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

# **Team ID =>** NM2025TMID20238

**Team Members:**

* + Madhan M (TL)
  + Abishek Kumar Sharma K
  + Lokesh N
  + Jaya Prakash M

**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 a streamlined project task management system in ServiceNow for a small project team, enabling clear role definitions (Project Manager and Team Member), role-based access controls, and a structured workflow. This solution aims to improve task assignment clarity, ensure accountability, and enhance visibility into project progress throughout the project lifecycle.

**Skills:**

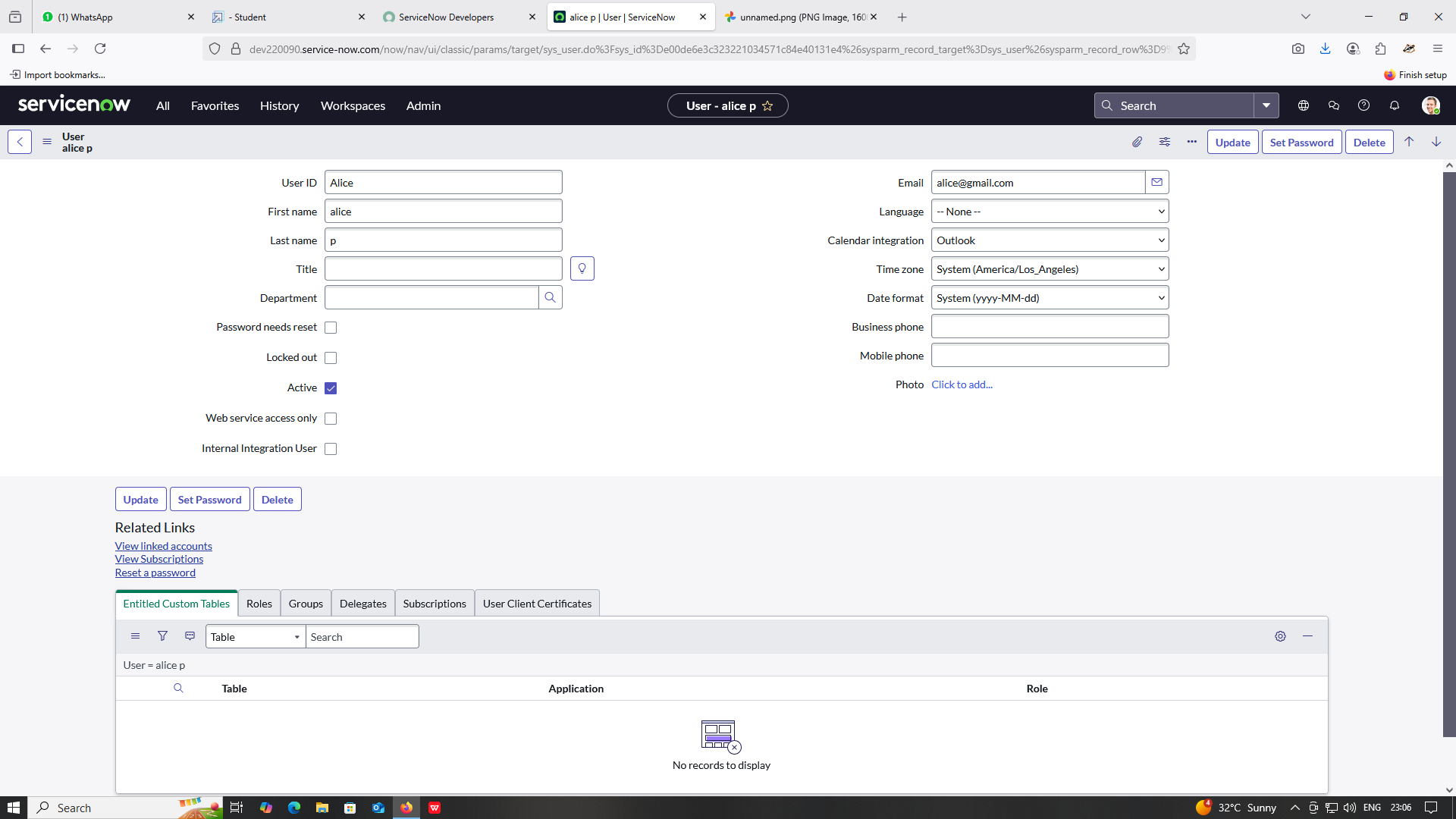
* Tensorflow
* Oracle DB

**Task Initiation:**

**Milestone 1: Users**

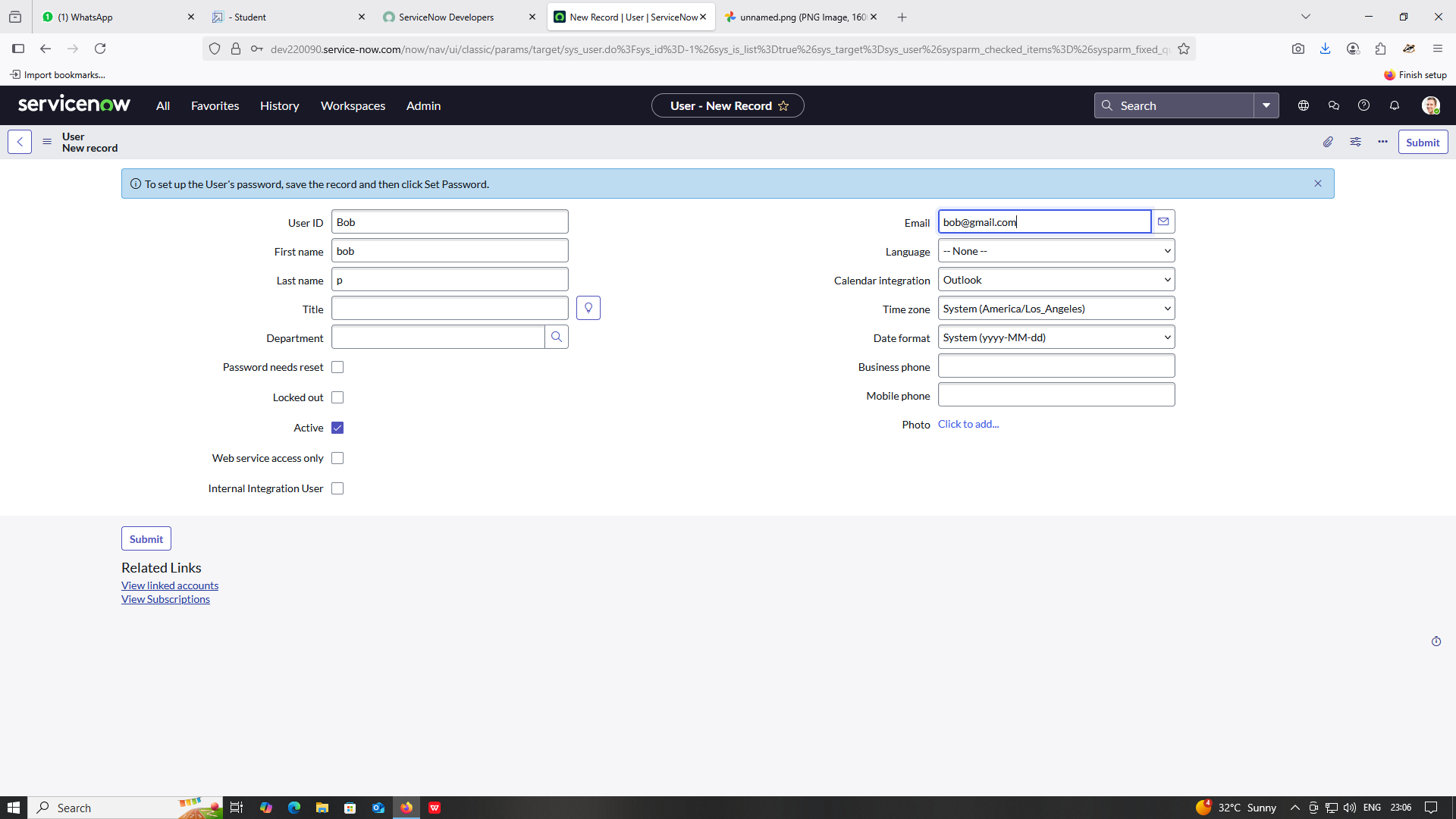
**Activity 1:** Create users

1. Open Service now developer PDI
2. Click on All -> search for users
3. Select Users under the system security section
4. Click on new
5. Fill the following details to create a new user.
6. Click on submit

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**Creating one more user Bob:**

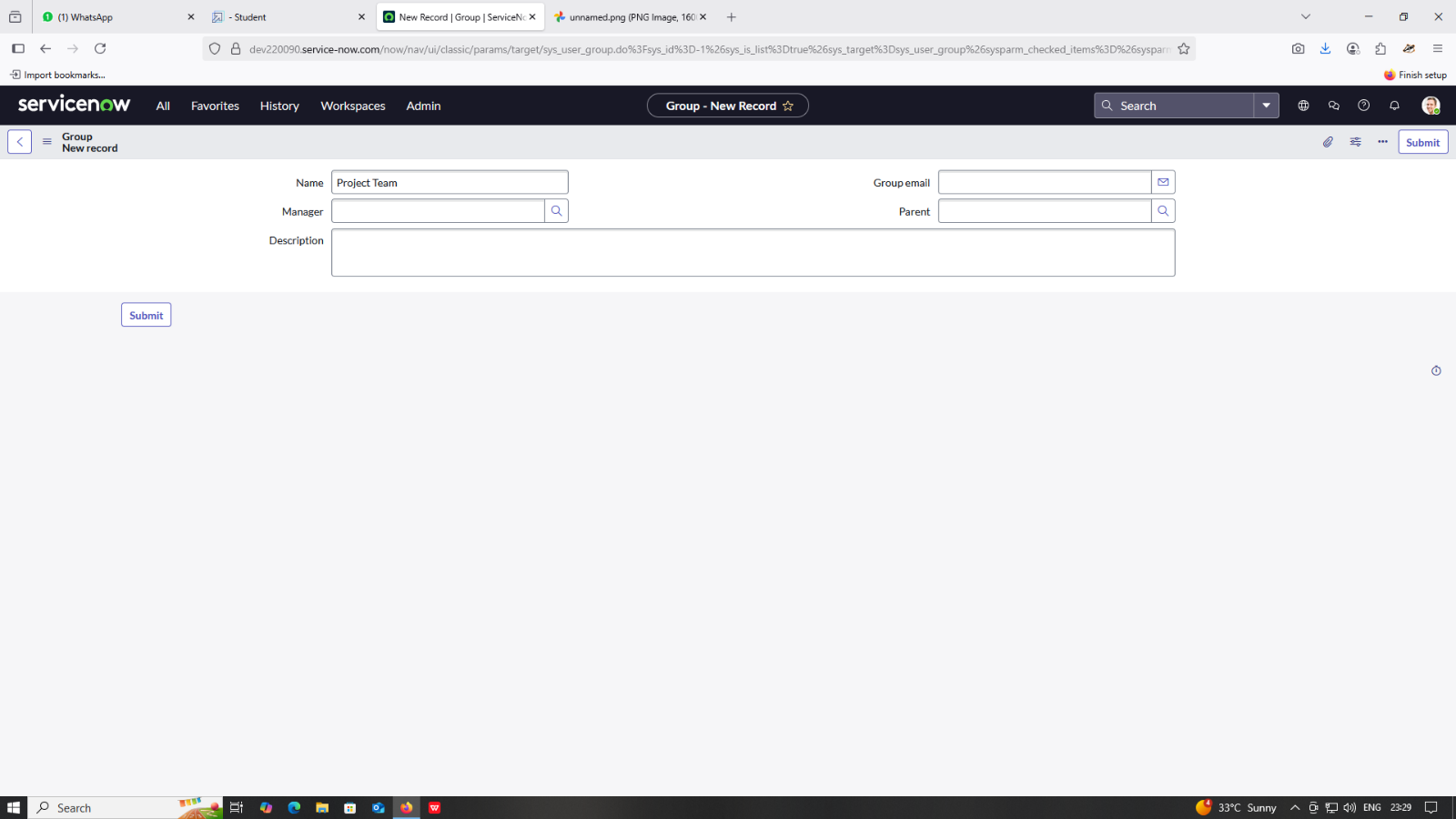
1. Create another user with following details
2. Click on submit

