INTRODUCTION

In today's fast-moving world, providing quick and helpful customer support is very important. One common challenge for support teams is assigning incoming tickets to the right people. When ticket assignment is done manually or without clear rules, it can cause delays, mistakes, and slow customer service.
Making ticket assignment faster and more organized helps teams work better. It ensures tickets go to the right agents quickly, based on their skills and availability. Using automated routing and smart rules can improve response times, make teams more productive, and help solve customer problems faster.

Project overview:

1. This project aims to improve how support teams handle and assign incoming tickets.
2. Currently, manual ticket assignment can lead to delays mistakes, and frustrated customers.
3. By streamlining the process, tickets will be automatically sent to the right agents.
4. This ensures faster responses and better use of team skills and time
5. The project will use rules, automation, and smart workflows to manage assignments.
6. It will help balance workloads and reduce pressure on individual team members.
7. As a result, customers will receive quicker and more accurate Support
8. Overall, the project will make support operations more efficient and reliable

Purpose:

The purpose of this project is to make ticket assignment faster and easier for support teams. Many companies still assign tickets manually, which can cause delays, mistakes, and slow service. This project will help by automatically sending each ticket to the right agent based on their skills and workload.
It will make sure tickets are handled quickly and fairly, so no agent is too busy while others have less work. Automatic ticket assignment will help the team work better and solve customer problems faster. In the end, this project will create a smoother support process and improve customer service.

IDEATION PHASE

Problem statement:

ABC Corporation, a leading technology company, was facing challenges with efficiently assigning support tickets to the appropriate teams. With a vast array of products and services, the support team found it increasingly difficult to manually route tickets to the right groups, leading to delays in issue resolution and customer dissatisfaction.

Objective:

The objective of this initiative is to implement an automated system for ticket routing at ABC Corporation, aimed at improving operational efficiency by accurately assigning support tickets to the appropriate teams. This solution aims to reduce delays in issue resolution, enhance customer satisfaction, and optimize resource utilization within the support department.

1. The system will quickly route tickets to the right teams, helping to solve issues faster and reduce waiting time.
2. It will improve customer satisfaction by ensuring that customers get faster and more accurate responses to their problems.
3. The automated system will help balance workloads among support teams, making better use of available staff and resources.

REQUIREMENT ANALYSIS

Solution Requirement:

Date	**04-11-2025**
Team id	NM2025TMID00191
Project name	Streamlining ticket assignment for efficient support operations
Maximum marks	

Functional requirements:
Following are the functional requirements of the proposed solution

FR NO.	**Functional requirements(milestones)**	**Sub requirements (sub milestones)**
FR-1	USERS	Create Users create users (manne niranjan and Katherine pierce)
FR-2	GROUPS	Create Groups. create groups (certificates and platform group)
FR-3	ROLES	Create Roles create Roles (certificates role and platform role)
FR-4	TABLE	Create Table create table (operations related) and add the data

FR-5	ASSIGN ROLES&USER GROUPS	• Assign roles & users to Certificate group • Assign roles & users to platform group
FR-6	ASSIGN ROLE TO TABLE	Assign role to table add group members and roles
FR-7	CREATE ACL	Create ACL insert new roles in read the write operations
FR-8	FLOW	✞ Create a Flow to Assign operation & Ticket group ✞ Create a Flow to Assign operation & Ticket to platform group
FR-9	CONCLUSION	Streamlining Ticket Assignment in service now improves support operations

Non-functional Requirements:

Following are the non-functional Requirements of proposed solution

FR NO.	NON-FUNCTIONAL REQUIREMENTS	DESCRIPTION
NFR-1	USABILITY	makes support operations faster by sending each issue to the right team quickly. It helps reduce mistakes by matching tickets with the right experts.
NFR-2	SECURITY	helps keep support data secure by limiting who can see and handle each ticket. This protects customer privacy and builds trust in the support process.
NFR-3	RELIABILITY	ensures tickets are consistently directed to the right teams, reducing errors and delays. This reliability helps support teams solve issues faster and more effectively
NFR-4	PERFORMANCE	improves performance by speeding up how quickly issues reach the right team. This leads to faster problem resolution and better overall support efficiency.

NFR-5	AVAILABILITY	Streamlining ticket assignment ensures support teams are always ready to handle incoming issues without delay. This improves availability and helps customers get help whenever they need it.
NFR-6	SCALABILITY	allows the support system to handle more requests as the company grows. This makes it easy to add new teams and manage higher ticket volumes without slowing down.

