---------*PROJECT NAME: OPTIMIZING USER,GROUP,AND ROLE MANAGEMENT WITH ACCESS CONTROL AND WORK FLOWS*

TEAM ID: *NM2025TMID15376*

TEAM SIZE: *4*

TEAM LEADER: *MUGESH V*

TEAM MEMBER: *MUTHUKUMARAN K*

TEAM MEMBER: *LOGESH M*

TEAM MEMBER: *ESWARAN R*

Optimizing User, Group, and Role Management with Access Control and Workflows

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:

1.Define User Roles Clearly: Establish distinct roles for Alice (Project Manager) and Bob (Team Member) to ensure clarity in responsibilities and access rights within the project management tool.
2.Implement Access Control Mechanisms: Create a system that restricts Bob's access to project creation and editing features while allowing him to view and update his assigned tasks, thereby preventing unauthorized changes.
3.Streamline Workflow Processes: Develop a structured workflow for task assignment and progress tracking, ensuring that Alice can easily assign tasks to Bob and monitor their completion in a timely manner.

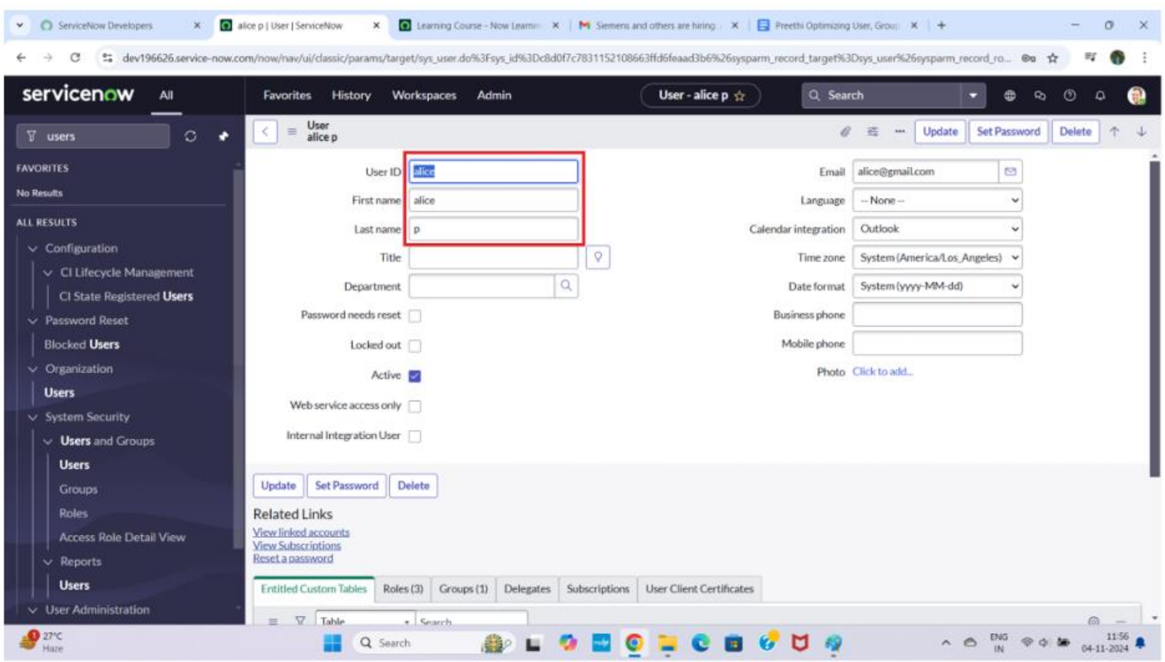
Skills: Users, Groups, Roles, Tables, Access Control List, Flow Designer

ASK INITIATION

Milestone 1 : Users

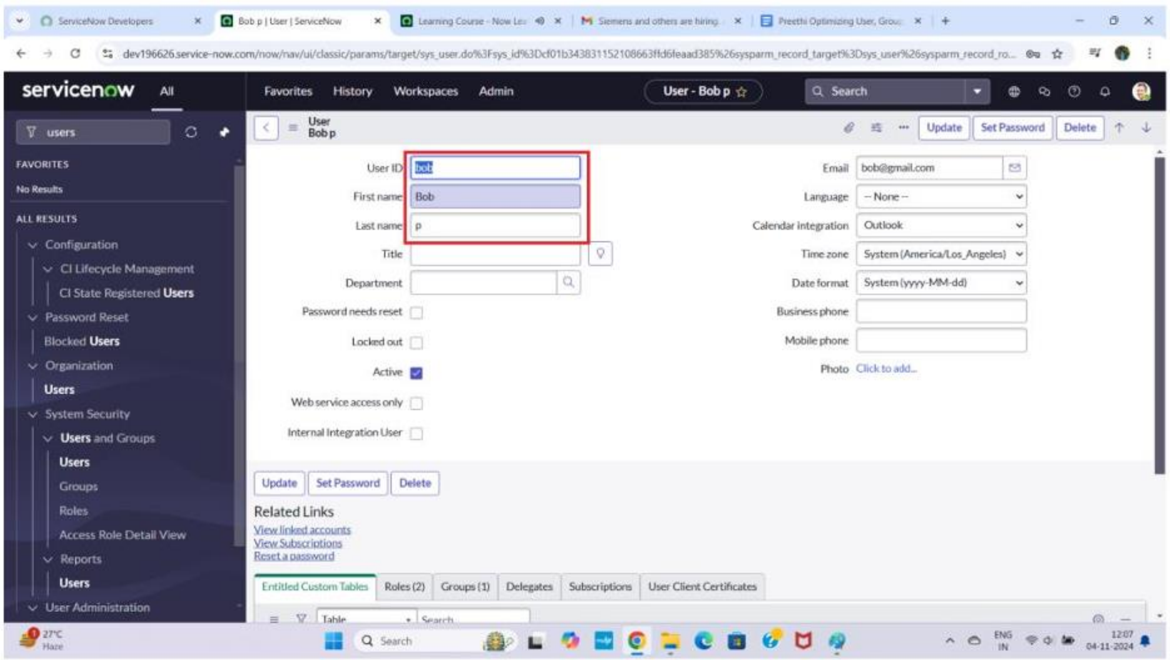
Activity 1: Create Users

1. **Open ServiceNow**
   - Log in with your credentials.
2. **Navigate to Users**
   - Click on **All** in the application navigator.
   - Type **Users** in the search bar.
   - Select **Users** under **System Security**.
3. **Create New User**
   - Click on **New** at the top.
4. **Fill User Details** (example fields you may need to complete):
   - **User ID** – Unique login name (e.g., `jdoe`).
   - **First Name** – Enter the user's first name.
   - **Last Name** – Enter the user's last name.
   - **Email** – Enter a valid email address.
   - **Password** – Set a password (if required).
   - **Roles** – Assign necessary roles (e.g., `itil`, `admin`).
   - **Department/Location** – (Optional) fill based on organization structure.
5. **Submit**
   - Click on **Submit** to save the user record.



6. **Click on New Again**
   - After the first user is created, click **New** again to add another user.

7. **Enter Second User Details**
    - **User ID** – e.g., `asmith`
    - **First Name** – Alice
    - **Last Name** – Smith
    - **Email** – `asmith@example.com`
    - **Password** – Set a password.
    - **Roles** – Assign required roles.
8. **Click on Submit**
    - Save the second user record.

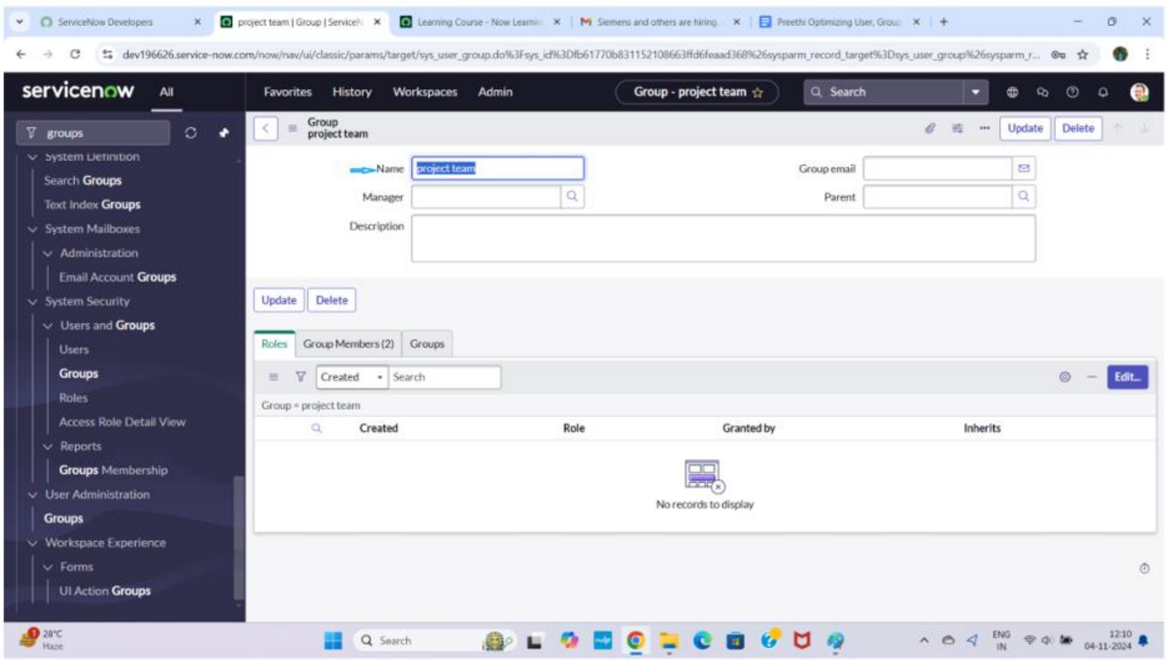


Milestone 2 : Groups

Activity 1: Create Groups

1. **Open ServiceNow**
    - Log in with your ServiceNow credentials.
2. **Navigate to Groups**
    - Click on **All** in the application navigator.
    - Type **Groups** in the search bar.
    - Select **Groups** under **System Security**.
3. **Create New Group**
    - Click on **New** at the top of the page.