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**Milestone 2: Groups**

**Activity 1:** Create groups

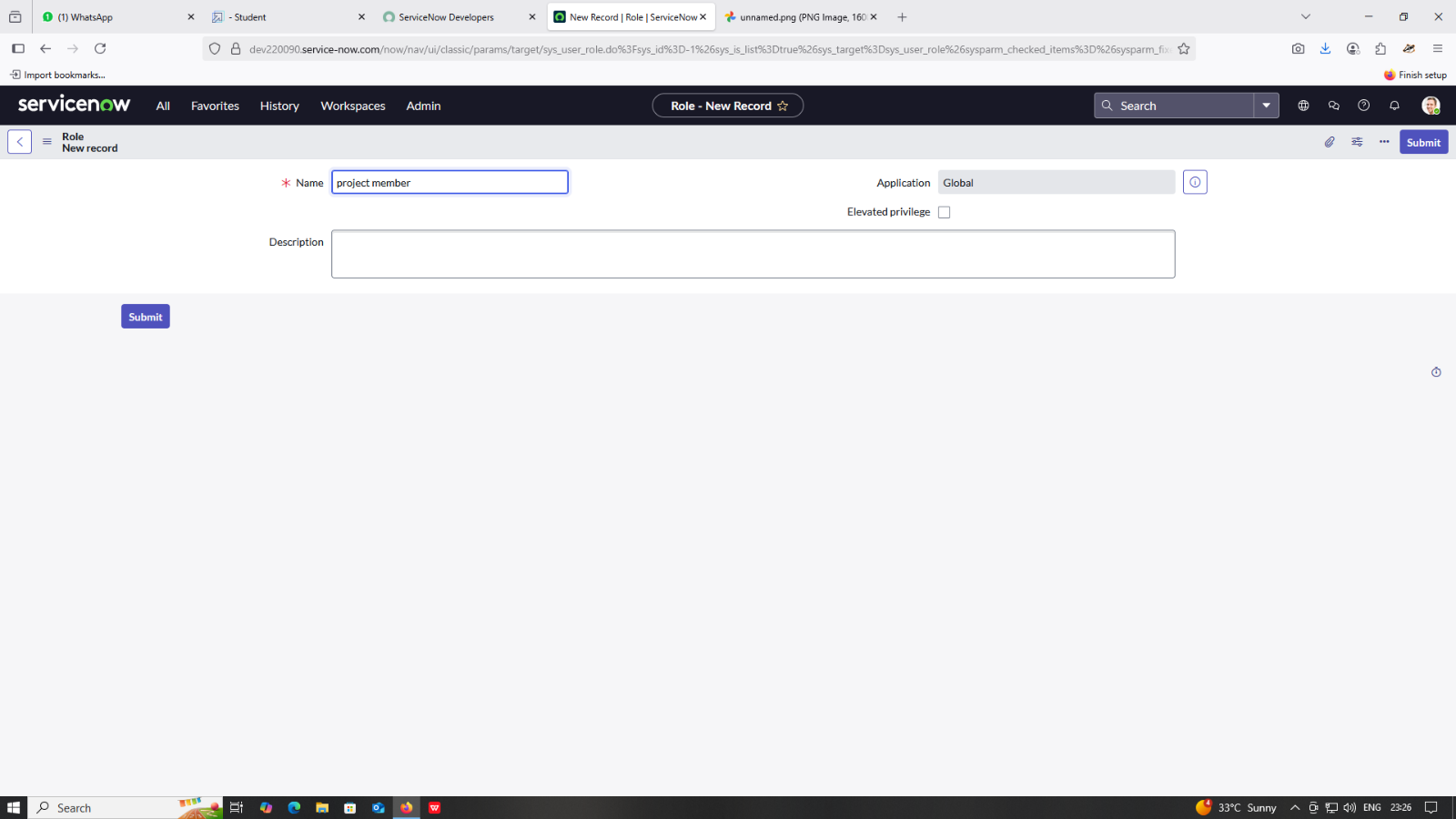
1. Open Service Now Developer PDI
2. Click on All -> search for groups
3. Select groups under the system security section.
4. Click on new
5. Fill the following details to create a new group.
6. Click on submit.

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**Milestone 3: Roles**

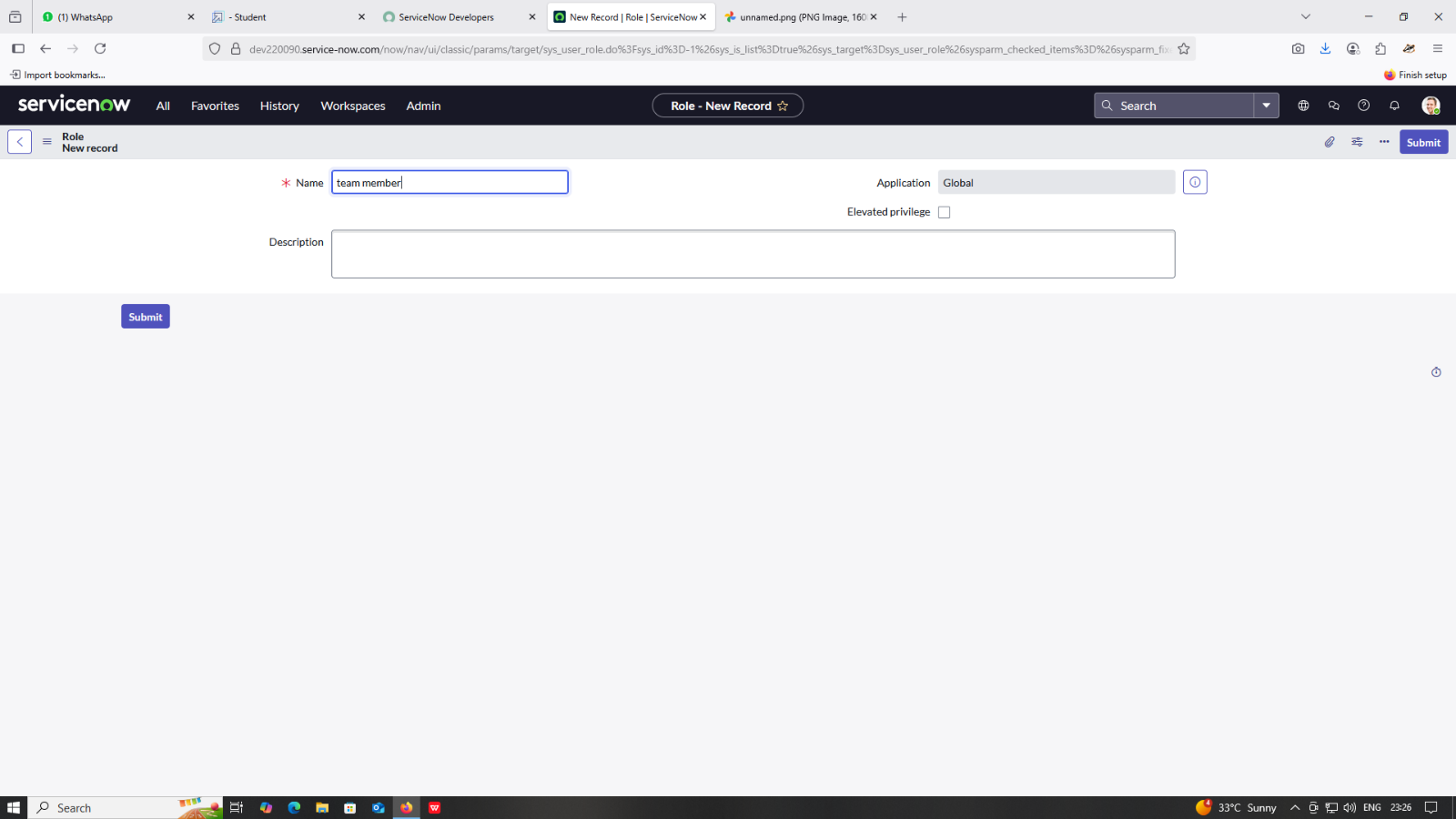
**Activity 1:** Create Roles

1. Open Service Now Developer PDI
2. Click on All -> search for Roles
3. Select Roles under the system security section.
4. Click on new.
5. Fill the following details to create a new role.
6. Click on submit.