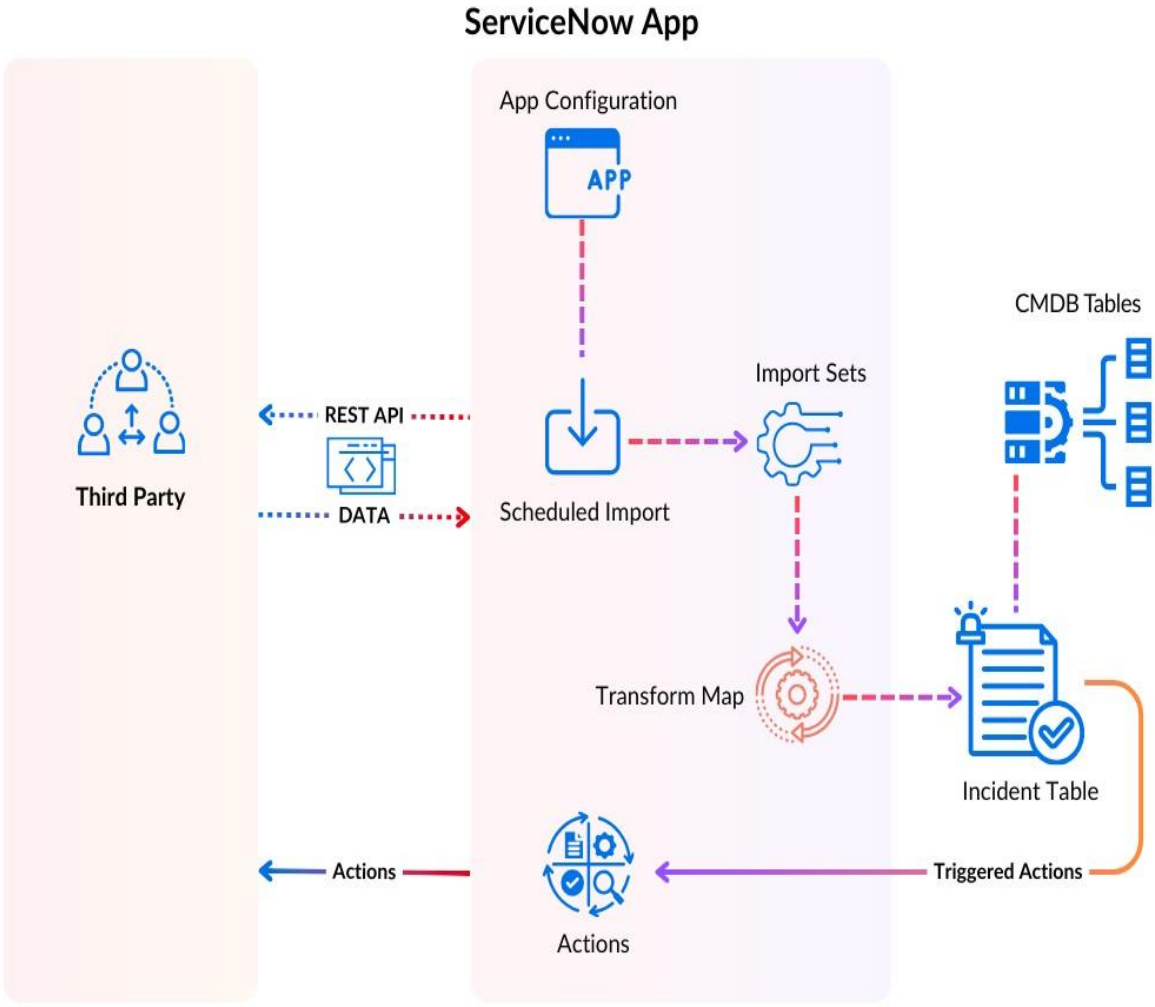
Data flow Diagram:

TABLE

CREATE ACL

FLOW

Technology stack:



PROJECT DESIGN:

Proposed solution:

SI.NO	PARAMETER	DISCRIPTION
1	Problem statement (problem to be solved)	Manual ticket assignment is slow and inefficient, causing delays and lower customer satisfaction. We need a faster, automated way to assign tickets to the right support agents based on their skills, workload, and ticket priority.
2	Idea/solution description	Use an automated ticket assignment system that quickly matches incoming tickets to the right support agents based on their skills, availability, and ticket priority. This will speed up response times, balance workloads, and improve customer satisfaction
3	Noveity/uniqueness	The unique aspect of this solution is the smart, automated matching of tickets to agents using real-time data like skills, workload, and ticket priority. Unlike basic assignment methods, it can adapt instantly to changes, ensuring faster, fairer, and more accurate ticket distribution.
4	Social impact/customer satisfaction	helps customers get faster, more accurate support, which increases their satisfaction and trust in the service. It also reduces stress and overload for support agents, creating a better work environment and improving overall team performance.
5	Business model/revenue model)	The solution can be offered as a subscription-based software (SaaS), where businesses pay monthly or yearly fees based on the number of users or tickets handled. Additional revenue can come from premium features like advanced reporting, AI-based routing, and system customization.
6	scalability of the solution	The solution can easily grow with the business by handling more tickets, agents, and support teams without losing speed or accuracy. It can be used by small teams or large organizations and can integrate with existing support tools to support future expansion.

STREAMLINING TICKET ASSIGNMENT FOR EFFICIENT SUPPORT OPERATIONS

MILESTONE -1 USERS

ACTIVITY 1:create Users

PURPOSE:

User creation helps set up profiles for support agents with their skills, availability, and roles. This makes it easier to quickly assign tickets to the right person, improving support speed and customer satisfaction.

