



**servicenow**



## **UNIVERSITY COLLEGE OF ENGINEERING , THIRUKKUVALAI**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

### **STREAMLINING TICKET ASSIGNMENT FOR EFFICIENT SUPPORT OPERATIONS**

**Team ID : NM2025TMID01861**

**Team Size : 4**

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## PROBLEM STATEMENT:

In many organizations, support tickets are manually assigned to agents, leading to uneven workload distribution, delayed resolutions, and customer dissatisfaction. There is a need for an automated and efficient system to manage and assign tickets intelligently.

## OBJECTIVE:

To develop a smart ticket management system that automates and optimizes ticket assignment to support agents, reducing response time and improving customer satisfaction.

## SKILLS:

- ServiceNow Catalog Item Creation
- UI Policies & UI Actions
- Update Set Management
- Testing & Deployment
- Team Collaboration

## TASK INITIATION:

The project **“Streamlining Ticket Assignment for Efficient Support Operations”** was initiated to enhance support efficiency by automating the ticket assignment process. The team identified key problems in manual ticket handling such as delays and uneven workload.

Technologies and tools were selected, and responsibilities were divided among members. A clear plan was created to guide the design, development, and testing phases, forming a strong base for successful project completion.



## FEATURES:

**Automated Ticket Assignment:** Automatically routes tickets to the appropriate support team or agent based on category, priority, and impact.

**Dynamic Workflow:** Uses ServiceNow workflows to handle ticket creation, assignment, and resolution efficiently.

**Role-Based Access Control:** Ensures data security and access control through user roles and group permissions.

**Real-Time Notifications:** Sends instant updates to agents and users about ticket status changes and assignments.

**SLA Monitoring:** Tracks service level agreements to ensure timely responses and escalations when needed.

**Reporting and Analytics:** Provides insights into ticket volume, team performance, and resolution trends.

**Improved User Experience:** Offers a streamlined and transparent support process for both users and technicians.

## Modules Implemented :

The project “Streamlining Ticket Assignment for Efficient Support Operations” was developed on the ServiceNow platform and implemented through a structured modular approach. Each module played a vital role in building an automated, role-based ticket assignment system. The following modules were created and configured during the project development:

## **1. User Creation:**

- Different users were created in ServiceNow to represent employees, support agents, and administrators, enabling role-based access and workflow execution.

## **2. Group Creation:**

- Support groups were configured to organize users according to their departments and areas of responsibility (e.g., IT Support, Network Team, Hardware Support).

## **3. Role Management:**

- Custom roles were defined to manage permissions and control access to specific ServiceNow features, ensuring security and accountability.

## **4. Table Creation:**

- Custom tables were designed to store and manage ticket data efficiently, allowing automation rules and workflows to process incidents dynamically.

## **5. Role and User Assignment:**

- Roles were assigned to appropriate groups and users to control access rights and determine who can view, modify, or resolve tickets.

## **6. Table Role Assignment:**

- Permissions were granted to ensure that only authorized groups could interact with the ticket table, maintaining data integrity and security.



## **7. Access Control List (ACL):**

- ACL rules were created to manage and restrict user access to data based on roles and responsibilities.