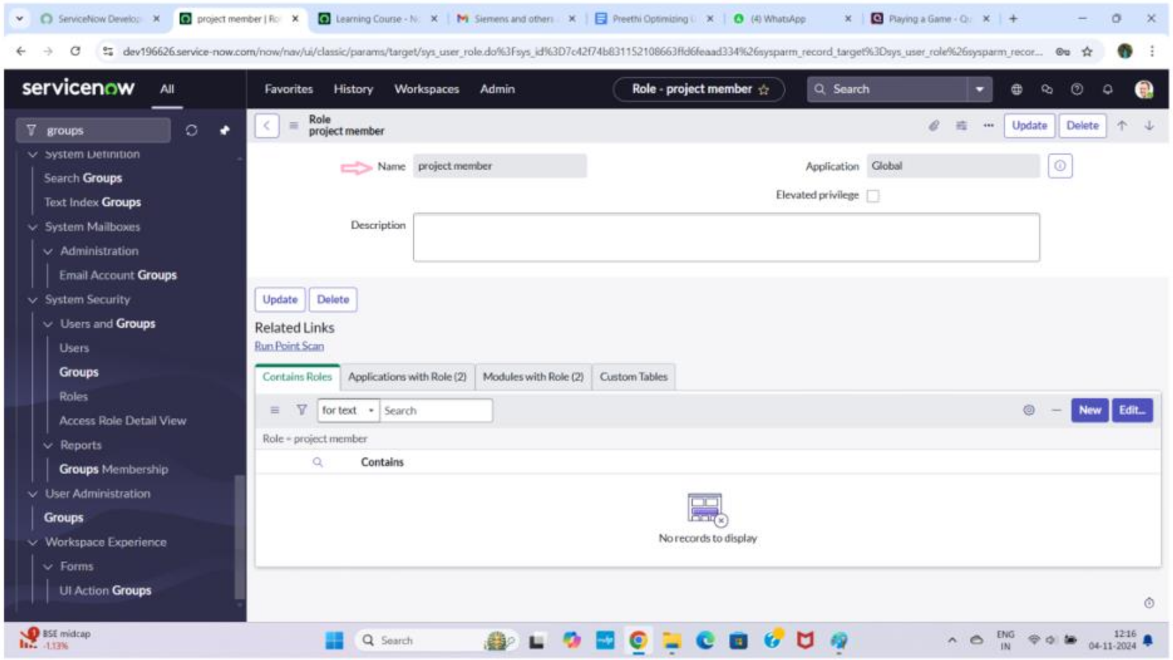
4. **Fill Group Details**
   - **Name** – Enter the group name (e.g., *IT Support*).
   - **Description** – Provide a short description (e.g., *Handles IT issues*).
   - **Manager** – Assign a manager if needed.
   - **Roles** – Add roles that group members will inherit.
   - **Members** – Add users who belong to this group.
5. **Submit**
   - Click on **Submit** to save the new group.



Milestone 3 : Roles

Activity 1: Create roles

1. **Open ServiceNow**
   - Log in with your ServiceNow credentials.
2. **Navigate to Roles**
   - Click on **All** in the application navigator.
   - Type **Roles** in the search bar.
   - Select **Roles** under **System Security**.
3. **Create New Role**
   - Click on **New** at the top of the Roles list.
4. **Fill Role Details**
   - **Name** – Enter the role name (e.g., *incident_manager*).
   - **Description** – Provide a short description (e.g., *Manages incident tickets*).
   - **Other fields** – Fill additional details if required.
5. **Click on Submit**
   - Save the new role record.



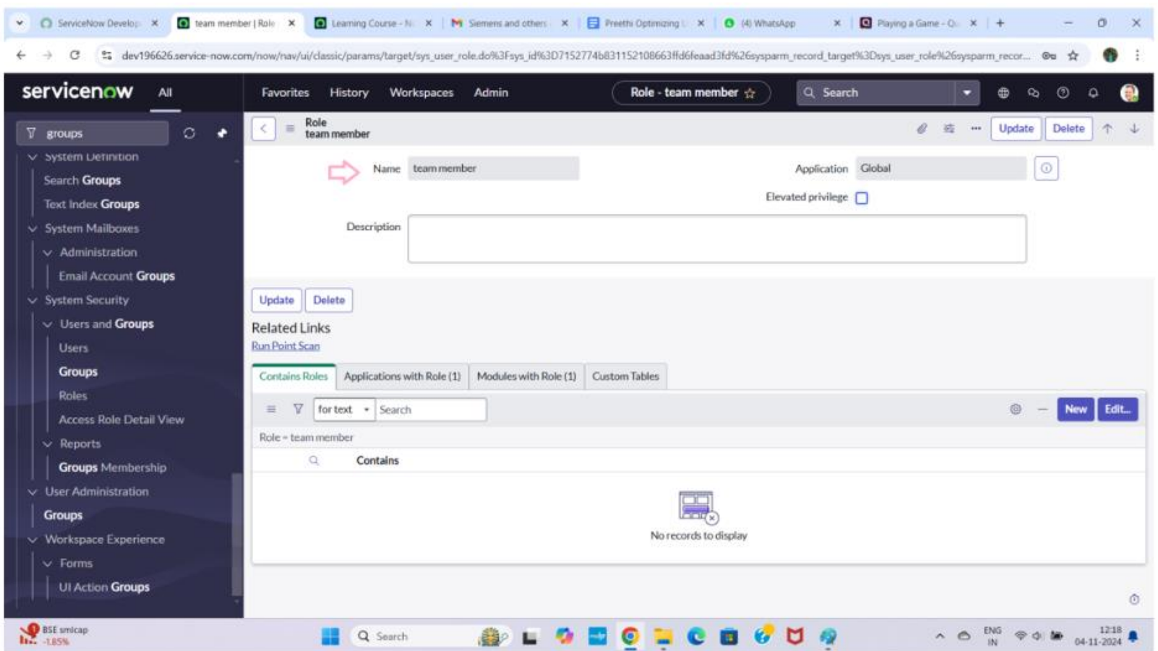
6. **Click on New Again**
    - After creating the first role, click **New** again.
7. **Enter Second Role Details**
    - **Name** – Enter another role name (e.g., *change_approver*).
    - **Description** – Provide a description (e.g., *Approves change requests*).
8. **Click on Submit**
    - Save the second role record.

Milestone 4 : Table

Activity 1: Create Table

1. **Open ServiceNow**
    - Log in with your ServiceNow credentials.
2. **Navigate to Tables**
    - Click on **All** in the application navigator.
    - Search for **Tables**.
    - Select **Tables** under **System Definition**.
3. **Create a New Table**
    - Click on **New** at the top.
4. **Fill Table Details**
    - **Label** – Enter: `Project Table`
    - **Name** – Will auto-populate based on the label.
    - **Application** – Choose the application where the table should be created.
    - **Create Module** – ☐ Check this box.
    - **Create Mobile Module** – ☐ Check this box.
5. **Menu Name**
    - Under **New Menu Name**, enter: `Project Table`.

6. **Define Table Columns**
    - Scroll down to the **Columns** section.
    - Add the required columns, for example:
        - **Project ID** – String
        - **Project Name** – String
        - **Start Date** – Date/Time
        - **End Date** – Date/Time
        - **Project Manager** – Reference (User table)
        - **Status** – Choice (Active, Completed, On Hold)
7. **Save Table**
    - Once all details are filled, click on **Submit**.