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**Create one more role:**

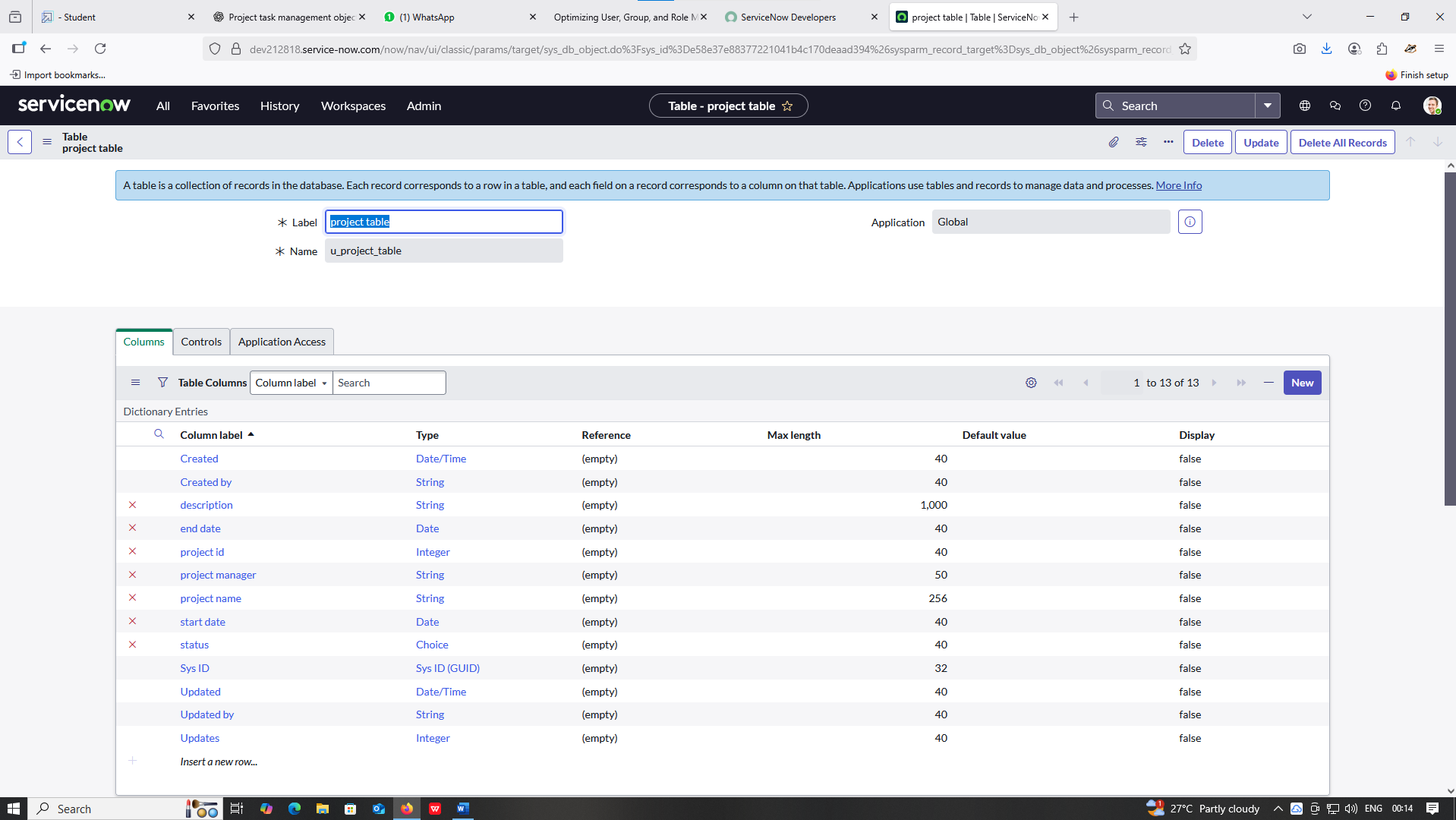
1. Create another role with the following details
2. Click on submit

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**Milestone 4: Table**

**Activity 1:** Create Table

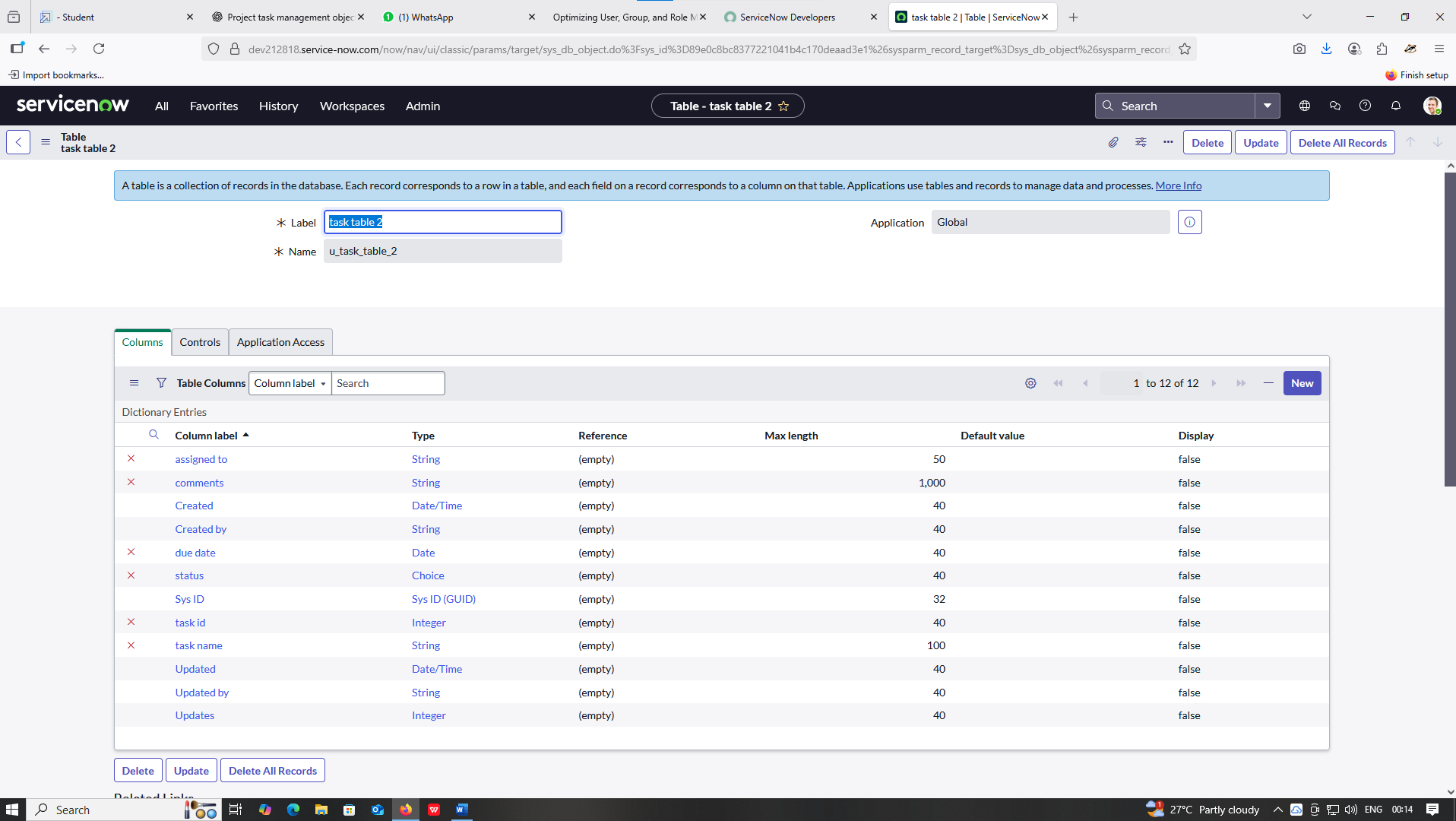
1. Open Service Now Developer PDI
2. Click on All -> Search for tables
3. Select tables under the system definition section
4. Click on New
5. Fill the following details to create a new table
   1. Label: Project table
   2. Check the boxes Create module & Create mobile module
6. Under new menu name: project table
7. Under table columns give the columns with data types.



1. Click on submit

**Create one more table**

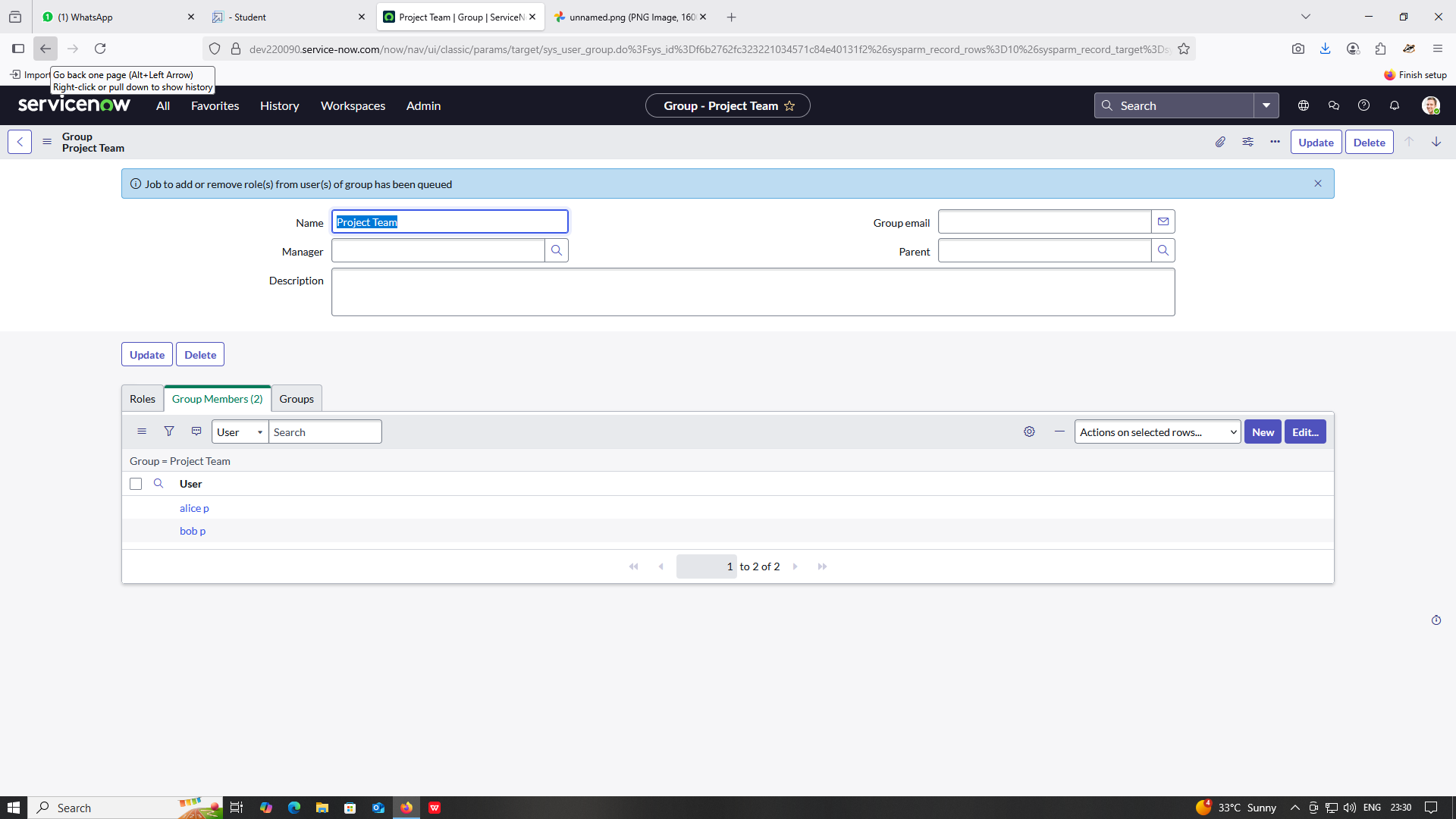
1. Create another table as : task table 2
2. Fill the following details to create task table 2
3. Click on submit.