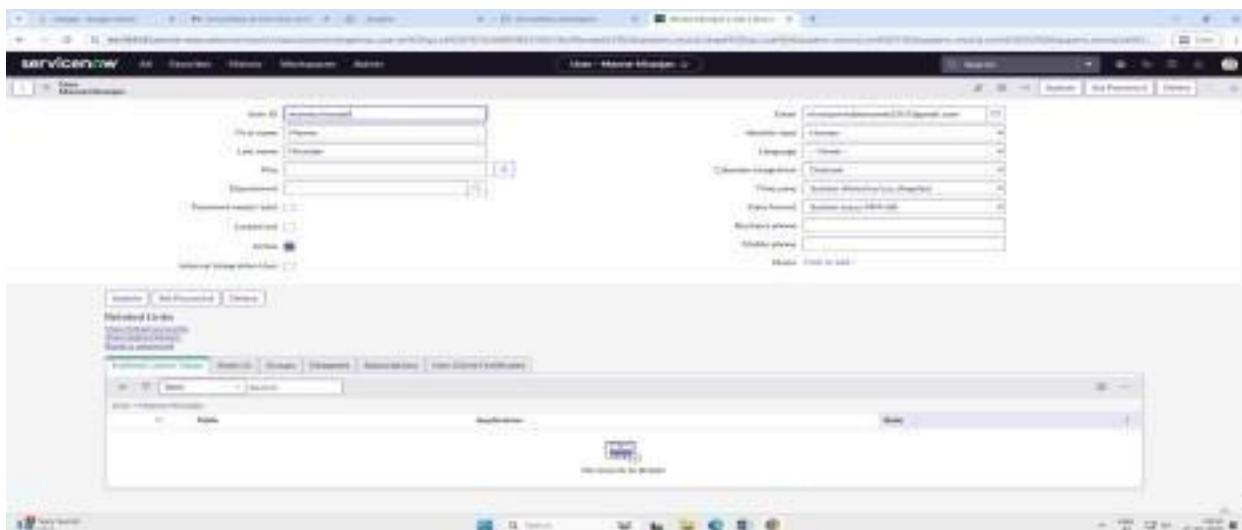
## **8. Flow & Outputs:**

- The final flow automated the entire ticket assignment process. When a new ticket is created, it is automatically analyzed and routed to the appropriate support group or agent. Notifications and SLA monitoring ensure timely resolution and complete visibility.