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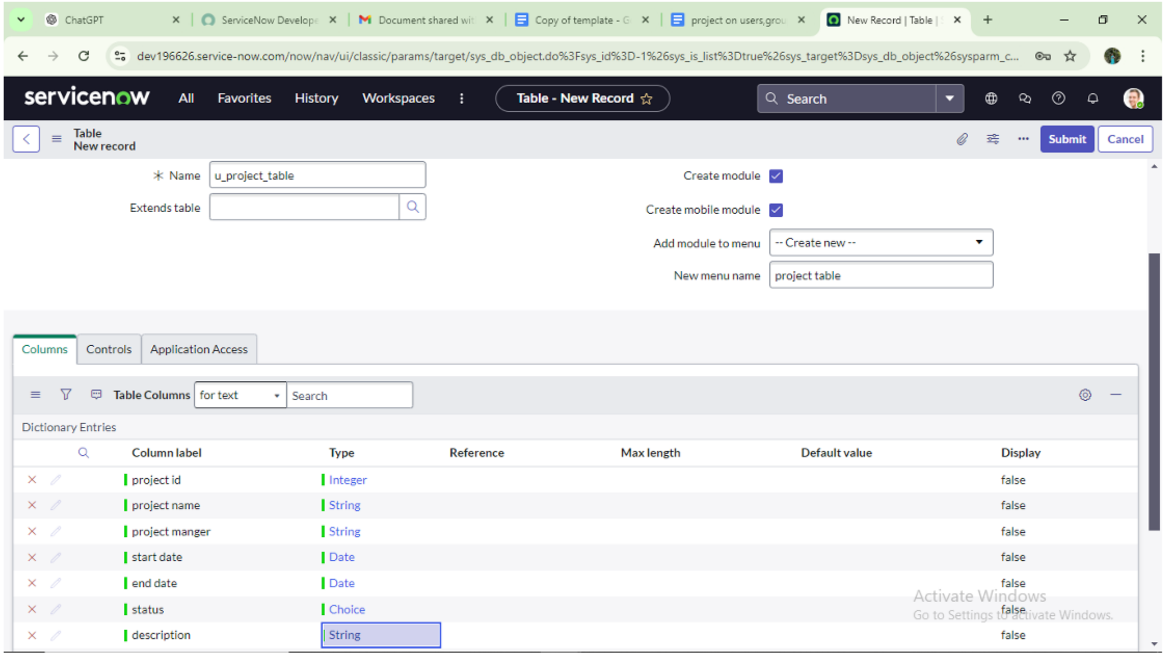
8**. Click on Submit**

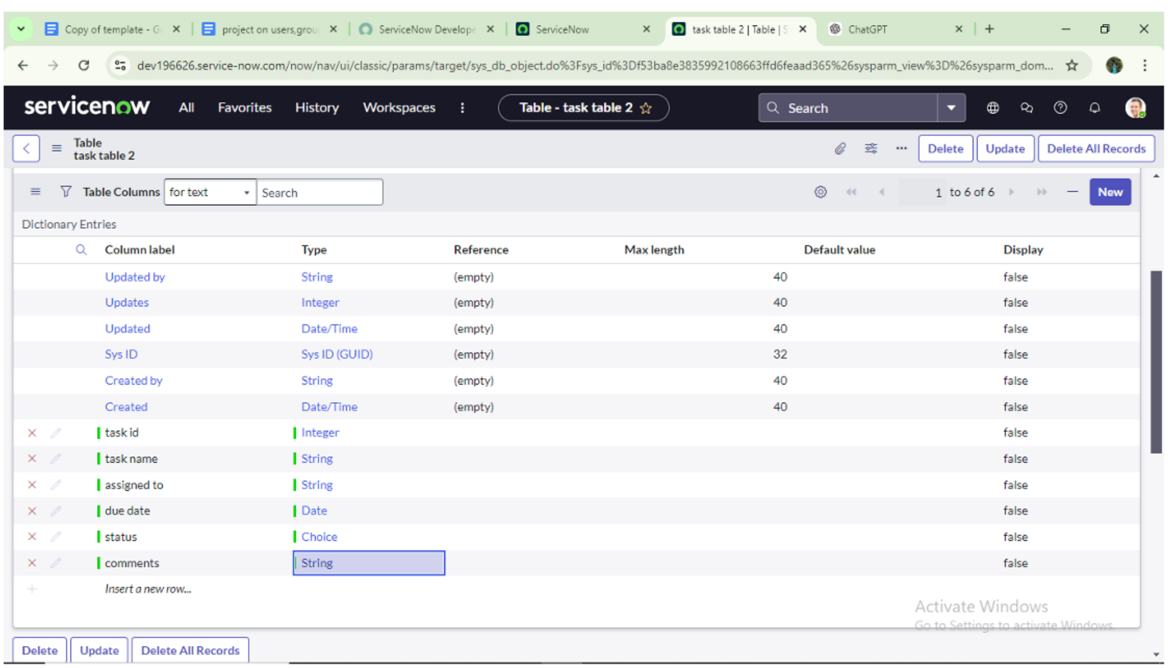
- Save the new table by clicking **Submit**.



9. **Click on New Again**
   - After creating the first table, click **New** to create another one.
   - **Label** – Enter: `Task Table 2`
   - **Check Boxes** – Select **Create Module** and **Create Mobile Module**.
   - **Menu Name** – Enter: `Task Table 2`.

10. **Click on Submit**

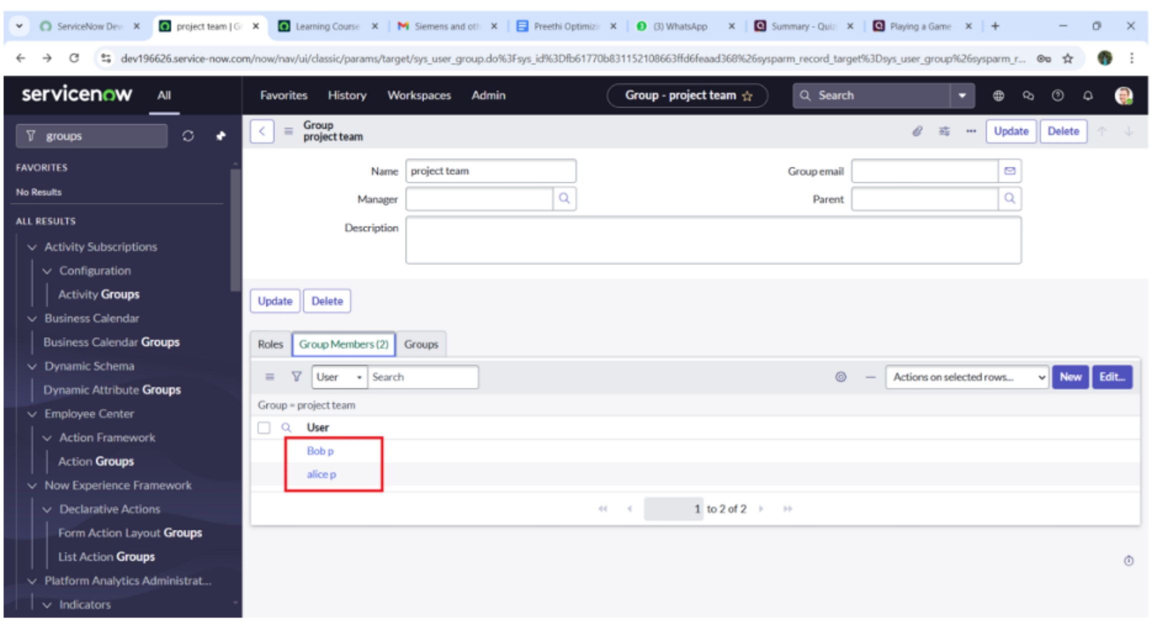
- Save the new table by clicking **Submit**.



