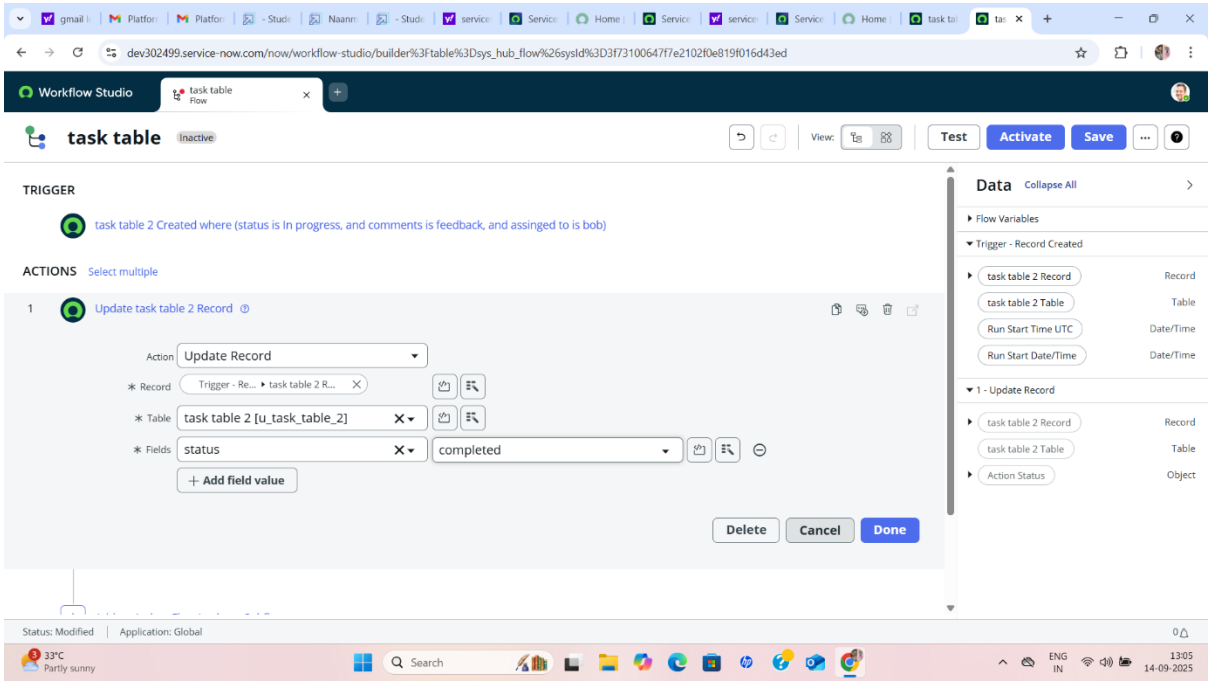
Next step:

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.



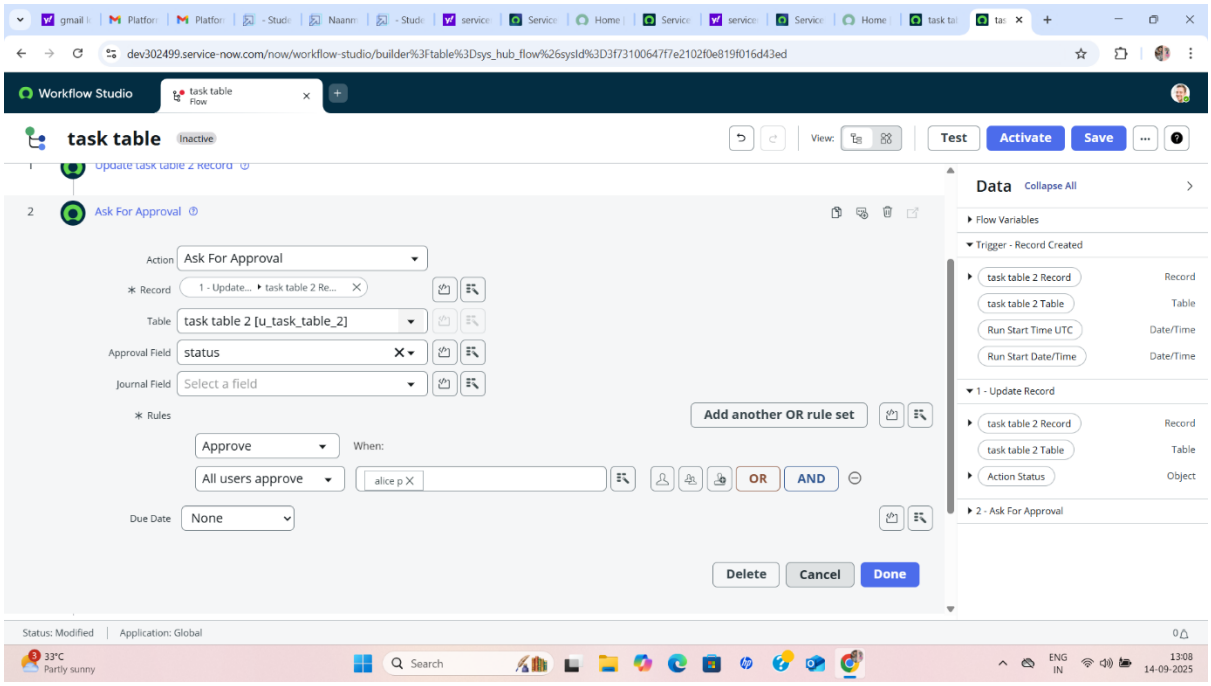
Next step:

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.

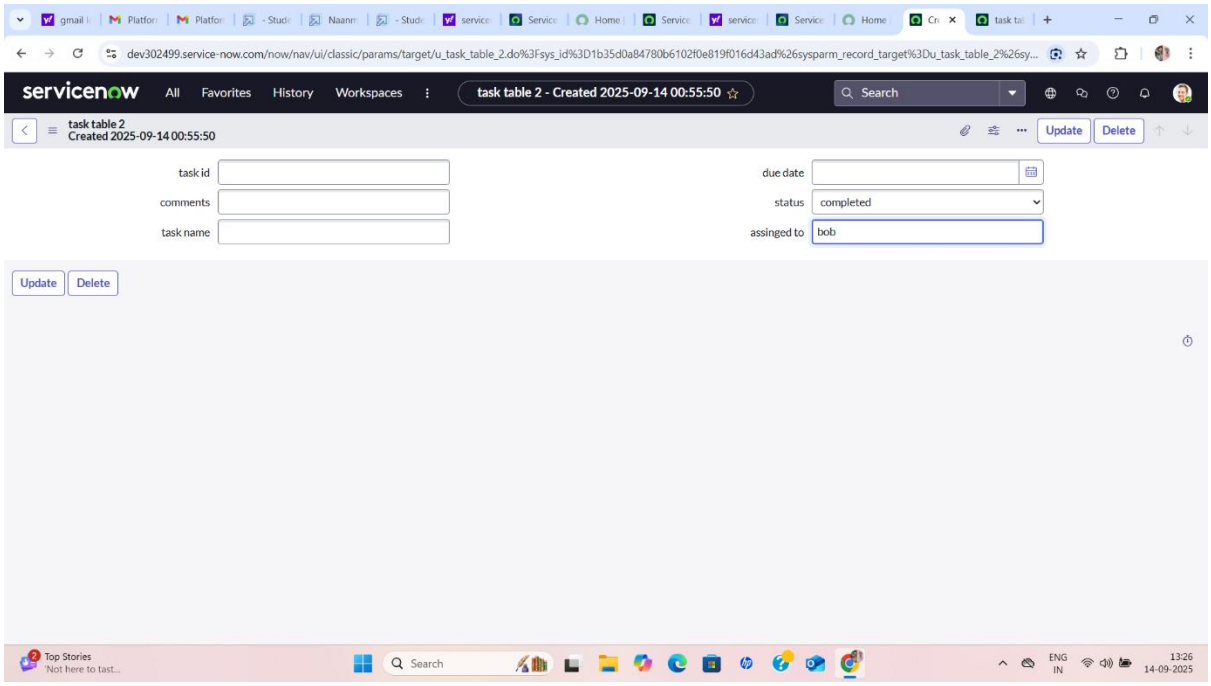


Next step:

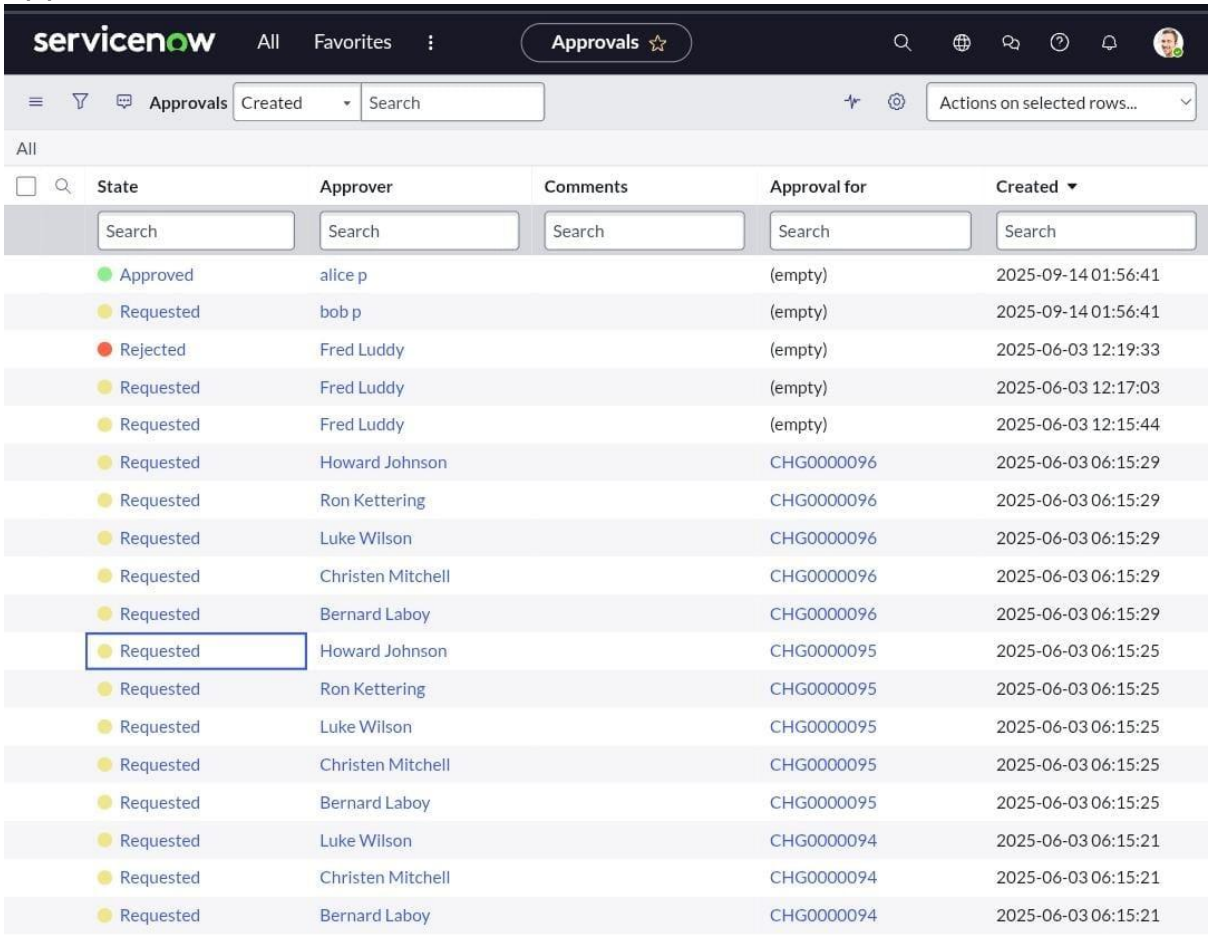
1. Now under Actions.
2. Click on Add an action.
3. Select action in that ,search for “ ask for approval ”.
4. In Record field drag the fields from the data navigation from Right side
5. Table will be auto assigned after that
6. Give the approve field as “ status”
7. Give approver as alice p 8. Click 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



State	Approver	Comments	Approval for	Created
Approved	alice p		(empty)	2025-09-14 01:56:41
Requested	bob p		(empty)	2025-09-14 01:56:41
Rejected	Fred Luddy		(empty)	2025-06-03 12:19:33
Requested	Fred Luddy		(empty)	2025-06-03 12:17:03
Requested	Fred Luddy		(empty)	2025-06-03 12:15:44
Requested	Howard Johnson		CHG0000096	2025-06-03 06:15:29
Requested	Ron Kettering		CHG0000096	2025-06-03 06:15:29
Requested	Luke Wilson		CHG0000096	2025-06-03 06:15:29
Requested	Christen Mitchell		CHG0000096	2025-06-03 06:15:29
Requested	Bernard Laboy		CHG0000096	2025-06-03 06:15:29
Requested	Howard Johnson		CHG0000095	2025-06-03 06:15:25
Requested	Ron Kettering		CHG0000095	2025-06-03 06:15:25
Requested	Luke Wilson		CHG0000095	2025-06-03 06:15:25
Requested	Christen Mitchell		CHG0000095	2025-06-03 06:15:25
Requested	Bernard Laboy		CHG0000095	2025-06-03 06:15:25
Requested	Luke Wilson		CHG0000094	2025-06-03 06:15:21
Requested	Christen Mitchell		CHG0000094	2025-06-03 06:15:21
Requested	Bernard Laboy		CHG0000094	2025-06-03 06:15:21

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.