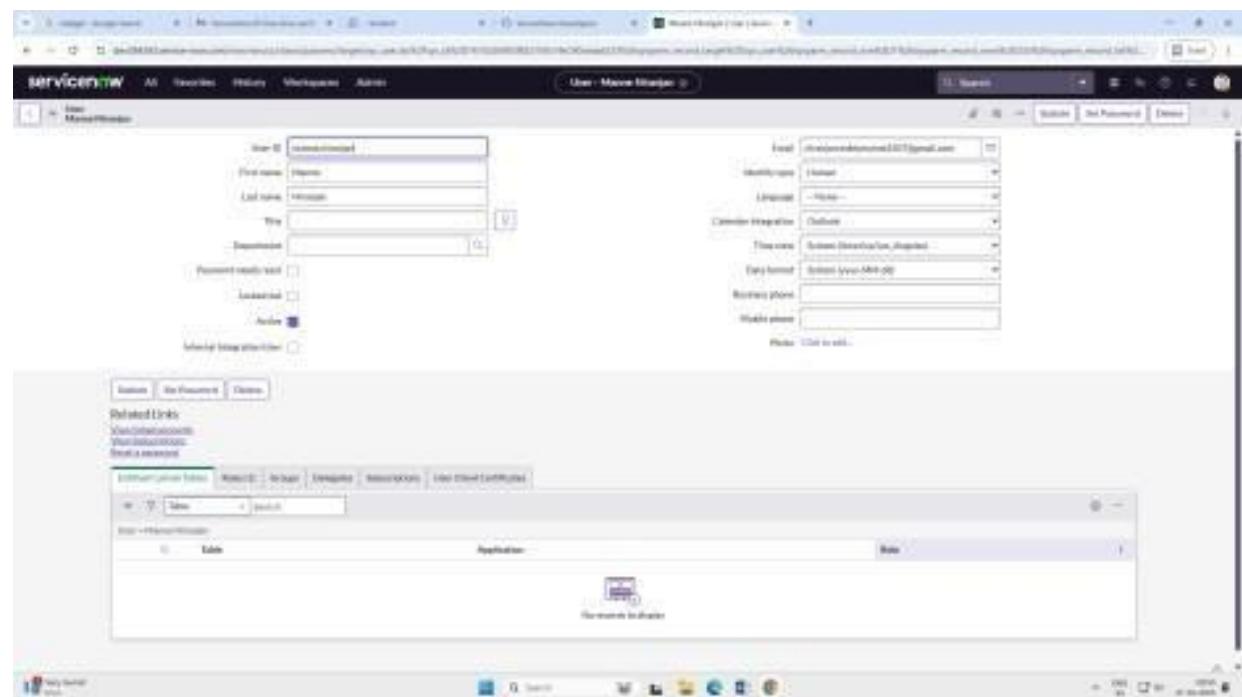
#### **IMPLEMENTATION STEPS:**

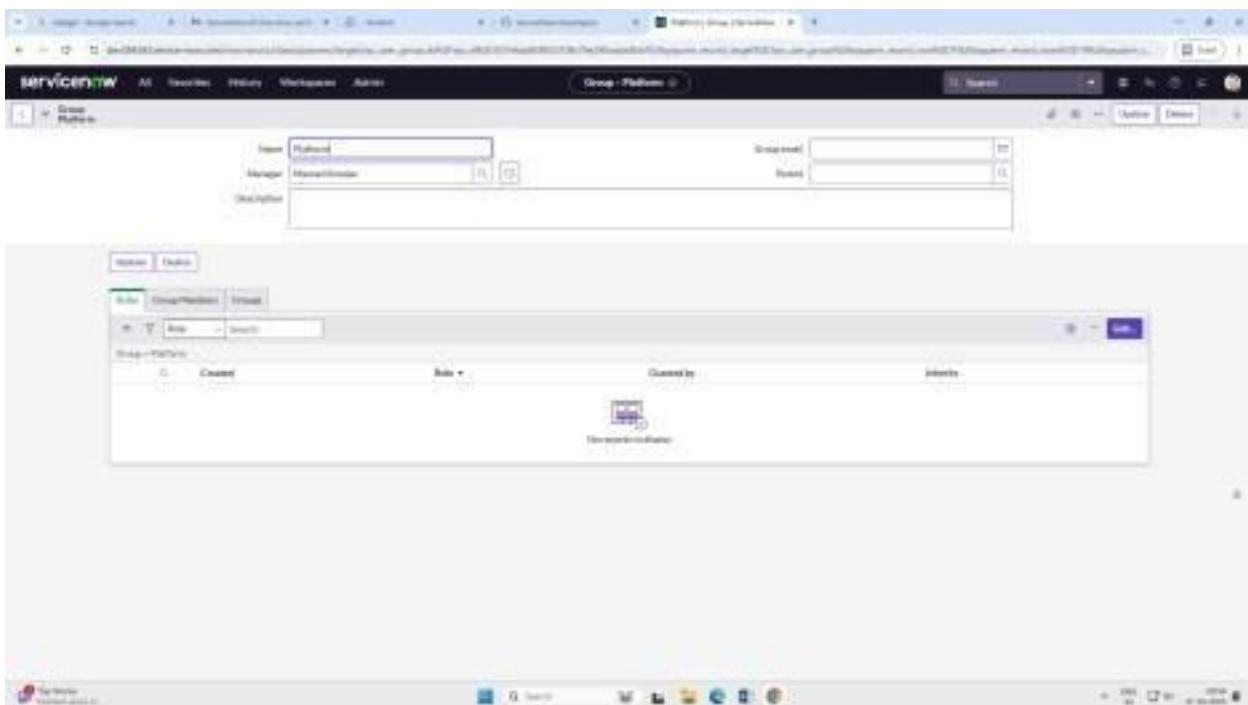
## STEP 1: CREATE USERS

The screenshot shows the ServiceNow interface for creating a new user profile. The top navigation bar includes links for Home, Applications, System, and Help. The main title is "User - Katherine Pierce". The left sidebar has sections for User, Groups, Roles, and Admins. The main content area is titled "Create User Profile" and contains fields for User ID (Katherine.Pierce), First Name (Katherine), Last Name (Pierce), Email (katherine.pierce@example.com), and Password (left blank). There are also fields for Address (Home), Home Phone (+1-555-1234), Work Phone (+1-555-1234), Work Address (Somewhere House, Anytown), Business Address (Business Office, Anytown), and Business Phone (+1-555-1234). A "People" section is present with a "Search for user..." input field. At the bottom, there are tabs for Overview, User Preferences, and Details, along with a "Save" button.