Milestone 5 : Assign users to groups

Activity 1: Assign users to project team group

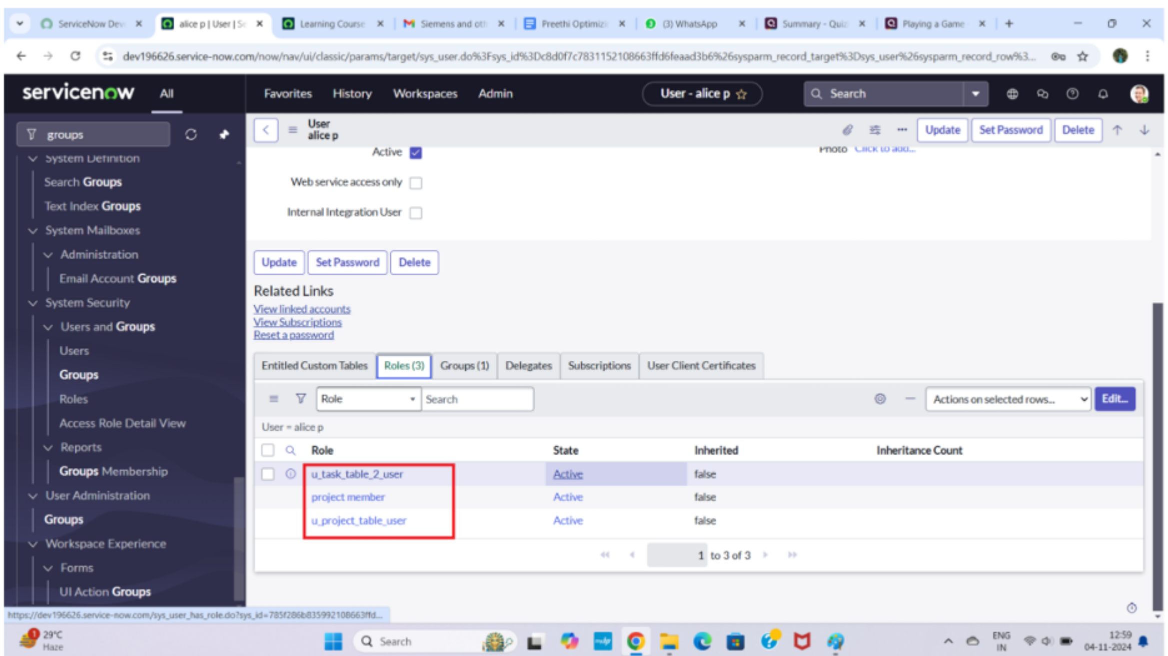
1. **Open ServiceNow**
   - Log in with your ServiceNow credentials.
2. **Navigate to Groups**
   - Click on **All** in the application navigator.
   - Search for **Groups**.
   - Select **Groups** under **System Security**.
3. **Select the Group**
   - From the Groups list, locate and select **Project Team Group**.
4. **Open Group Members**
   - Scroll down to the **Group Members** related list.
5. **Click on Edit**
   - In the **Group Members** section, click **Edit**.
6. **Add Members**
   - In the available users list, search for **Alice P** and **Bob P**.
   - Move them to the **Selected** list.
7. **Save Changes**
   - Click **Save** to add the users to the group.



Milestone 6 : Assign roles to users

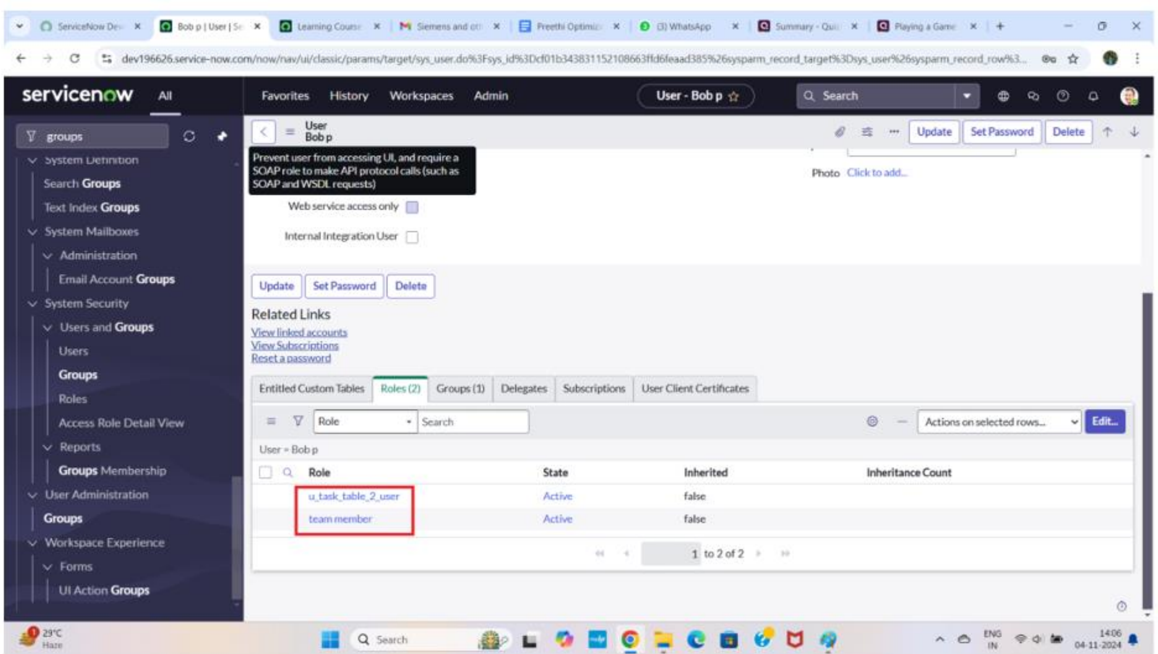
Activity 1: Assign roles to alice user

1. **Open ServiceNow**
   - Log in with your ServiceNow credentials.
   - Click on **All** in the application navigator.
   - Search for **User**.
2. **Navigate to Users**
   - Select **Users** under **System Definition**.
3. **Select the User**
   - From the list, open the **Project Manager** user record.
4. **Scroll to Roles Section**
   - Locate the **Roles** related list under the Project Manager user form.
5. **Click on Edit**
   - In the Roles related list, click **Edit**.
6. **Assign Role: Project Member**
   - From the available roles, select **Project Member**.
   - Move it to the **Selected Roles** list and **Save**.
7. **Click Edit Again**
   - Re-open the Roles editor.
   - Add the following roles:
     - **u_project_table**
     - **u_task_table**
8. **Save and Update**
   - Click **Save** to assign the roles.
   - Then click **Update** on the user form to finalize the changes.



Activity 2: Assign roles to bob user

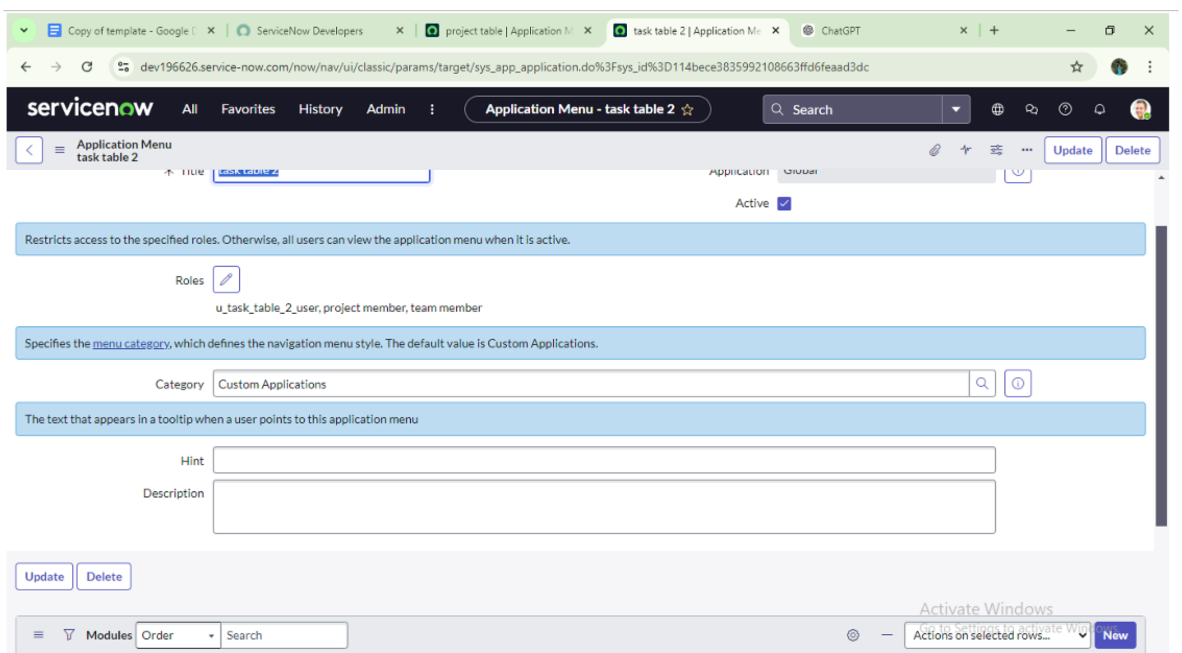
1. **Open ServiceNow**
   - Log in with your ServiceNow credentials.
   - Click on **All** in the application navigator.
   - Search for **User**.
2. **Navigate to Users**
   - Select **Users** under **System Definition**.
3. **Select the User**
   - From the list, open the **Bob P** user record.
4. **Go to Roles Section**
   - Scroll down to the **Roles** related list (or the **Team Member** section if configured).
5. **Click on Edit**
   - Click **Edit** to modify the assigned roles.
6. **Assign Role**
   - Select the **Team Member** role.
   - Also assign the **Table Role** related to `Task Table 2`.
   - Click **Save**.
7. **Impersonate User**
   - Click on your **Profile Icon** (top-right corner).
   - Select **Impersonate User**.
   - Choose **Bob P**.
8. **Verify Access**
   - As Bob P, check the application navigator.
   - You should now see access to **Task Table 2**.