USES

User creation saves key details about each support agent, like their skills and availability. This helps the system quickly assign tickets to the right agent, making support faster and more efficient

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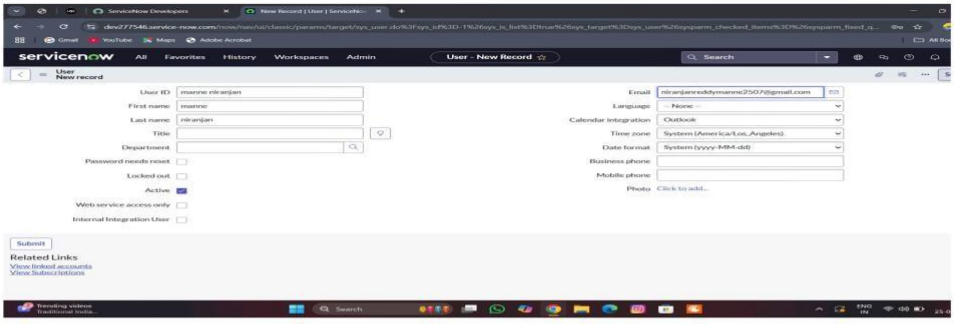
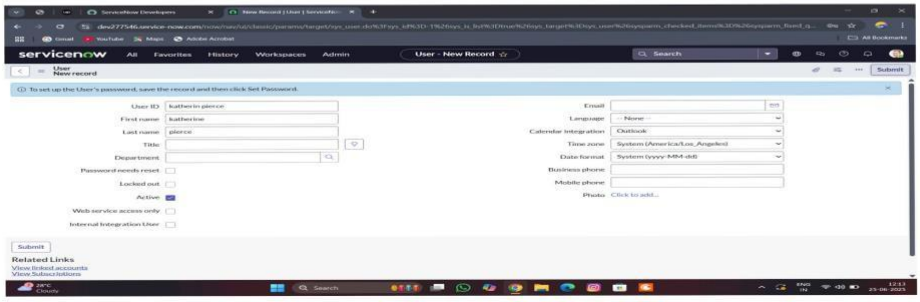
STEPS:

1.Open service now.
2.Click on All >> search for user
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

PURPOSE:

Group creation helps organize support agents into teams based on their skills, departments, or ticket types. This makes it easier to assign tickets to the right team, improving ticket handling speed and ensuring the right experts work on the right issues.

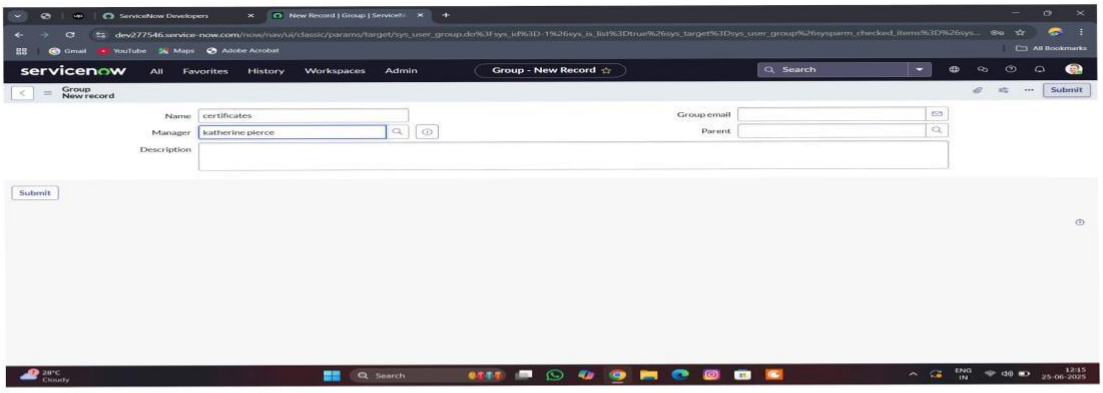
USES:

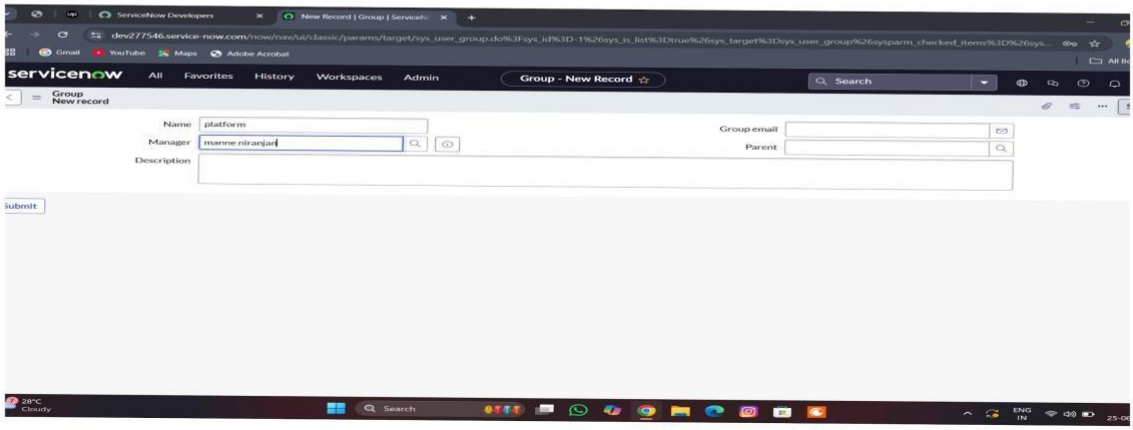
Group creation helps organize support agents into teams based on skills or departments. This makes it easier to quickly assign tickets to the right team, improving support speed, workload balance, and overall efficiency.