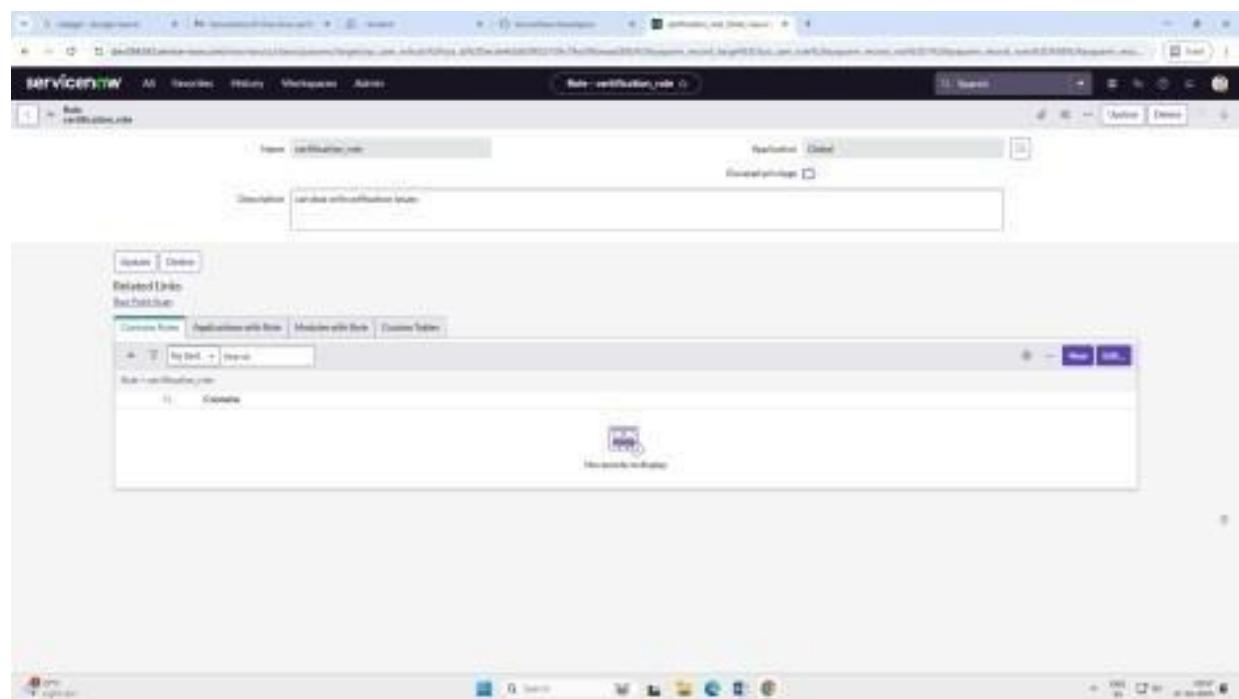


## STEP 2: CREATE GROUPS





## STEP 3: CREATE ROLES

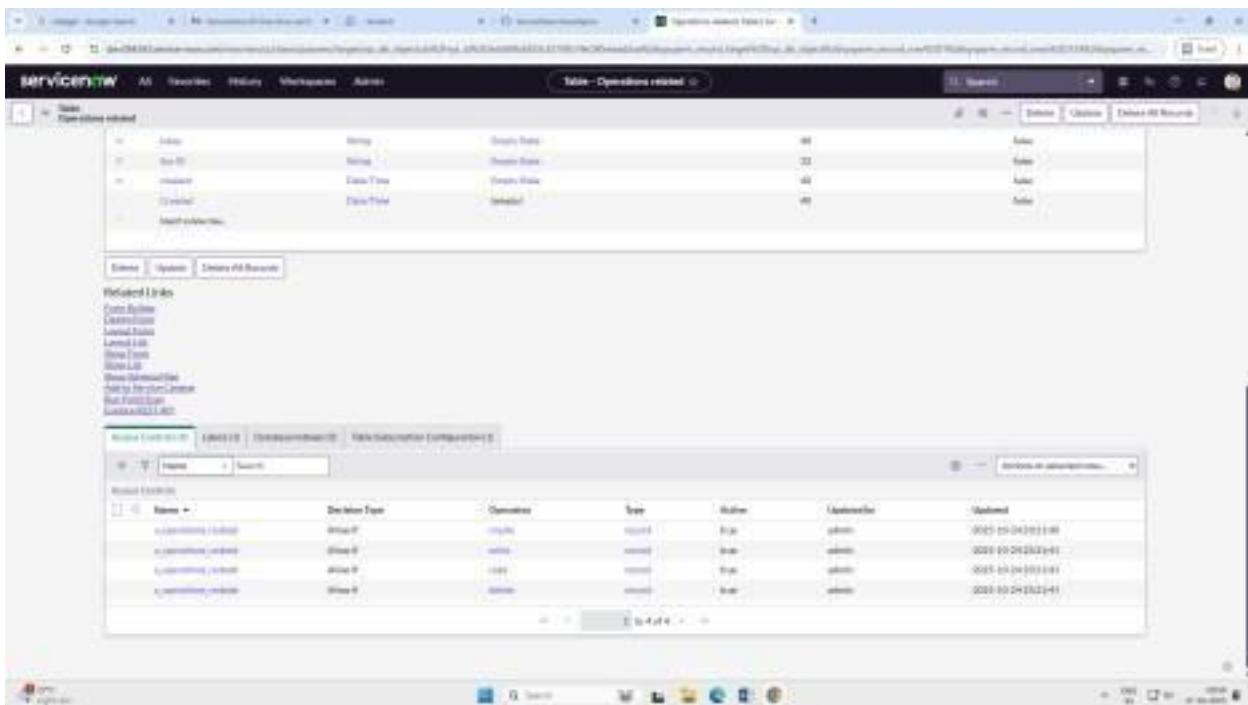




A screenshot of the ServiceNow interface showing a new record creation screen. The title bar says 'Role - Platform role'. The main area has a search bar with 'Platform role' and a 'General privilege' checkbox. Below is a large text input field with placeholder text 'General privilege'. A 'Related Links' section shows 'Role Privileges' and a 'List View' link. A 'Details' tab is selected. At the bottom are 'Save' and 'Cancel' buttons.

## STEP 4: CREATE TABLES

A screenshot of the ServiceNow interface showing the 'Table - Operations related' configuration screen. The title bar says 'Table - Operations related'. The main area shows a table with columns: 'Name' (containing 'Operations related'), 'Description' (empty), 'Activation' (checkbox checked), and 'Last modified' (checkbox checked). Below is a 'List View' section with a table of columns: 'Column label', 'Type', 'Reference', 'Maxlength', 'Default value', and 'Display'. The table lists various fields like 'Category', 'Category ID', 'Category Name', etc., with their respective data types and properties.