Milestone 7 : Application access

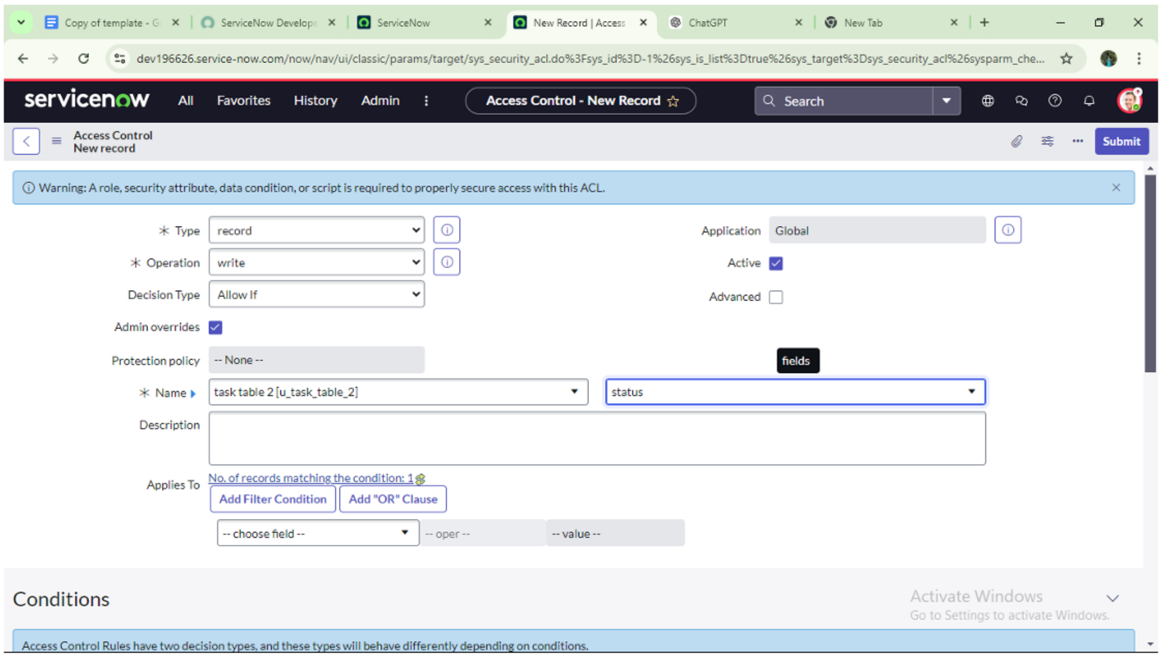
Activity 1: Assign table access to application

1. **Automatic Application Creation**
   - When you **create a new table** in ServiceNow, an **Application** and **Module** for that table are created automatically.
   - Example: Creating `Project Table` generates a **Project Table Application** and module in the navigator.
2. **Locate the Project Table Application**
   - In the **Application Navigator**, search for **Project Table Application**.
3. **Edit Module**
   - Right-click on the **Project Table Module**.
   - Select **Edit Module**.
4. **Assign Roles**
   - In the module form, scroll to the **Roles** field.
   - Add **Project Member** role.
   - Save/Update the module.
5. **Locate Task Table 2 Application**
   - In the **Application Navigator**, search for **Task Table 2 Application**.
   - Open the module related to Task Table 2.
6. **Assign Multiple Roles**
   - Edit the module.
   - In the **Roles** field, add both:
     - **Project Member** role
     - **Team Member** role
   - Save/Update the module.



Milestone 8 :Access control list

1. **Open ServiceNow**
   - Log in with your ServiceNow credentials.
2. **Navigate to ACLs**
   - Click on **All** in the application navigator.
   - Search for **ACL**.
   - Select **Access Control (ACL)** under **System Security**.
3. **Elevate Role**
   - Before creating or modifying ACLs, you must have the **security_admin** role.
   - Click on your **profile icon** → **Elevate Roles**.
   - Select **security_admin** and click **OK**.
4. **Create New ACL**
   - Click on **New** to create a new Access Control rule.



5. **Fill ACL Details**
   - In the ACL form, enter:
     - **Type** – Choose `record`.
     - **Operation** – Select `Read`, `Write`, `Create`, or `Delete`.
     - **Name** – Choose the table (e.g., `Task Table`).

6. **Assign Roles**
   - Scroll down to the **Requires Role** section.
   - Double-click on **Insert a new row**.
   - Add the role **Team Member**.

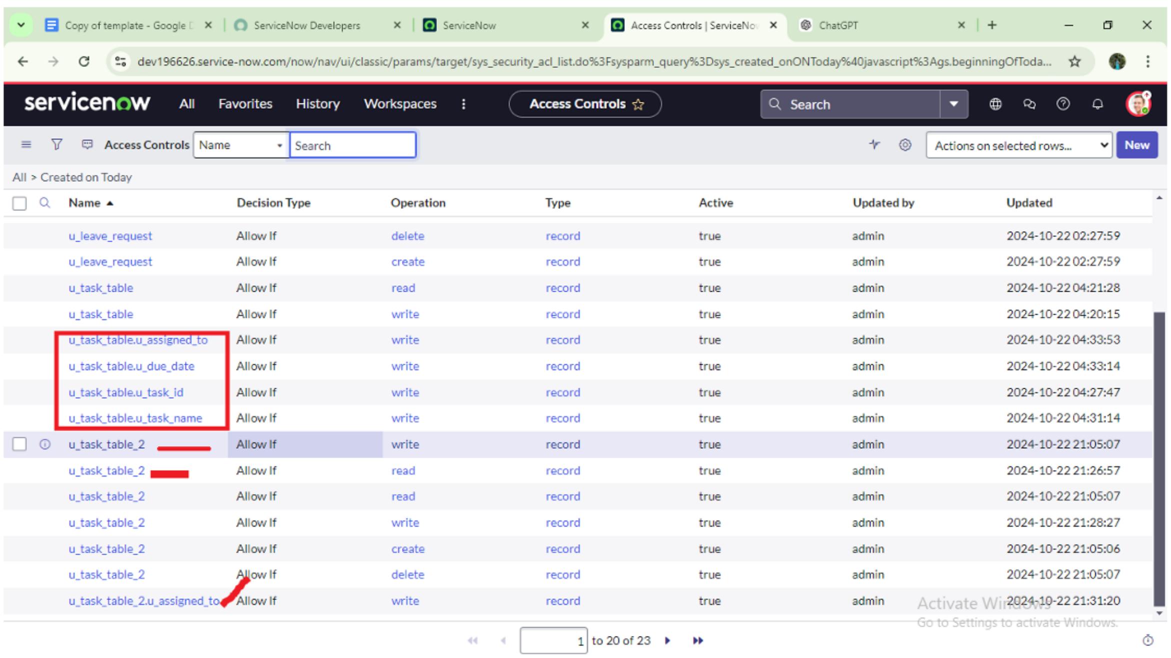
7. **Save ACL**

- Click **Submit**.

Repeat – Create Four ACLs for Task Table

Create 4 separate ACLs for the **Task Table**, each with **Team Member** role:

1. **Read ACL** – Task Table (Team Member can read records).
2. **Write ACL** – Task Table (Team Member can update records).
3. **Create ACL** – Task Table (Team Member can create records).
4. **Delete ACL** – Task Table (Team Member can delete records).



12. **Click on Profile (Top-Right Corner)**

- In ServiceNow, click your profile icon at the top-right of the screen.

13. **Click on Impersonate User**

- From the dropdown, select **Impersonate User**.

14. **Select Bob User**

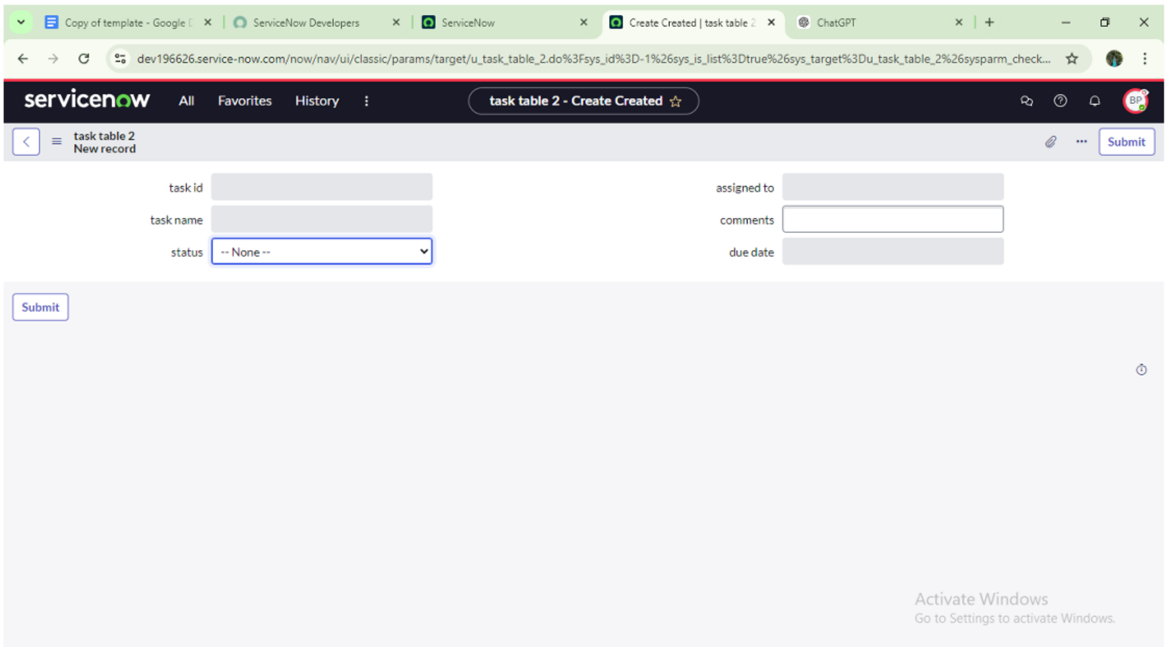
- In the impersonation dialog, choose **Bob P** (Team Member).
- ServiceNow will switch the session to Bob's access.