STEPS:

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
Create one more Group
7.Create another group with the following details
8.Click on submit





MILESTONE -3 ROLES

ACTIVITY 1: Create Roles

PURPOSE:

Roles creation defines what each user can do in the system, such as managing tickets, handling specific tasks, or overseeing teams. It helps control access, organize responsibilities, and ensure the right people have the right permissions to keep the support process smooth and secure.

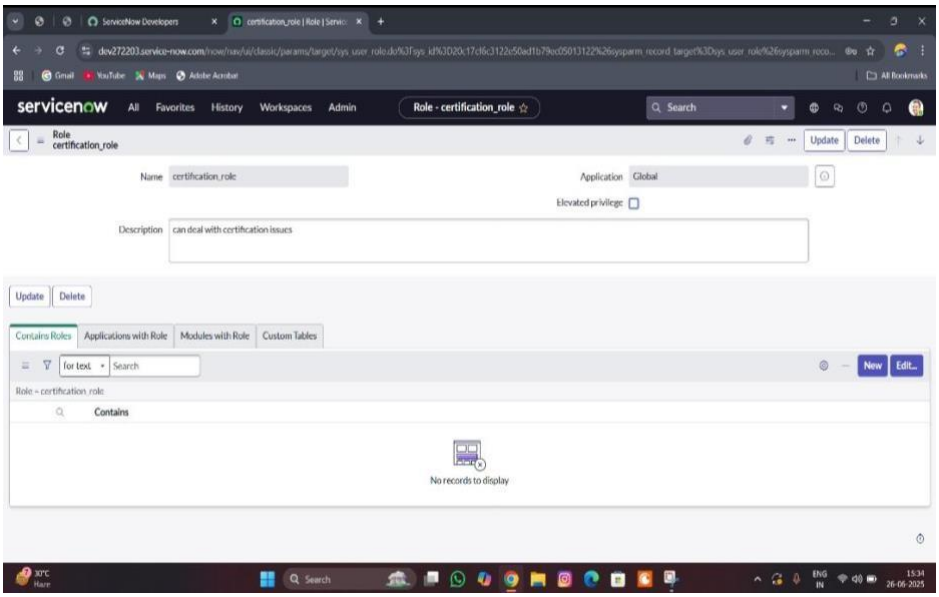
USES:

Roles creation helps assign specific permissions and responsibilities to each user. It ensures that agents, team leads, and managers can only access the features they need, making the ticket assignment process organized, secure, and efficient.

STEPS:

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 Creating Table

PURPOSE:

Table creation is used to store, organize, and display important data like user details, ticket information, groups, and roles in a clear and structured way. This helps the system easily manage and track tickets, making the assignment process faster, more accurate, and easier to control.