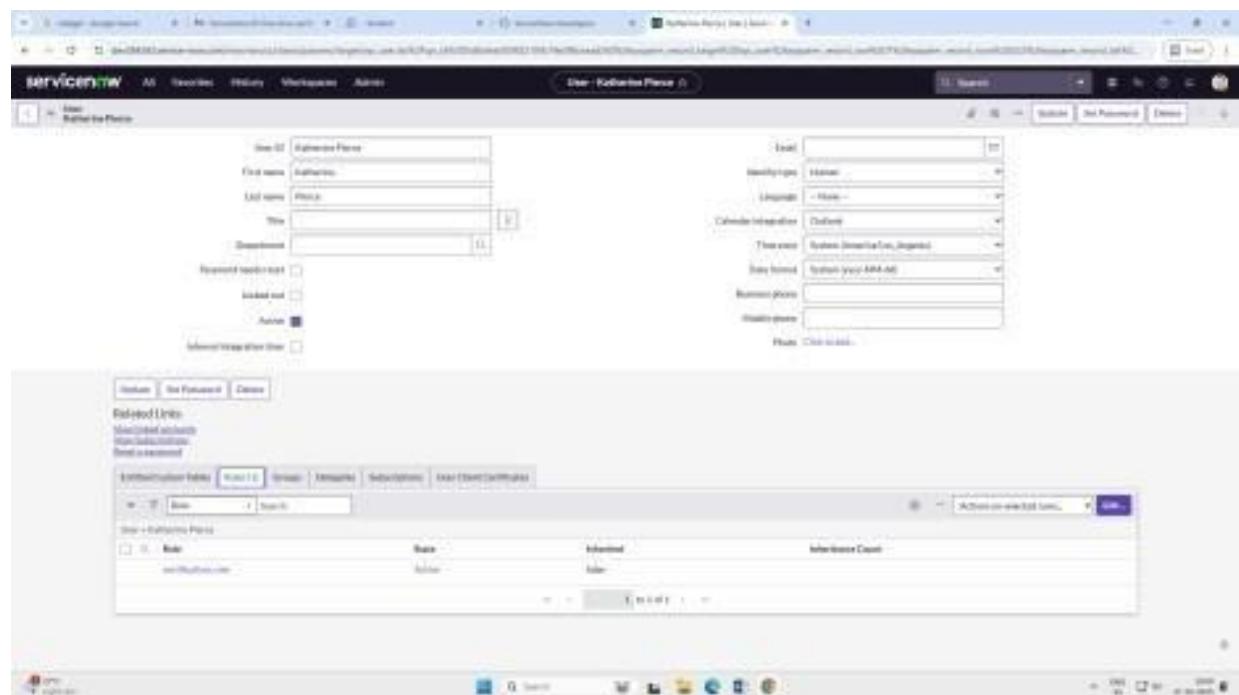


This screenshot shows a ServiceNow interface for managing operations. At the top, there are tabs for 'All', 'Workflows', 'Phases', 'Workspaces', and 'Admin'. The main area displays a table titled 'Table - Operations related' with the following data:

Operation	Name	Description	Owner	Last Update
1	String	String Data	John Doe	0000-00-00 00:00:00
2	Int	Integer Data	Jane Doe	0000-00-00 00:00:00
3	Double	Double Data	John Doe	0000-00-00 00:00:00
4	Date/Time	Date/Time Data	Jane Doe	0000-00-00 00:00:00
5	Boolean	Boolean Data	John Doe	0000-00-00 00:00:00

Below the table, there are buttons for 'Create', 'Update', and 'Delete All Records'. A 'Related Units' section lists various system components like 'Custom Fields', 'List View', 'Layout', etc. At the bottom, there is a search bar and a table titled 'Related Events (4)'.

## STEP 5: ASSIGN ROLES & USERS TO GROUPS



This screenshot shows a ServiceNow interface for creating a new user profile. The top navigation bar includes 'All', 'Workflows', 'Phases', 'Workspaces', and 'Admin'. The main area shows a 'User - Katherine.Perez' form with the following fields:

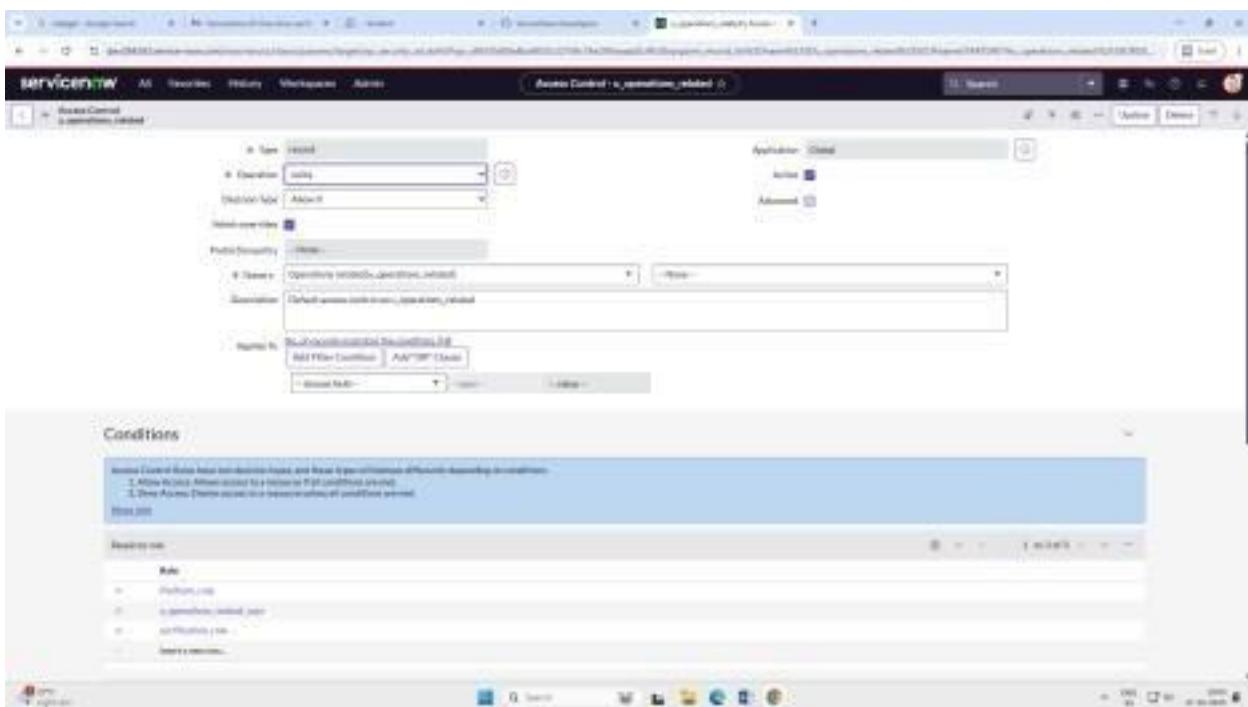
User ID: Katherine.Perez	First name: Katherine	Last name: Perez	Title: null	Department: null
Required password: <input type="checkbox"/>	Locked out: <input type="checkbox"/>	Active: <input checked="" type="checkbox"/>	Informed about this user: <input type="checkbox"/>	
		Email: katherine.perez@now.com Identity type: Human Language: English Calendar integration: Default Time zone: System Default Time, Argentina User group: System Group KMA-AM Business phone: null Home phone: null Photo: Click to upload...		

Below the form, there is a 'Related Units' section and a table titled 'Assignment Rule'.

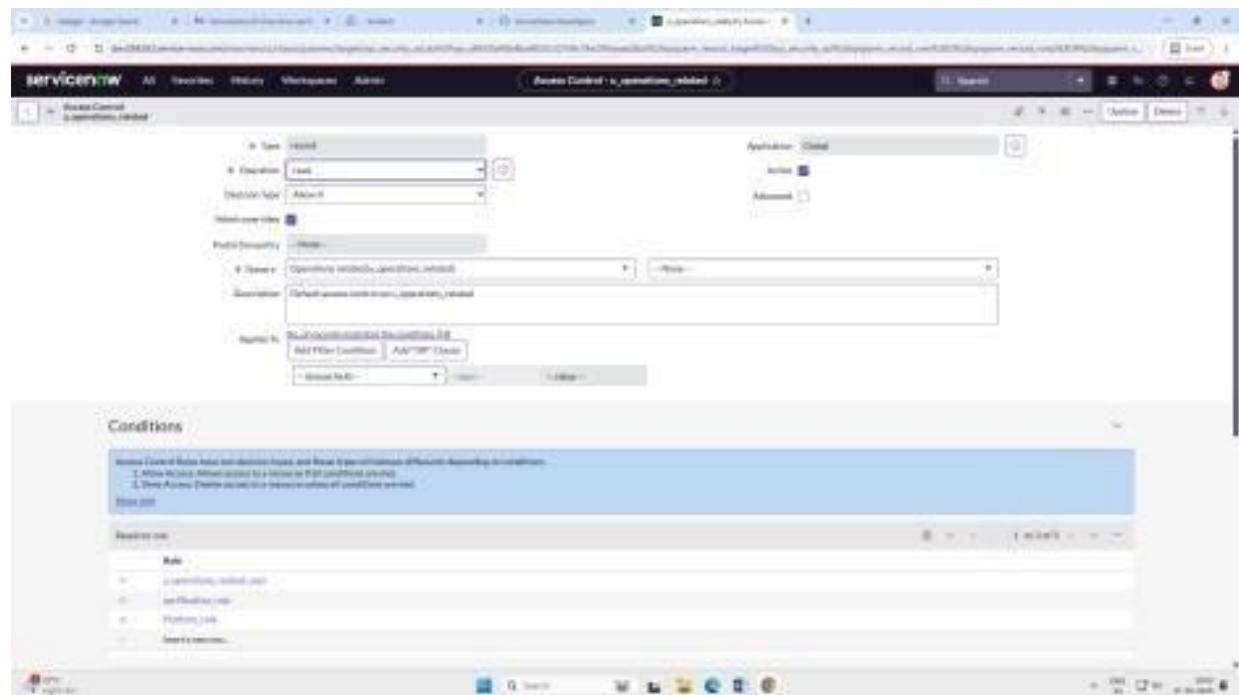
A screenshot of the ServiceNow User - Create New User interface. The page shows fields for User ID, First name, Last name, Title, Department, and various contact details like Email, Home phone, and Business phone. Below the main form, there is a "Related Units" section and a "Role Assignment" table where roles can be assigned to the user.