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**Milestone 5: Assign users to groups**

**Activity 1:** Assign users to project team group

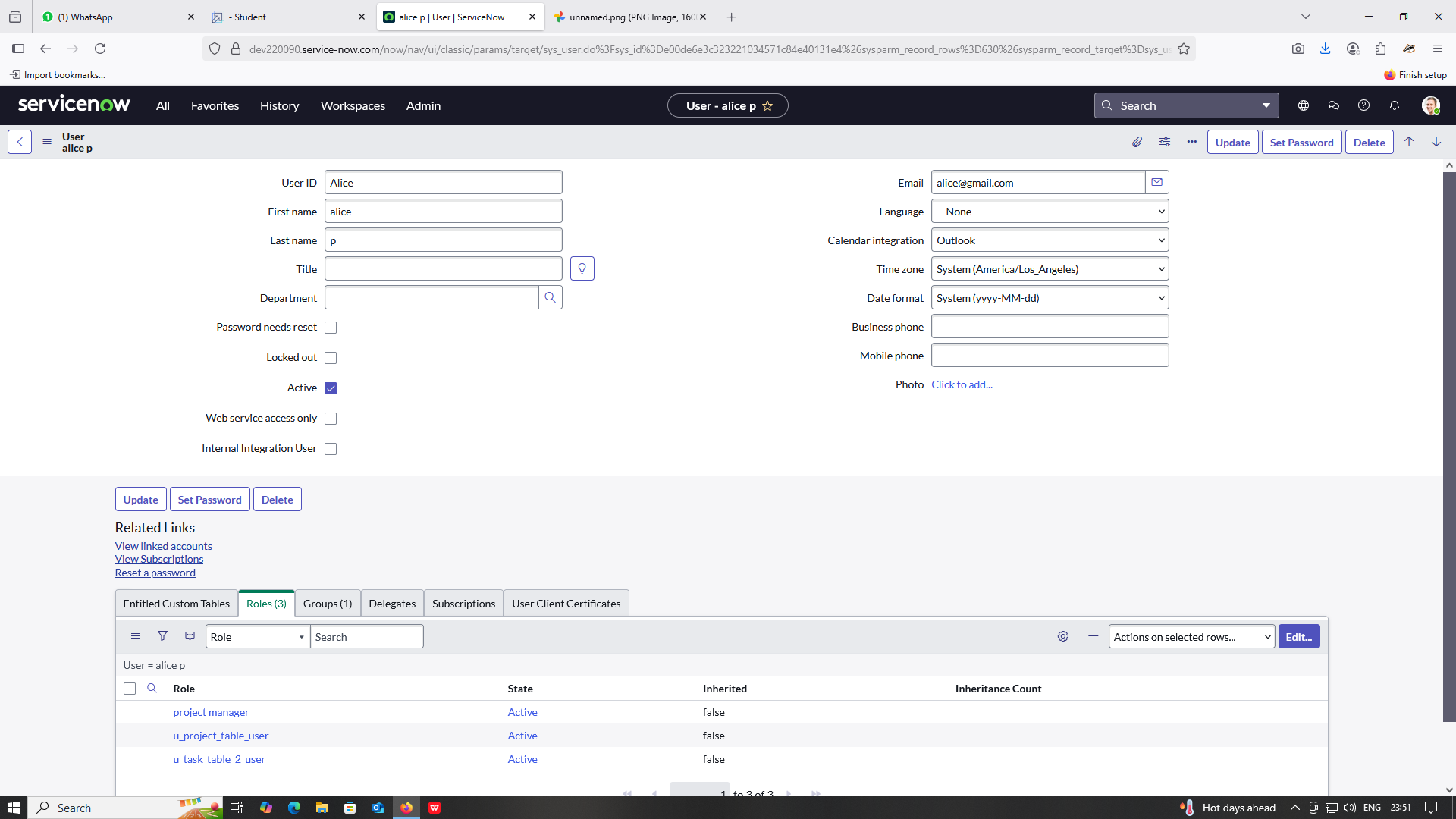
1. Open Service Now Developer PDI
2. Click on All -> search for groups.
3. Select tables under the system definition section.
4. Select the project team group under group members.
5. Click on edit.
6. Select Alice P and Bob P and save.

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**Milestone 6: Assign roles to users**

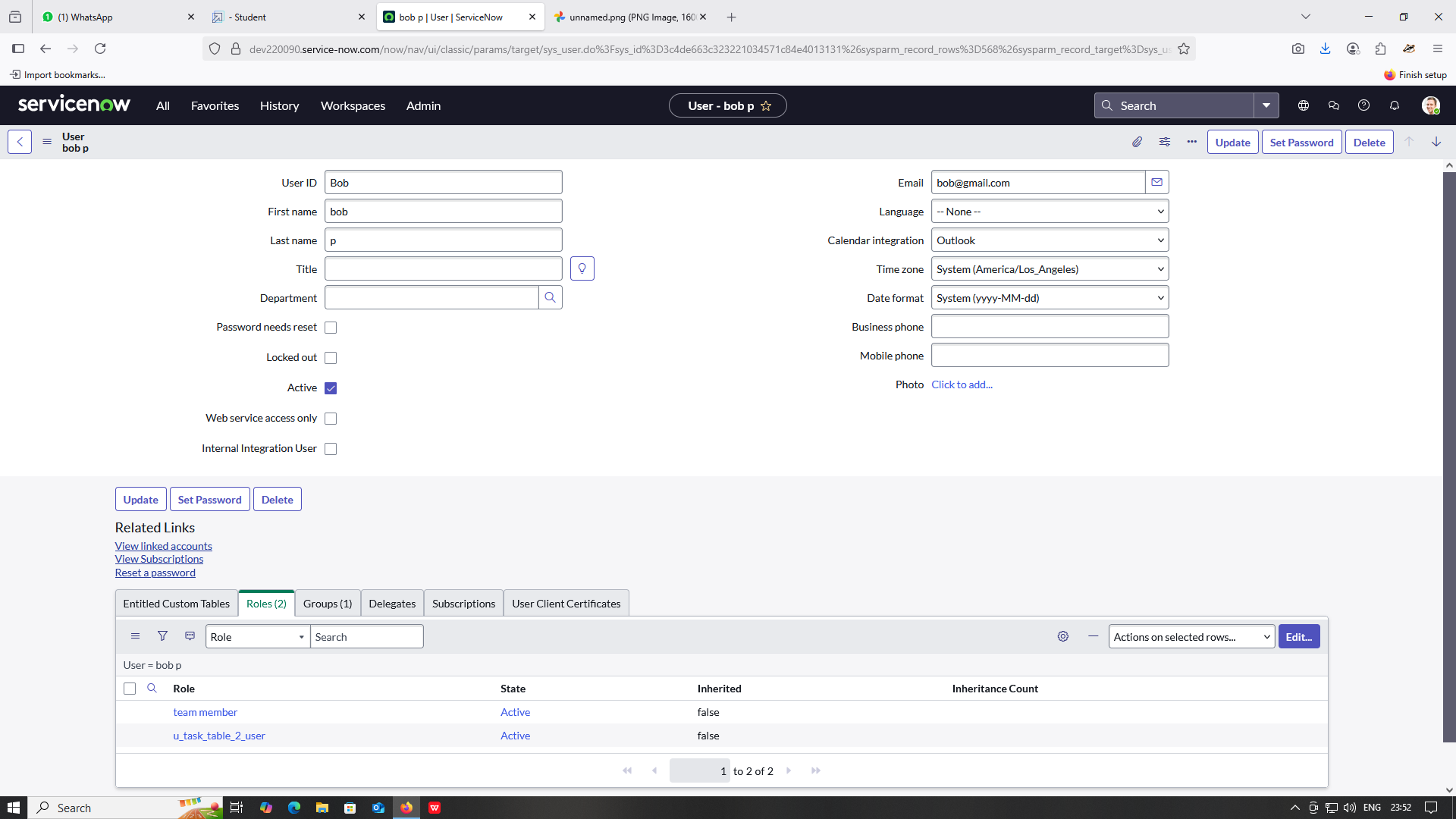
**Activity 1:** Assign roles to alice user

1. Open Service Now Developer PDI
2. Select tables under the 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.

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**Activity 2:** Assign roles to bob user.

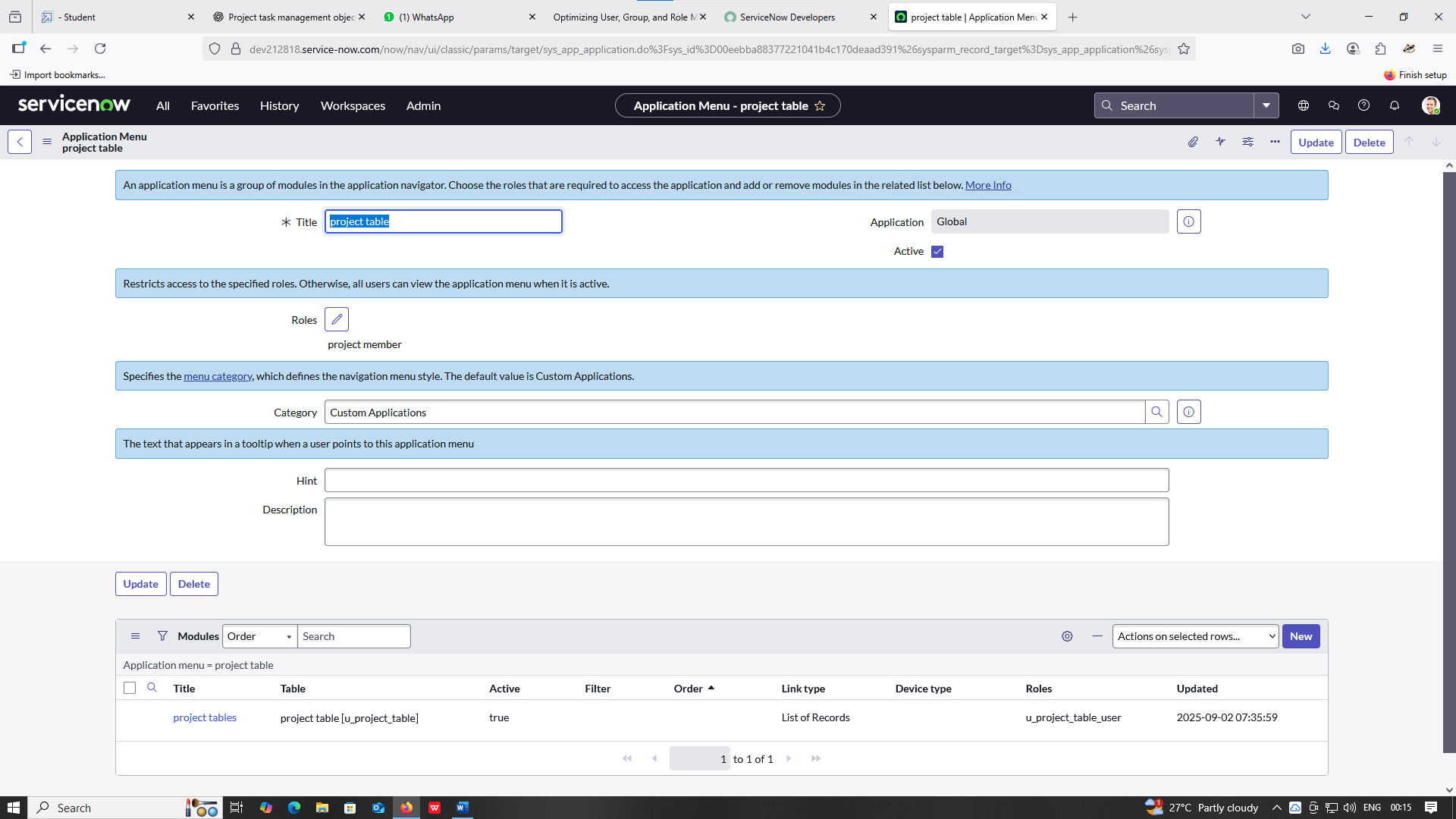
1. Open Service Now Developer PDI
2. Select tables under the system definition section.
3. Select the bob p user under team member.
4. Click on edit.
5. Select team member and give table role and save.
6. Click on project icon Impersonate the user to bob p.
7. We can see the task table 2