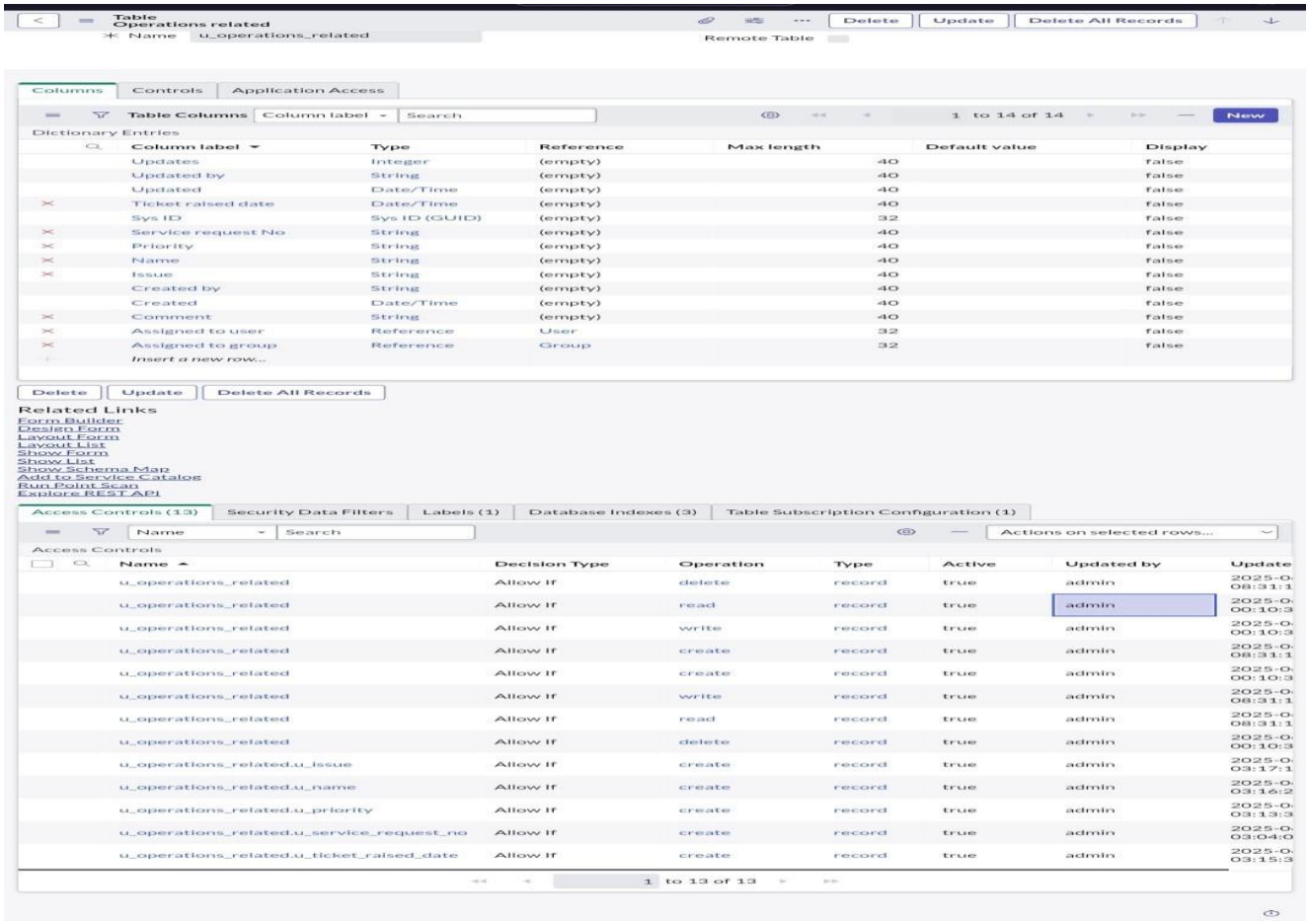
USES:

Table creation helps store and organize data like users, tickets, groups, and roles. It makes it easy to manage, track, and quickly assign tickets to the right agents or teams.

STEPS:

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 : Operations related
Check the boxes Create module & Create mobile module
6.Under new menu name : Operations related
7.Under table columns give the columns
8.Click on submit
Create choices for the issue filed by using form design
Choices are

*unable to login to platform
* 404 error
*regarding certificates
*regarding user expired



MILESTONE -5 ASSIGN ROLES & USERS TO GROUP

ACTIVITY-1 Assign roles & users to certificate group

PURPOSE:

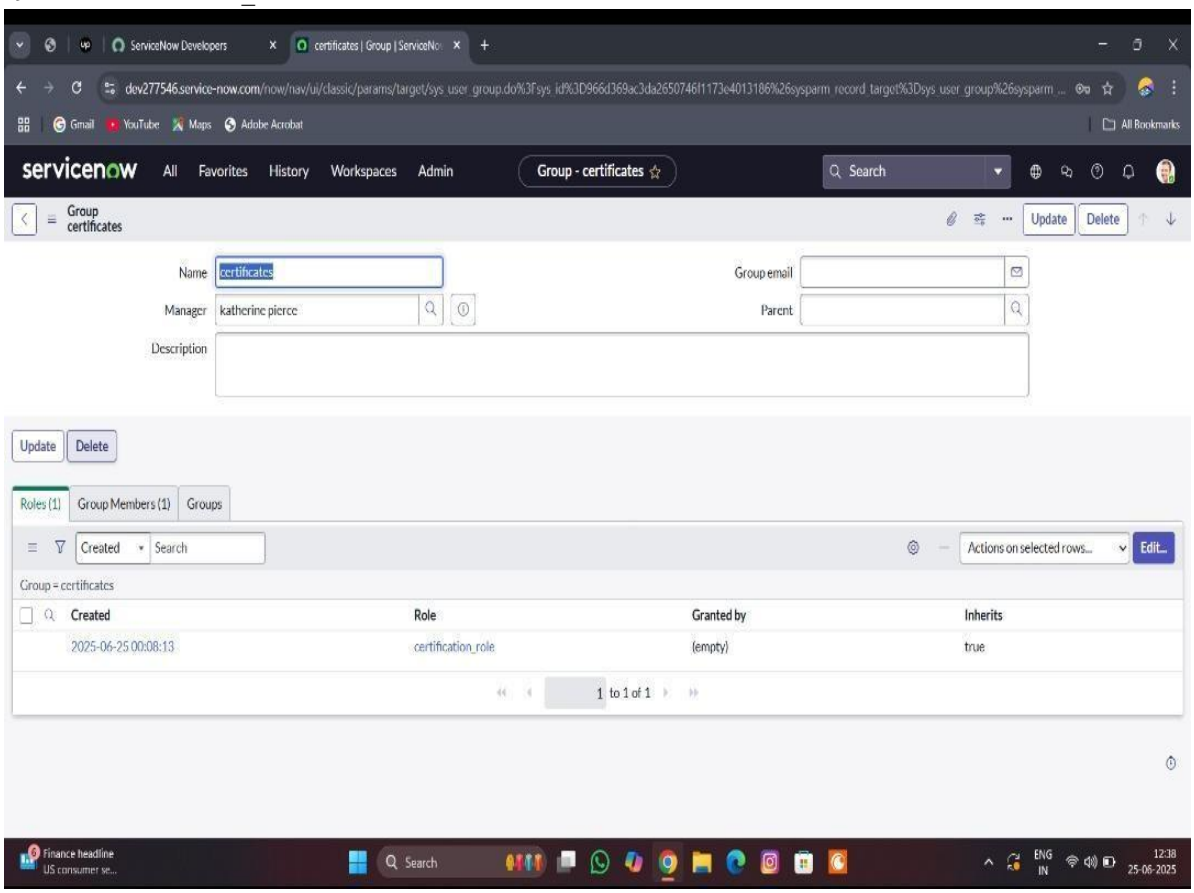
Assigning roles and users to a certificate group helps make sure the right people handle the right tickets. It ensures tickets go to qualified agents quickly and safely.