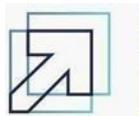
## STEP 6: ASSIGN ROLES TO TABLE

A screenshot of the ServiceNow Access Control - Assign Roles to Table interface. It shows a table with columns for Role, Name, and Action. A "Role Assignment" section below the table lists "Opportunities" and "Opportunity Line Items" under "Name" and "Add". A "Conditions" section at the bottom contains a note about access rules and a "Run Access" button. A "Run Access" table at the bottom lists "Role", "Opportunity", "Added", and "Run Access" status.



## STEP 7: CREATE ACL





## STEP 8: FLOW & OUTPUTS

The screenshot shows the Microsoft Flow editor interface. At the top, there's a navigation bar with tabs like 'My flows', 'Create', 'Recent', and 'Shared'. Below the header, the main area has a title 'Regarding Certificate...' and a 'DESCRIPTION' button. The flow itself is divided into sections: 'TRIGGER' (a 'Compliance-based trigger' for 'Identity & Access - Identity' events), 'ACTIONS' (an 'Update application-related Record' step with 'Azure AD B2B' selected), and 'ERROR HANDLER' (a placeholder for error handling). On the right side, there are two panes: 'DATA' (with sections for 'Identity & Access', 'Azure Active Directory', and 'Azure AD B2B') and 'POLLING' (with sections for 'Identity & Access' and 'Azure Active Directory').



The screenshot shows the Microsoft Flow designer interface. The top navigation bar includes 'File', 'New', 'Recent', 'My flows', 'Search', 'Help & support', and 'Logout'. Below the navigation is a search bar with the placeholder 'Search flows, connectors, or templates...'. The main area features a flow titled 'Regarding Platform' with the following steps:

- TRIGGER:** 'Open an email (Outlook)' with the condition 'Message subject contains "Re: Regarding Platform"'.
- ACTIONS:**
  - 'Update campaign contact record' with the condition 'Is empty'.
  - 'Add to activity stream (Log to Twitter)'.
- ERROR HANDLER:** 'If an error occurs in your flow, the activity you added here will run'.

On the right side, there are sections for 'DATA' (including 'Email variables' and 'Record variables') and 'LOGS' (with a table showing the flow's execution history).



**Outcome :**

The project successfully automates the entire ticket assignment process, reducing manual workload and improving service efficiency. It ensures that each ticket is handled by the right team, minimizes delays, and maintains SLA compliance. The automation enhances productivity, transparency, and customer satisfaction by providing real-time updates and balanced task distribution among agents.

**Conclusion:**

The project “Streamlining Ticket Assignment for Efficient Support Operations” effectively demonstrates how automation can improve IT service management using the ServiceNow platform. By eliminating manual ticket routing, it ensures faster resolution times, efficient workload management, and consistent service quality. This implementation showcases the power of workflow automation and smart assignment logic in achieving operational excellence and better end-user experience.