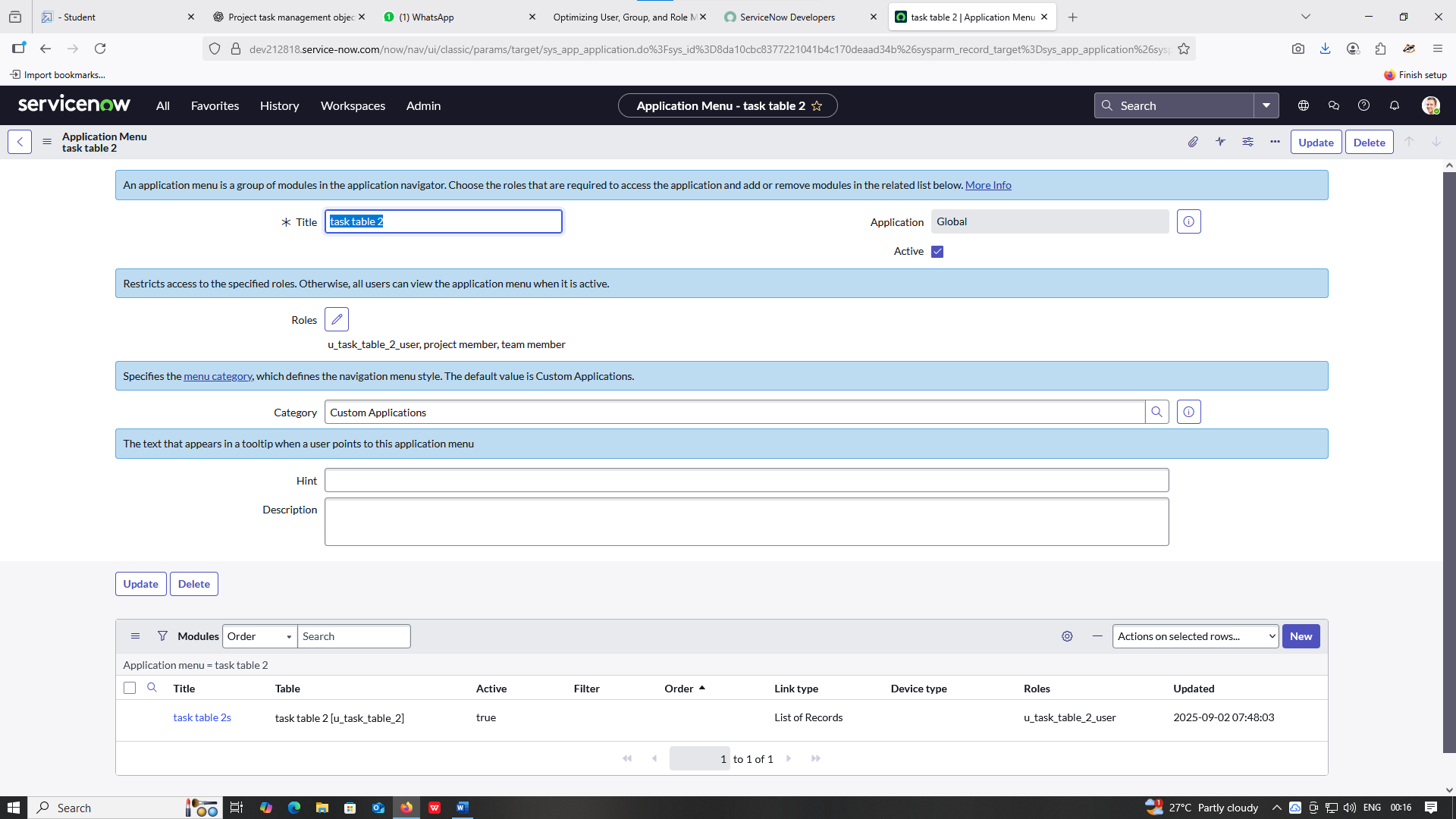
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**Milestone 7: Application Access**

**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 project table application
3. Click on edit module.
4. Give project member roles to that application.
5. Search for task table 2 and click on edit application.
6. Give the project member and team member role for task table 2 application.

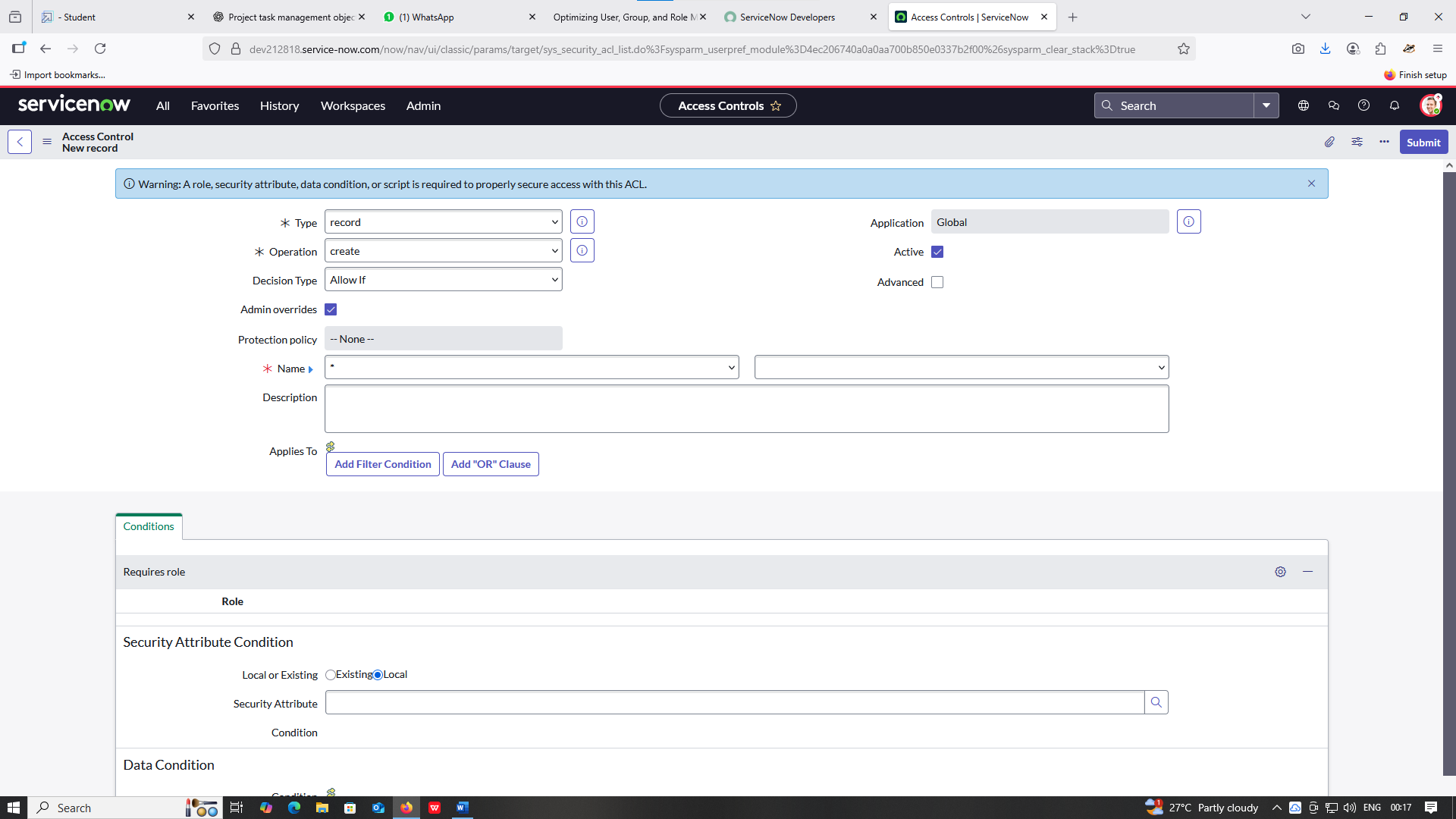
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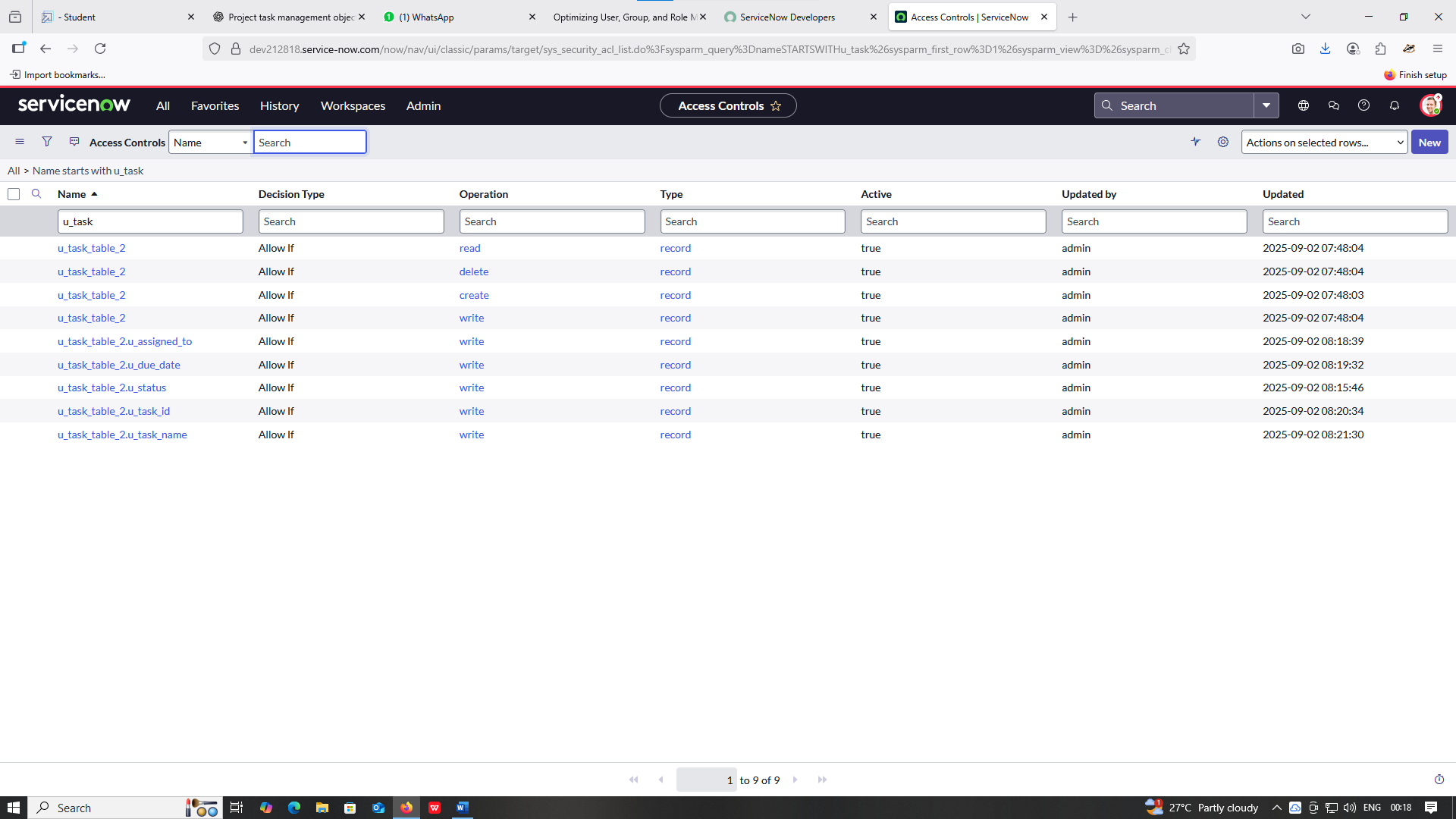
**Milestone 8: Access control list**