USES:

It helps the system automatically send specific tickets to the right certified agents or teams, making ticket assignment faster, more accurate, and handled by qualified people.

STEPS:

1.Open service now.
2.Click on All >> search for tables
3.Select tables under system definition
4.Select the certificates group
5.Under group members
6.Click on edit
7.Select Katherine Pierce and save
8.Click on roles
9.Select Certification_role and save



ACTIVITY -2 Assign roles & users to platform group

PURPOSE:

Assigning roles and users to a platform group helps organize agents based on the platforms or tools they support. This ensures tickets related to specific platforms are quickly assigned to the right experts, improving accuracy and response time

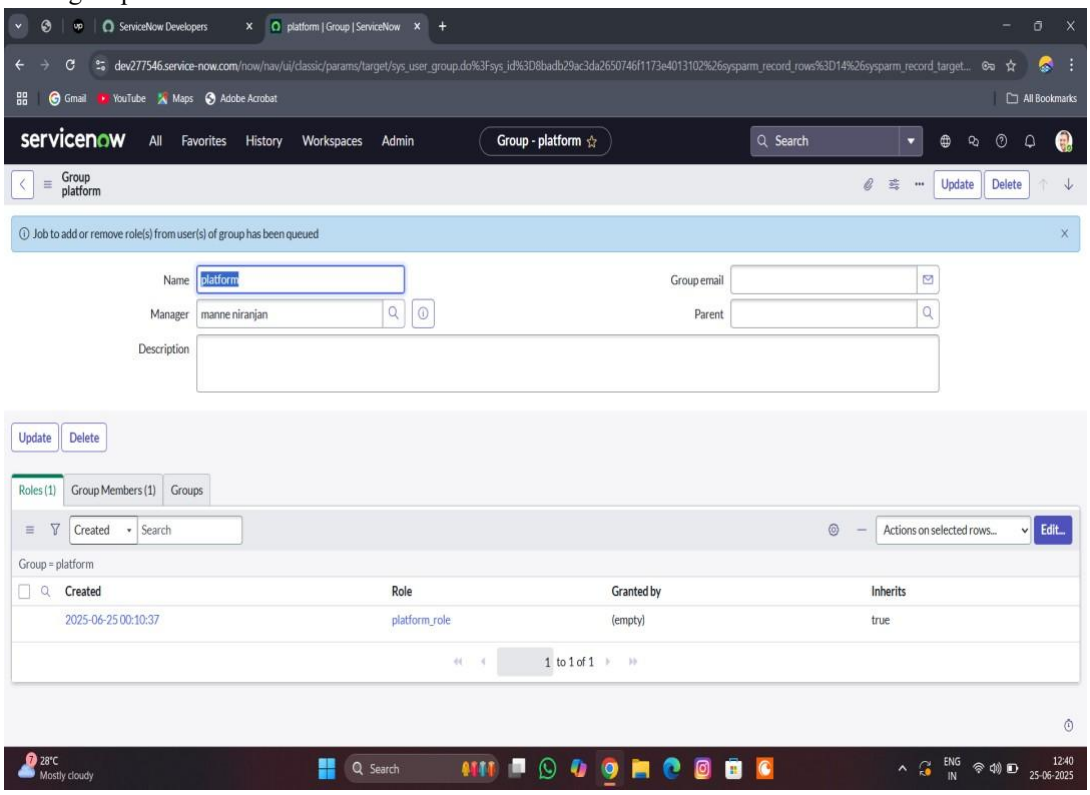
USES:

It helps the system automatically send platform-specific tickets to the right agents who are trained for that platform, making ticket assignment faster, more accurate, and efficient.