15. **Navigate to Task Table 2**

- Click on **All** in the application navigator.
- Search for **Task Table 2**.
- Open the application module created for Task Table 2.

16. **Verify Field Access**

- Open a record inside **Task Table 2**.
- Check the **Comment** field → Bob should have **Edit** access.
- Check the **Status** field → Bob should also have **Edit** access.

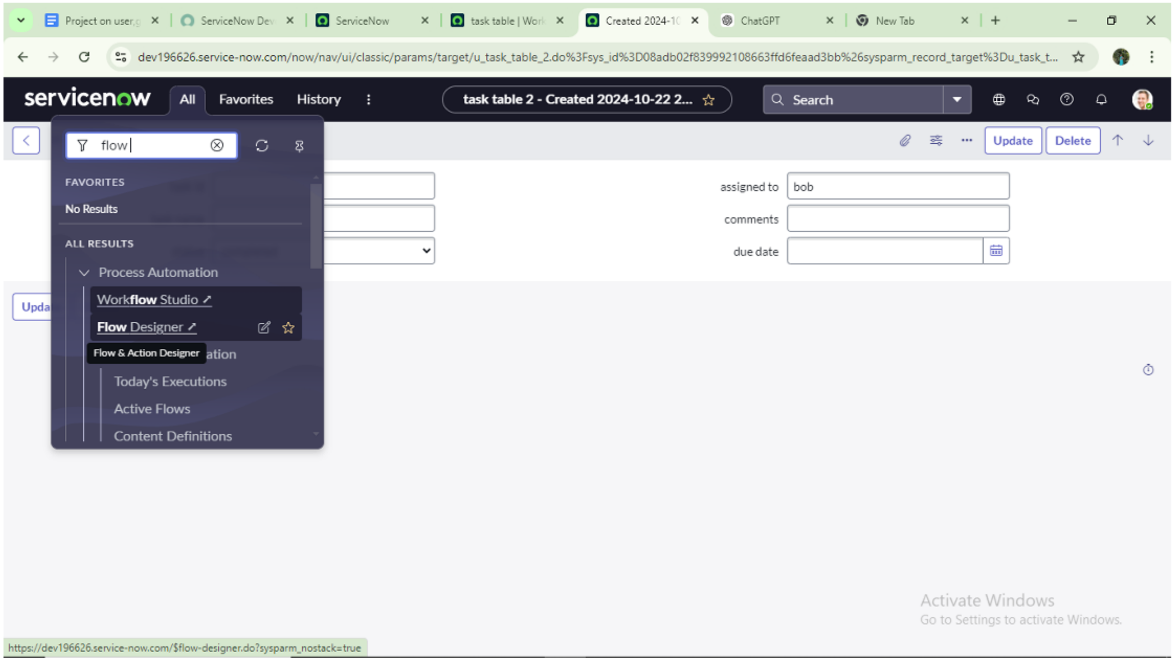


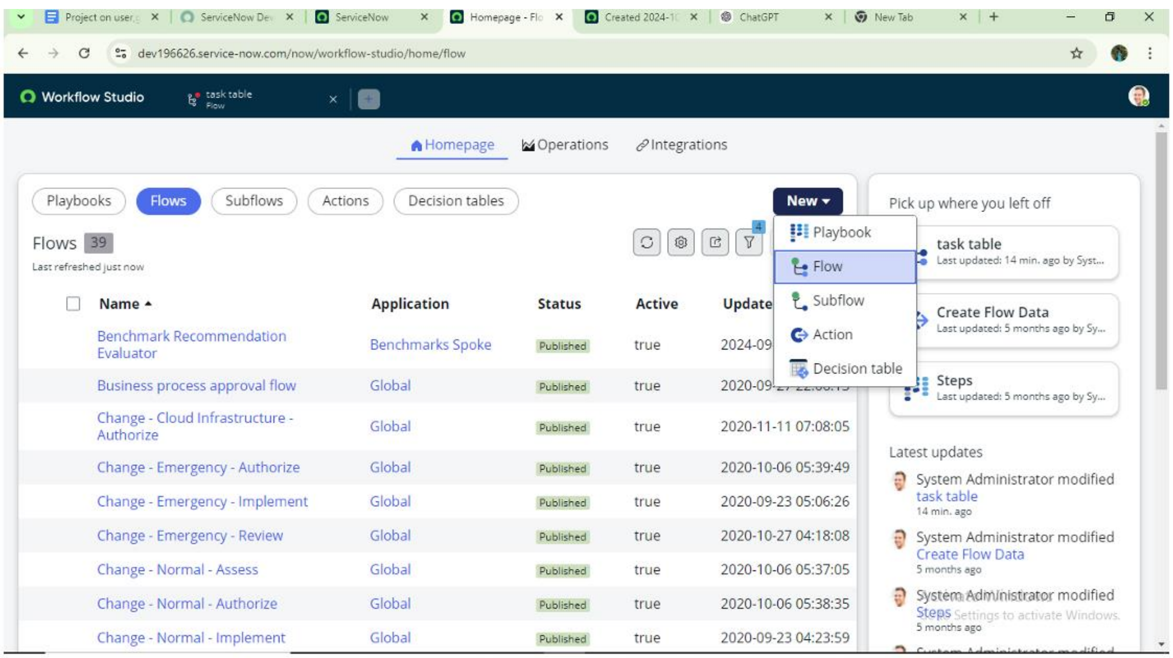
Milestone 9: Flow

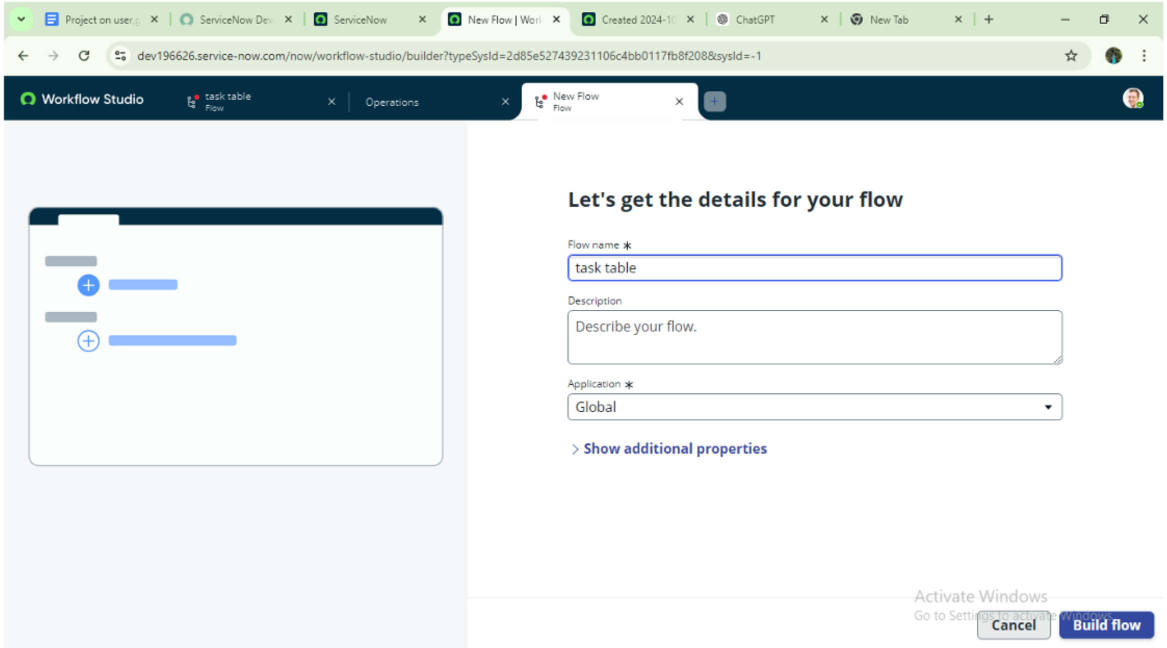
Activity 1: Create a Flow to Assign operations ticket to group

1. **Open ServiceNow**
   - Log in with your ServiceNow credentials.
2. **Navigate to Flow Designer**
   - Click on **All** in the application navigator.
   - Search for **Flow Designer**.
3. **Open Flow Designer**
   - Under **Process Automation**, click on **Flow Designer**.
4. **Create a New Flow**
   - Once Flow Designer opens, click **New**.
   - Select **Flow** from the options.
5. **Fill Flow Properties**
   - **Flow Name** – Enter: `Task Table`.
   - **Application** – Select **Global**.
6. **Click Submit / Done**
   - Confirm the properties and continue.