**Activity 1: Create ACL**

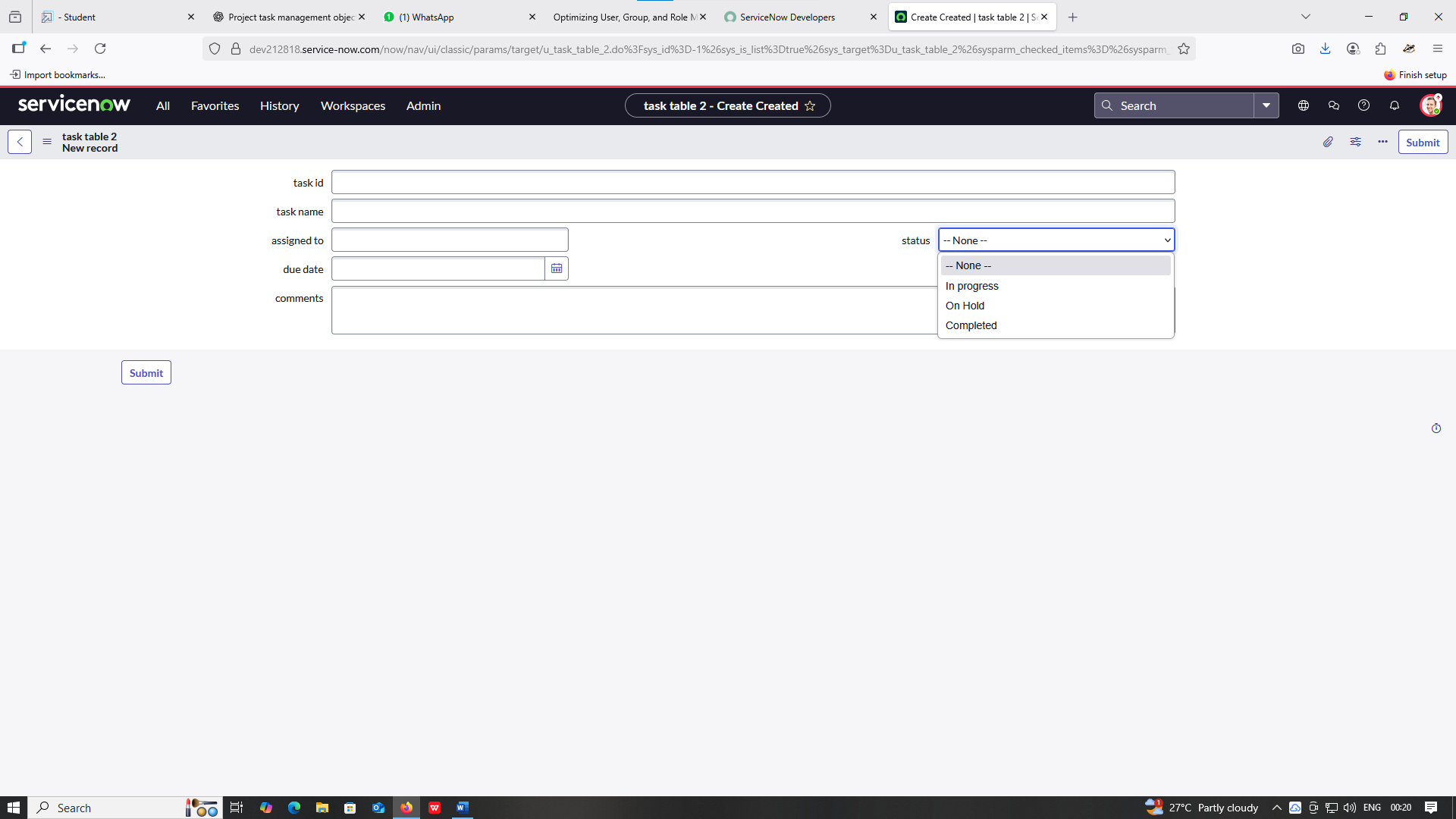
1. Open Service Now developer PDI
2. Click on All -> Search for ACL
3. Select Access Control (ACL) under the system security section.
4. Click on elevate role
5. Click on new.

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1. Fill the following details to create a new ACL.
2. Scroll down under requires role.
3. Double click on insert a new role.
4. Give task table and team member role.
5. Click on Submit
6. Similarly create four acls for the following fields.

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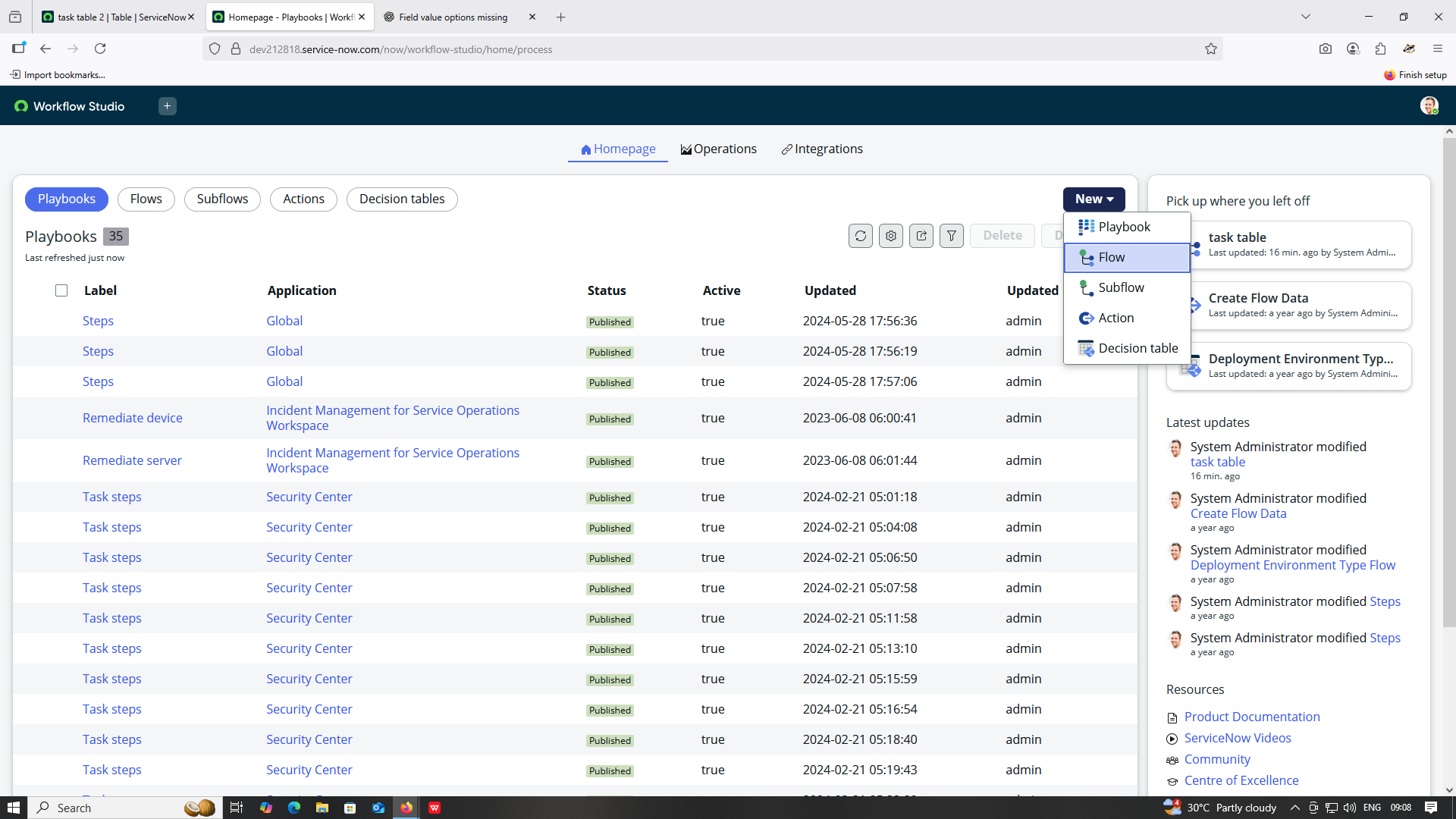
1. Click on profile on top right side
2. Click on impersonate user
3. Select Bob user
4. Go to all and select task table 2 in the application menu bar
5. Comment and status fields are have the edit access.