T shirt

STEPS:

1.Open service now.
2.Click on All >> search for tables
3.Select tables under system definition
4.Select the platform group
5.Under group members
6.Click on edit
7.Select Manne Niranjan and save
8.Click on role
9.give platform role and save



MILESTONE-6 ASSIGN ROLE TO TABLE

ACTIVITY-1 Assign role to table

PURPOSE:

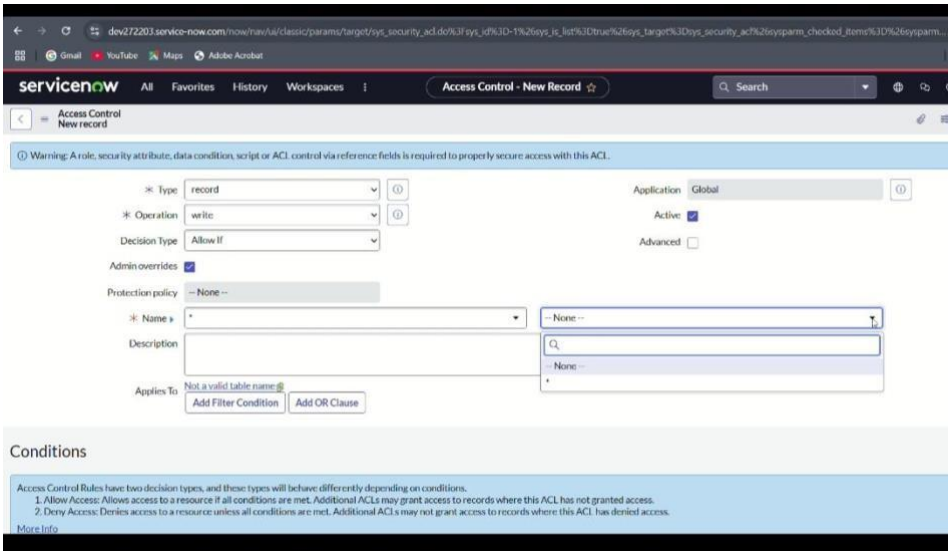
Assigning roles to a table helps control who can view, edit, or manage the information in that table. It ensures that only the right users with proper permissions can access or update ticket, user, or group data, keeping the system organized, secure, and efficient.

USES:

It controls who can see or update the table data, making sure only the right people can manage tickets, users, or groups. This keeps the ticket assignment process safe, organized, and efficient.

STEPS:

1.Open service now.
2.Click on All >> search for tables
3.Select operations related table
4.Click on the Application Access
5.Click on u_operations_related read operation
6.Click on the profile on top right side
7.Click on elevate role
8.Click on security admin and click on update
9.Under Requires role
10.Double click on insert a new row
11.Give platform role
12.And add certificate role
13.Click on update
14. Click on u_operations_related write operation
15.Under Requires role
16.Double click on insert a new row
17.Give platform role
18.And add certificate role



MILESTONE-7 CREATE ACL

ACTIVITY-1 Create ACL

PURPOSE:

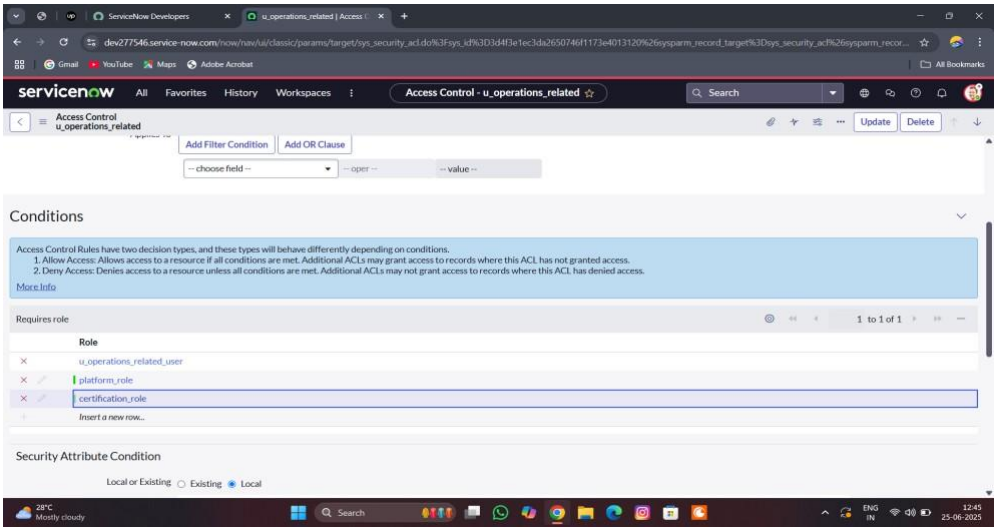
Creating an ACL (Access Control List) helps set rules about who can view, create, edit, or delete specific data. This keeps the ticket assignment process secure by making sure only authorized users can access or change important information.

USES:

Creating an ACL helps control user access to tickets, tables, and other system data. It makes sure only the right people can view or update information, keeping the ticket assignment process secure and well-managed.