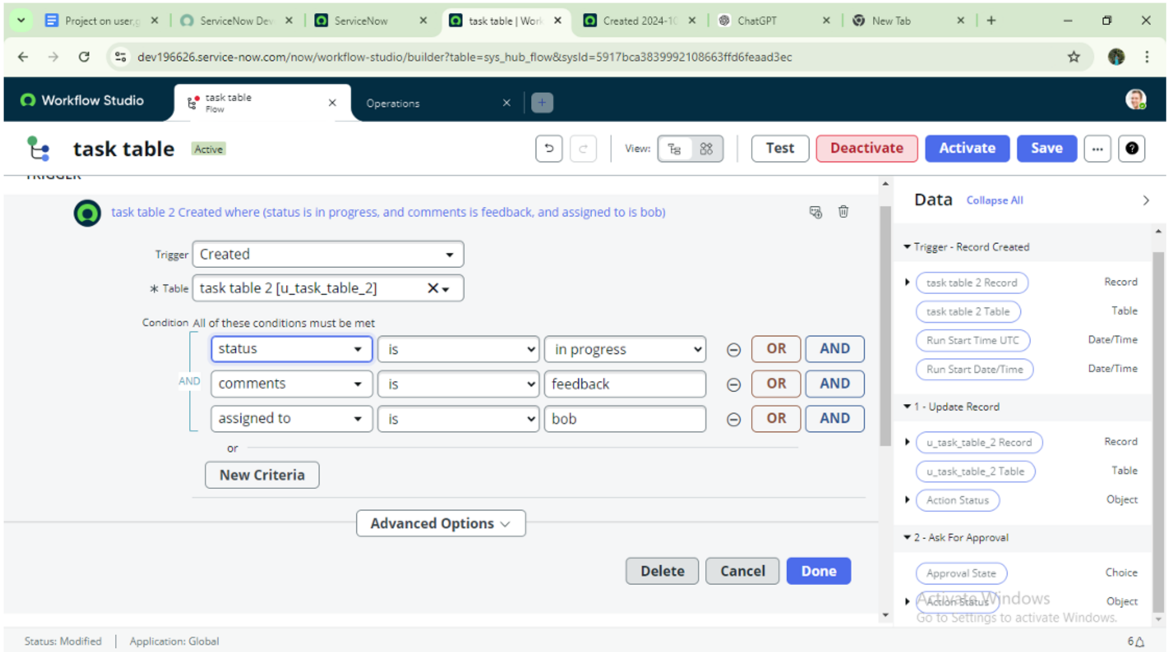
7. **Build the Flow**
   - Click on **Build Flow** to start defining triggers, actions, and logic for the flow.



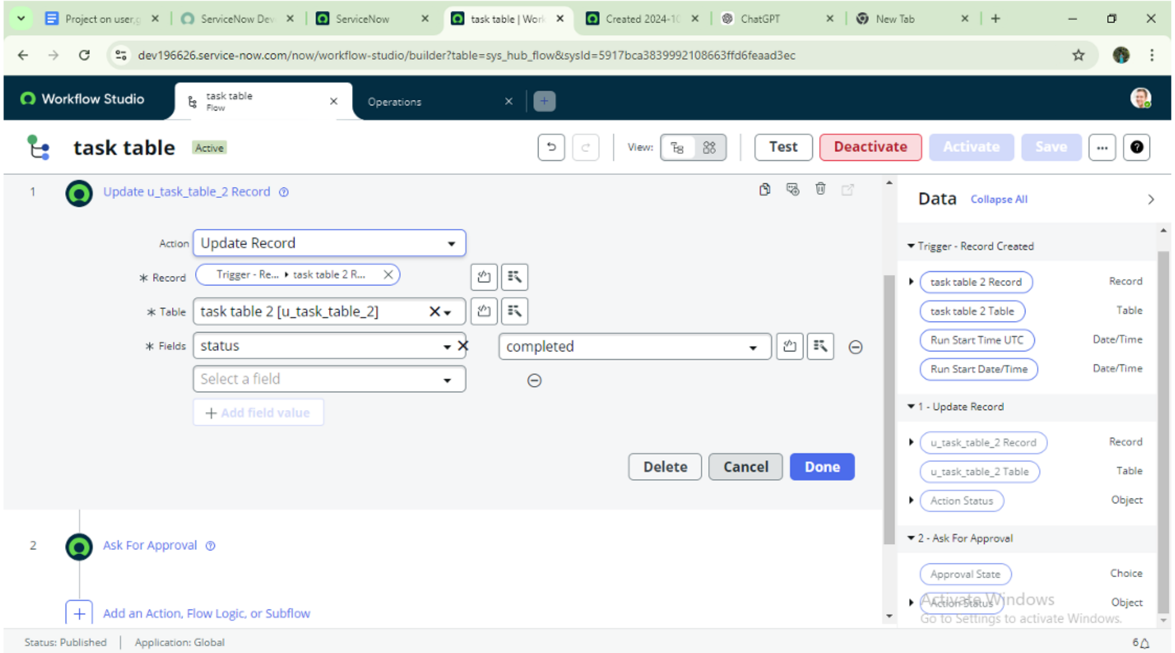




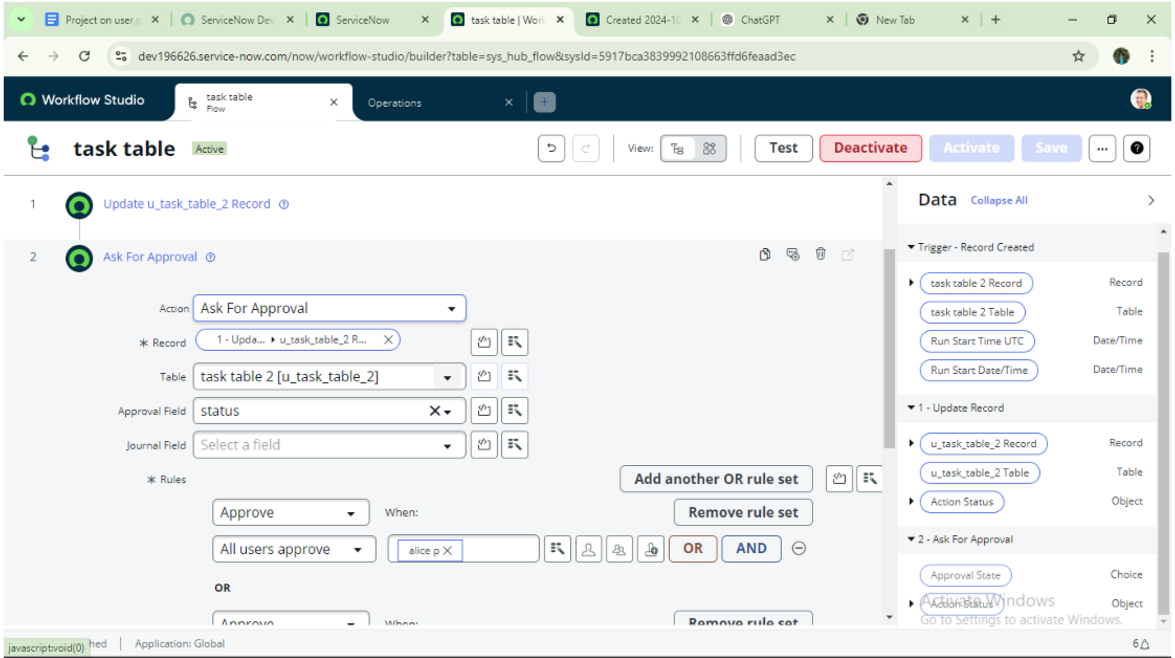
1. **Click on Add a Trigger**
   - Inside Flow Designer, click the **+ Add a Trigger** button.
2. **Select Trigger Type**
   - In the search bar, type **Create Record**.
   - Select **Created Record** as the trigger.
3. **Choose Table**
   - In the table field, select **Task Table**.
4. **Set Conditions**
   - Add the following conditions for the trigger:
     - **Field:** Status → **Operator:** is → **Value:** In Progress
     - **Field:** Comments → **Operator:** is → **Value:** Feedback
     - **Field:** Assigned To → **Operator:** is → **Value:** Bob
5. **Save the Trigger**
   - Click on **Done** to save the trigger configuration.