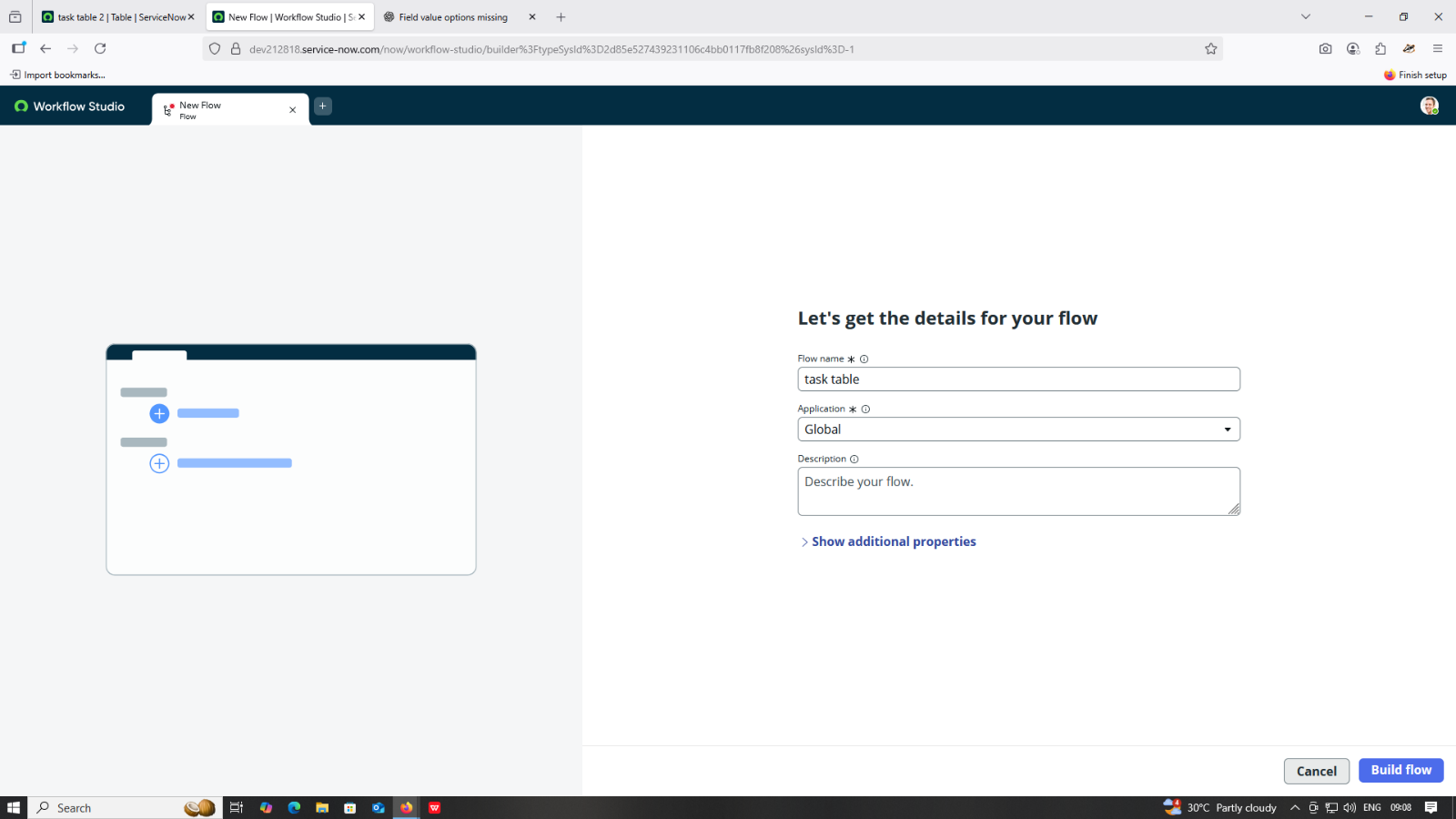
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**Milestone 9: Flow**

**Activity 1:** Create a Flow to Assign operations ticker to group

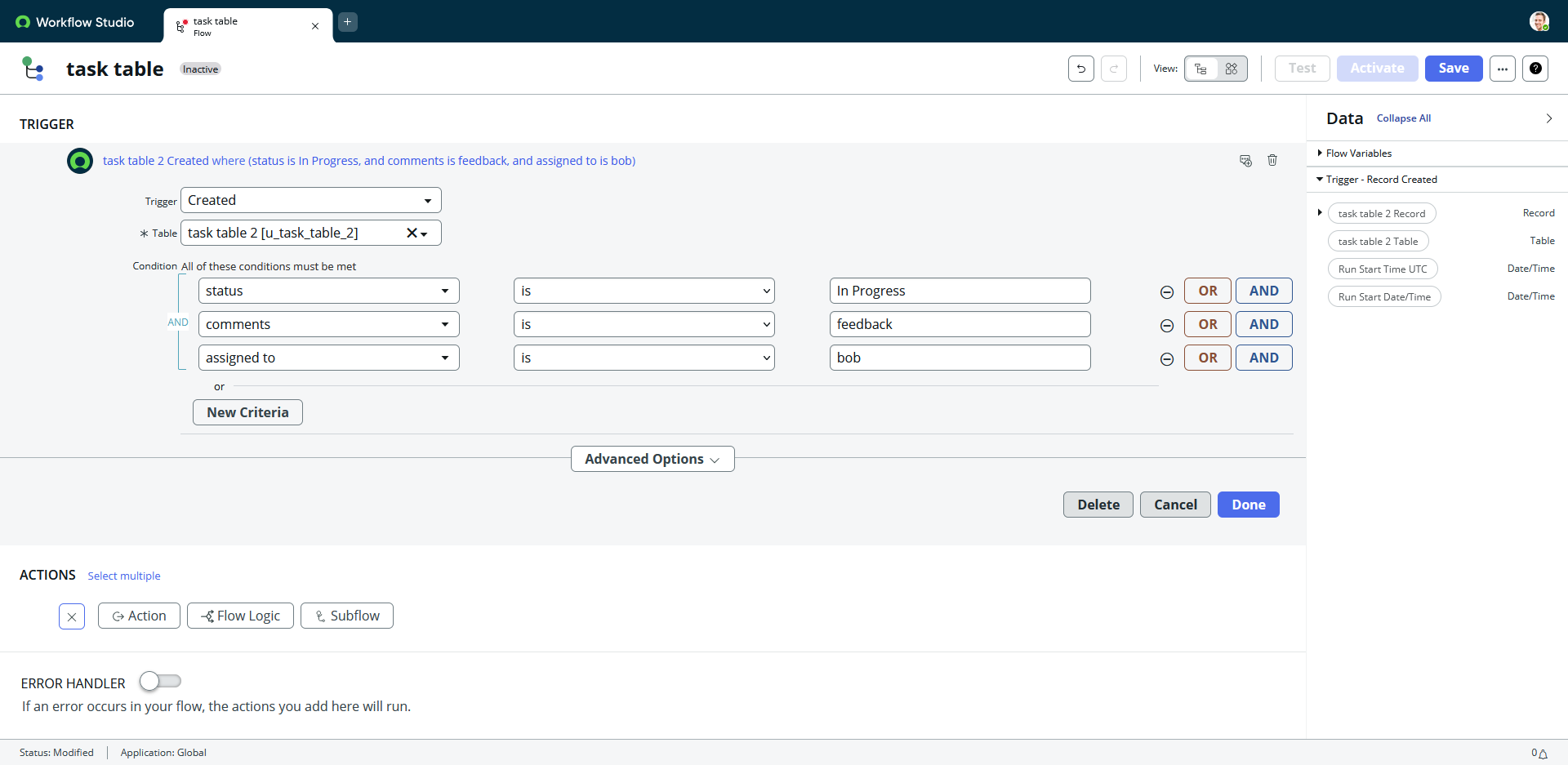
1. Open Service Now developer PDI
2. Click on All -> search Flow Designer
3. Click on Flow Designer under Process Automation
4. After opening Flow Designer click on new and select Flow.
5. Under Flow properties Give Flow name as “task table”
6. Application should be Global.
7. Click build flow.

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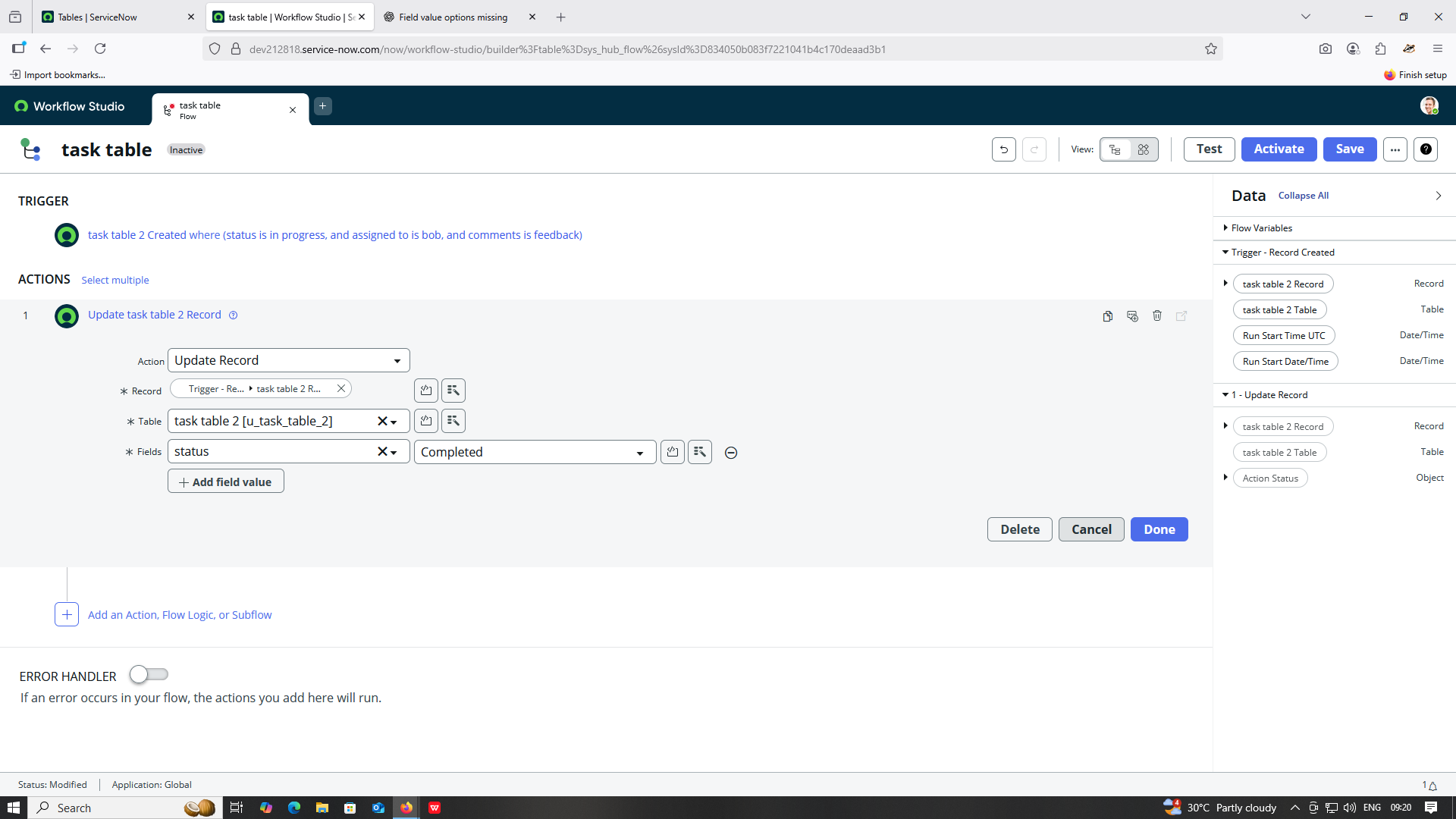
**Activity 2:** Adding Trigger

1. Click add 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
   1. Field: status operator: is Value: in Progress
   2. Field: Comments operator: is Value: Feedback
   3. Field: Assigned to Operator: is Value: bob
5. After that click on Done.

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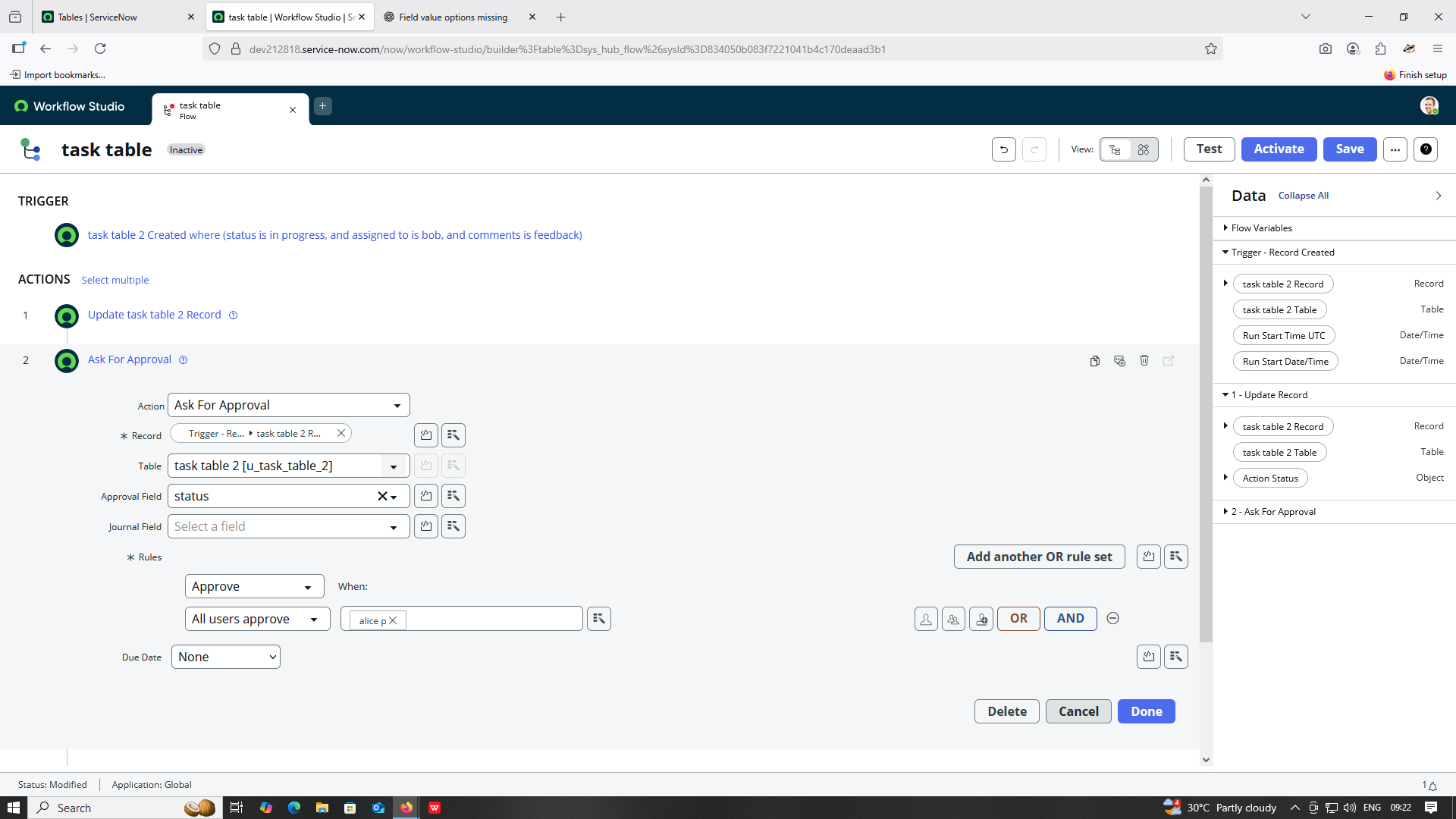
**Activity 3:** Add an Action

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.

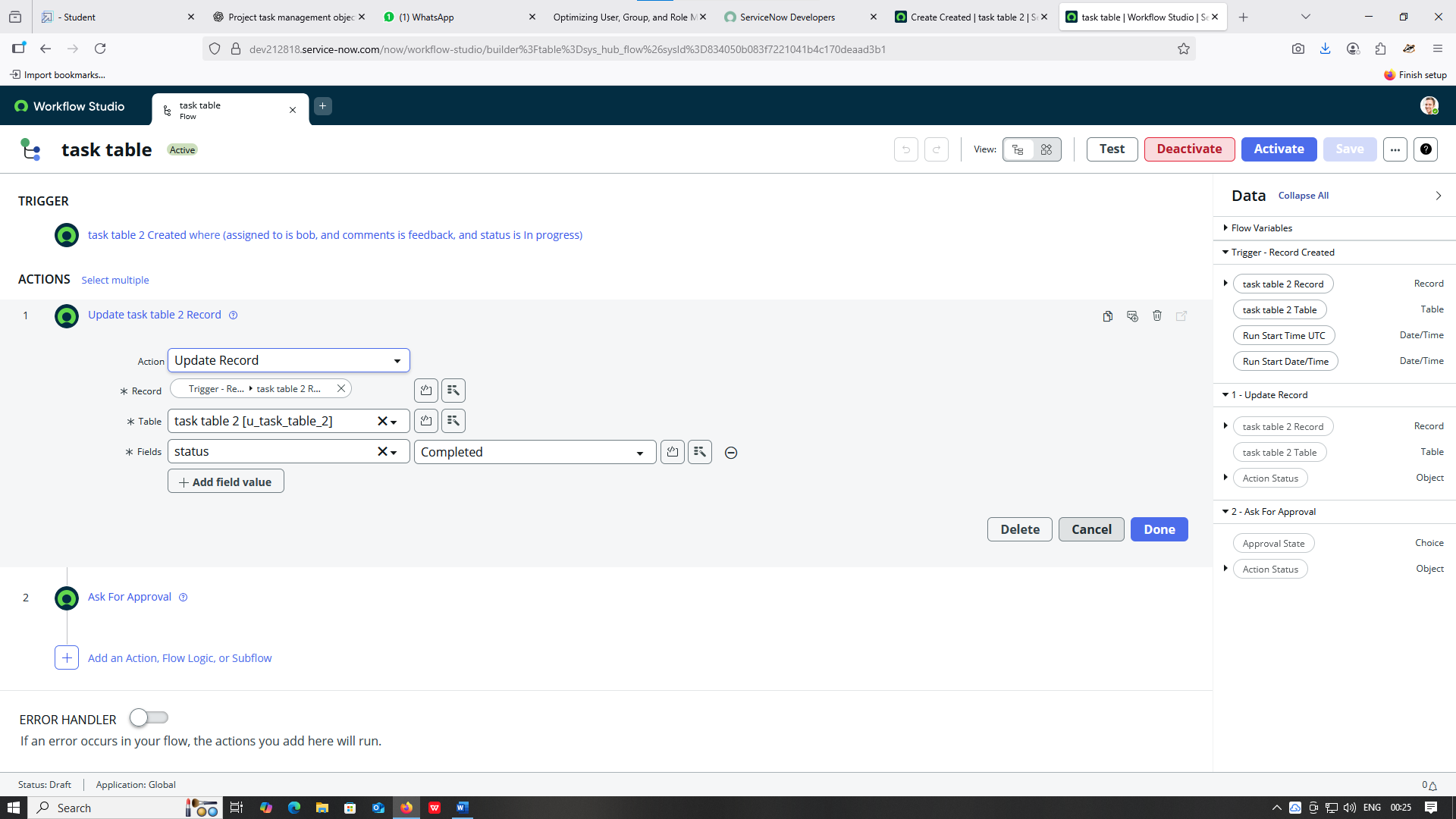
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**Activity 4:** Create Ask Approvals

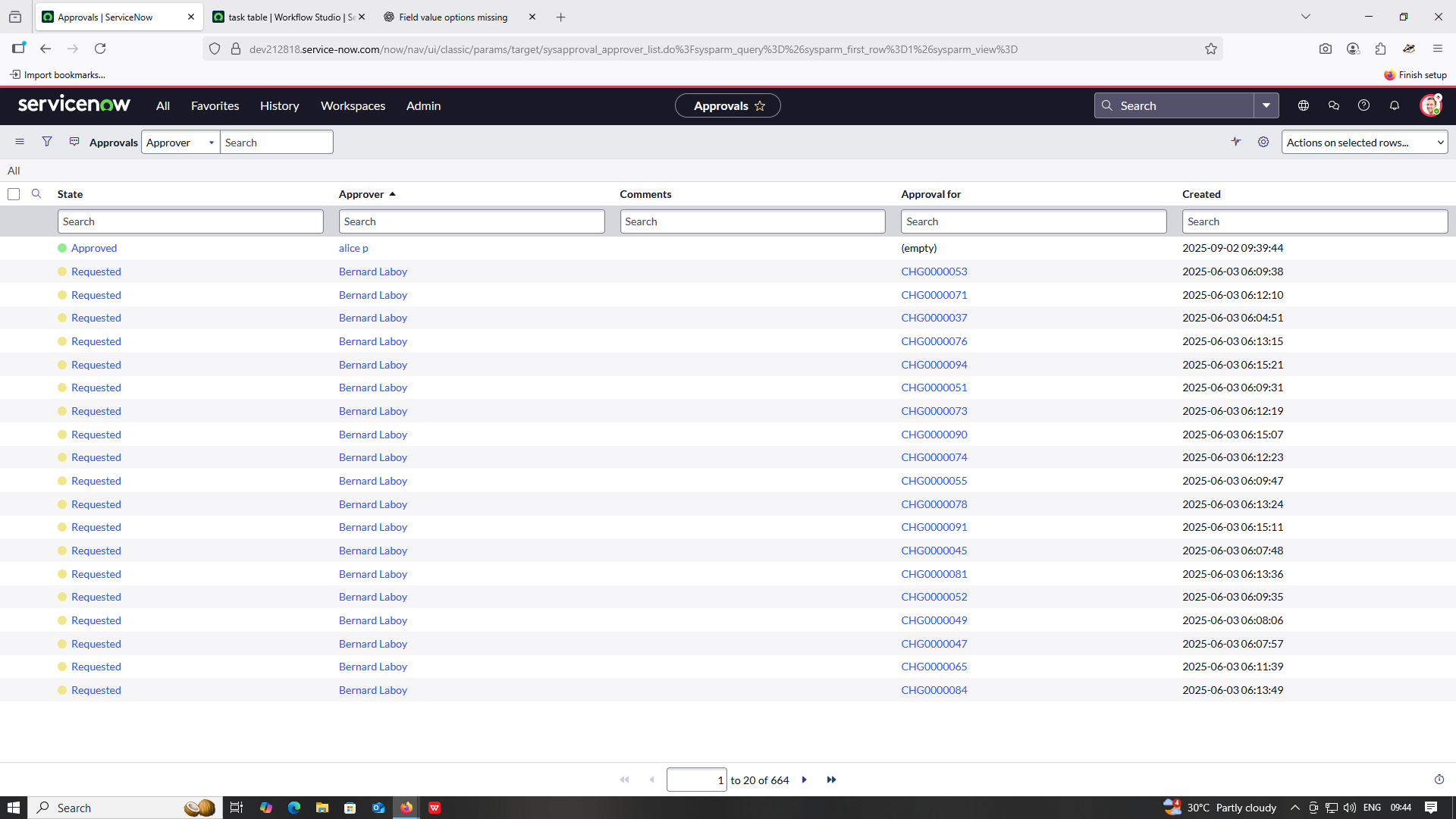
1. Now under Actions.
2. Click on Add an action
3. Select action in that search for “Ask for Approval”
4. In Record field drag the fields from the data navigation from Right side.
5. Table will be auto assigned after that.
6. Give the approve fields as “status”
7. Give approver as Alice P
8. Click on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



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

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

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**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.