1. **Click on Add an Action**
   - In the Flow Designer canvas, click **+ Add an Action**.
2. **Search for Action**
   - In the action search bar, type **Update Records**.
   - Select **Update Record** from the list.
3. **Select Record**
   - In the **Record** field, drag and drop the record reference from the **Data Pill** (on the right side under **Trigger** → **Record**).
4. **Table Auto-Assignment**
   - The **Table** field will automatically be assigned to **Task Table** since the trigger comes from it.
5. **Update Fields**
   - Add the following field to update:
     - **Status** → set the **Value** to **Completed**.
6. **Save the Action**
   - Click **Done** to save the action configuration.



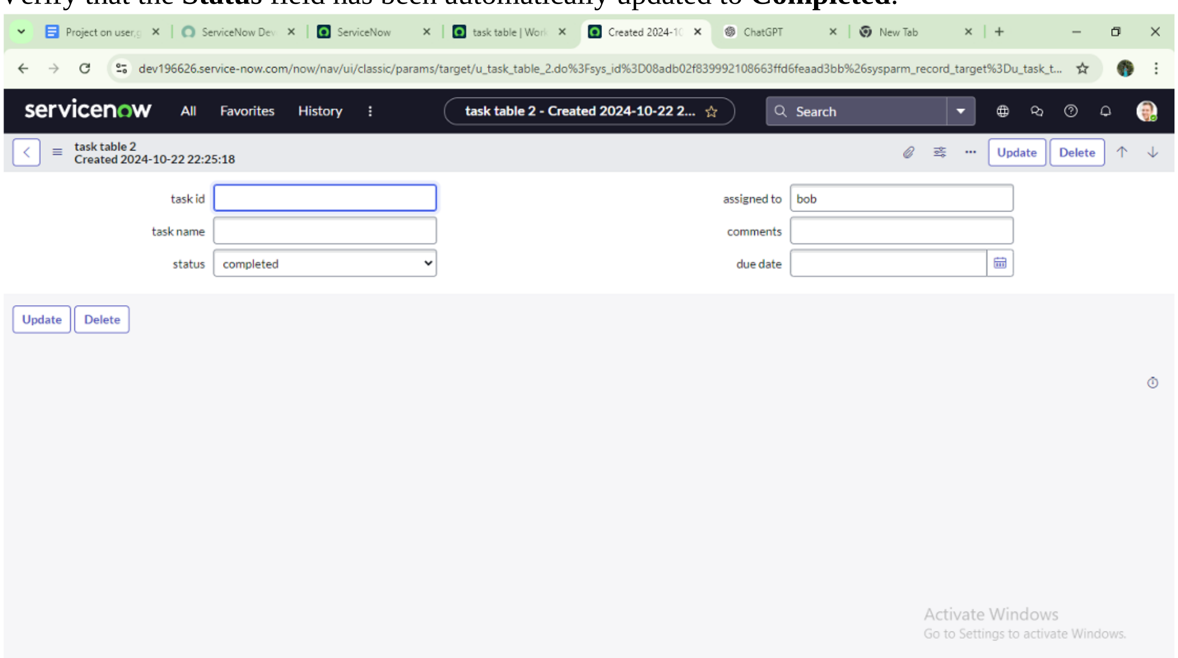
1. **Go to Actions Section**
   - In your flow, scroll to the **Actions** section.
2. **Click on Add an Action**
   - Click **+ Add an Action** in the flow canvas.
3. **Search for Action**
   - In the search bar, type **Ask for Approval**.
   - Select **Ask for Approval** from the list.
4. **Select Record**
   - In the **Record** field, drag and drop the record reference from the **Data Pill** panel (on the right side, under **Trigger → Record**).
5. **Table Auto-Assignment**
   - The **Table** field will automatically populate with **Task Table**.
6. **Set Approval Field**
   - In **Approval field**, choose: **Status**.
7. **Set Approver**
   - In the **Approver** field, enter: **Alice P**.
8. **Save the Action**



9. **Access Task Table**
   - In the **Application Navigator**, search for **Task Table**.
   - Click on **Task Table** under the relevant application/module to open the list of records.
10. **Check Status Field**

- Open the record that was created with the trigger conditions.

Verify that the **Status** field has been automatically updated to **Completed**.



11. **Open My Approvals**

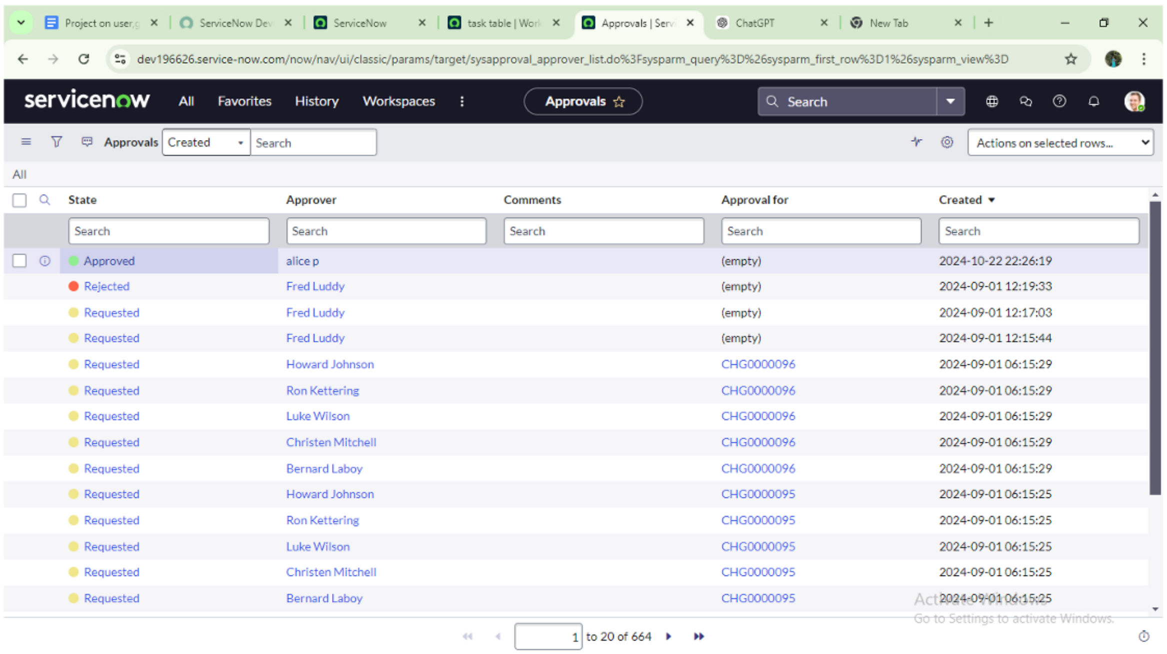
- In the **Application Navigator**, search for **My Approvals**.
- Click on **My Approvals** under the **Service Desk** section.

12. **Check Approval Request**

- Alice P will see the **approval request** generated by the flow for the Task Table record.

13. **Approve the Request**

- Right-click on the approval request.
- Select **Approve** from the options.



State	Approver	Comments	Approval for	Created
Approved	alice p		(empty)	2024-10-22 22:26:19
Rejected	Fred Luddy		(empty)	2024-09-01 12:19:33
Requested	Fred Luddy		(empty)	2024-09-01 12:17:03
Requested	Fred Luddy		(empty)	2024-09-01 12:15:44
Requested	Howard Johnson		CHG0000096	2024-09-01 06:15:29
Requested	Ron Kettering		CHG0000096	2024-09-01 06:15:29
Requested	Luke Wilson		CHG0000096	2024-09-01 06:15:29
Requested	Christen Mitchell		CHG0000096	2024-09-01 06:15:29
Requested	Bernard Laboy		CHG0000096	2024-09-01 06:15:29
Requested	Howard Johnson		CHG0000095	2024-09-01 06:15:25
Requested	Ron Kettering		CHG0000095	2024-09-01 06:15:25
Requested	Luke Wilson		CHG0000095	2024-09-01 06:15:25
Requested	Christen Mitchell		CHG0000095	2024-09-01 06:15:25
Requested	Bernard Laboy		CHG0000095	2024-09-01 06:15:25

Conclusion

This scenario highlights a **structured approach to project management**, clearly demonstrating the roles of Alice and Bob within a defined workflow. With **Alice's oversight** and **Bob's execution**, the team collaborates efficiently, ensuring project objectives are met.

The use of **tables** organizes critical information, allowing for easy tracking of projects, tasks, and progress updates. Automated processes like **Flow Designer triggers, record updates, and approvals** streamline workflow, enhance accountability, and improve communication.

Overall, this system supports **effective collaboration**, promotes **role-based access**, and ensures the **successful completion of projects** in a controlled and organized manne.

Complete

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