STEPS:

1.Open service now.
2.Click on All >> search for ACL
3.Select Access Control(ACL) under system security
4.Click on new
5.Fill the following details to create a new ACL
6.Scroll down under requires role
7.Double click on insert a new row
8.Give admin role
9.Click on submit
10.Similarly create 4 acl for the following fields



MILESTONE -8 FLOW

ACTIVITY-1 Create a Flow to Assign operations ticket to group

PURPOSE:

Purpose of Creating a Flow to Assign Operations Ticket to Group: The purpose is to automate the process of directing operations-related tickets to the right support group.

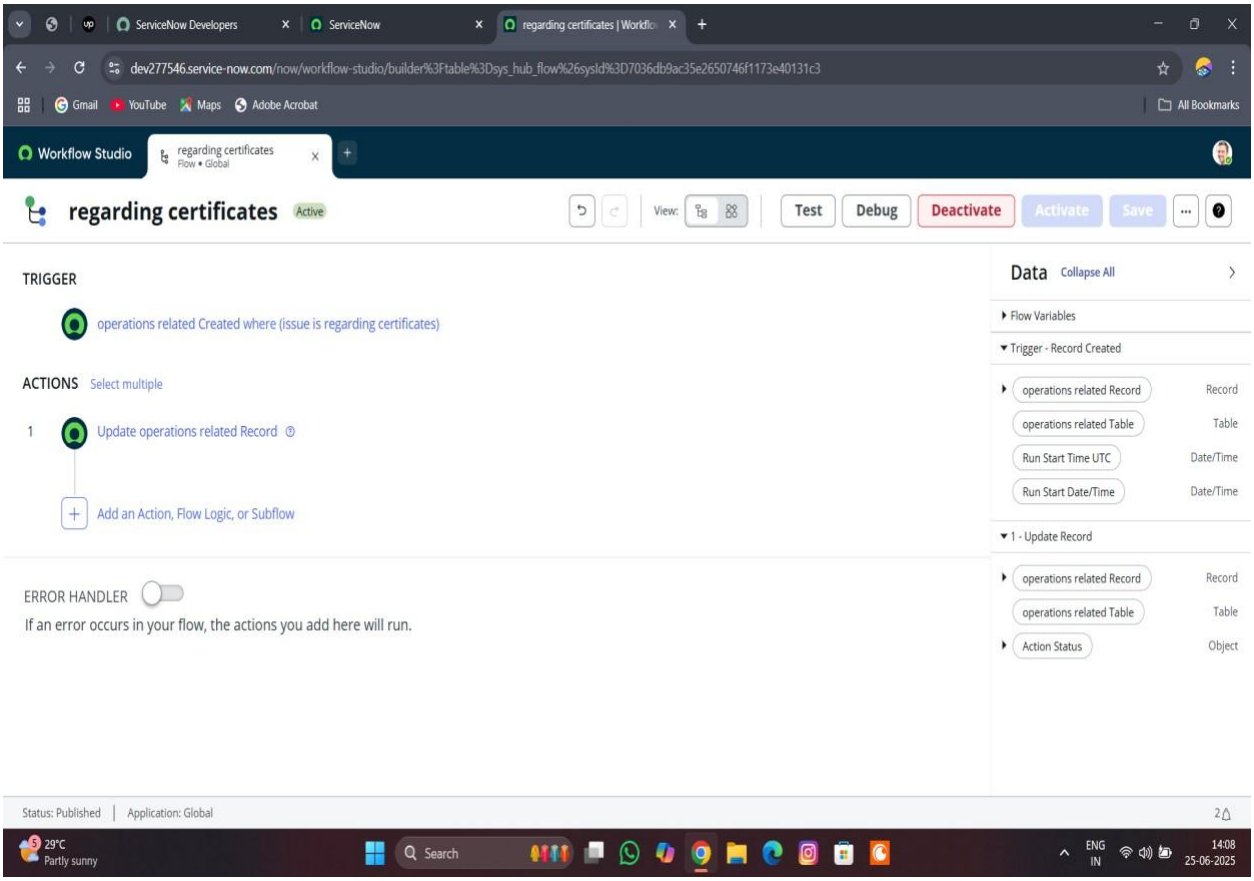
USES:

It automatically routes operations tickets to the correct group, speeding up ticket handling and improving support efficiency.

STEPS:

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 " Regarding Certificate".
6.Application should be Global.
7.Select Run user as " System user " from that choice.
8.Click on Submit.

1.Click on Add a trigger
2.Select the trigger in that Search for "create or update a record" and select that.
3.Give the table name as " Operations related ".
4.Give the Condition as
Field : issue
Operator : is
Value : Regrading Certificates
5.After that click on Done
6.Now under Actions.
7.Click on Add an action.
8.Select action in that search for " Update Record ".
9.In Record field drag the fields from the data navigation from left side
10.Table will be auto assigned after that
11.Give the field as " Assigned to group "
12.Give value as " Certificates "
13.Click on Done.
14.Click on Save to save the Flow.
15.Click on Activate.



ACTIVITY-2 Create a Flow to Assign operations ticket to Platform

PURPOSE:

To automatically assign operations tickets to the right platform experts, ensuring faster and accurate support.

USES:

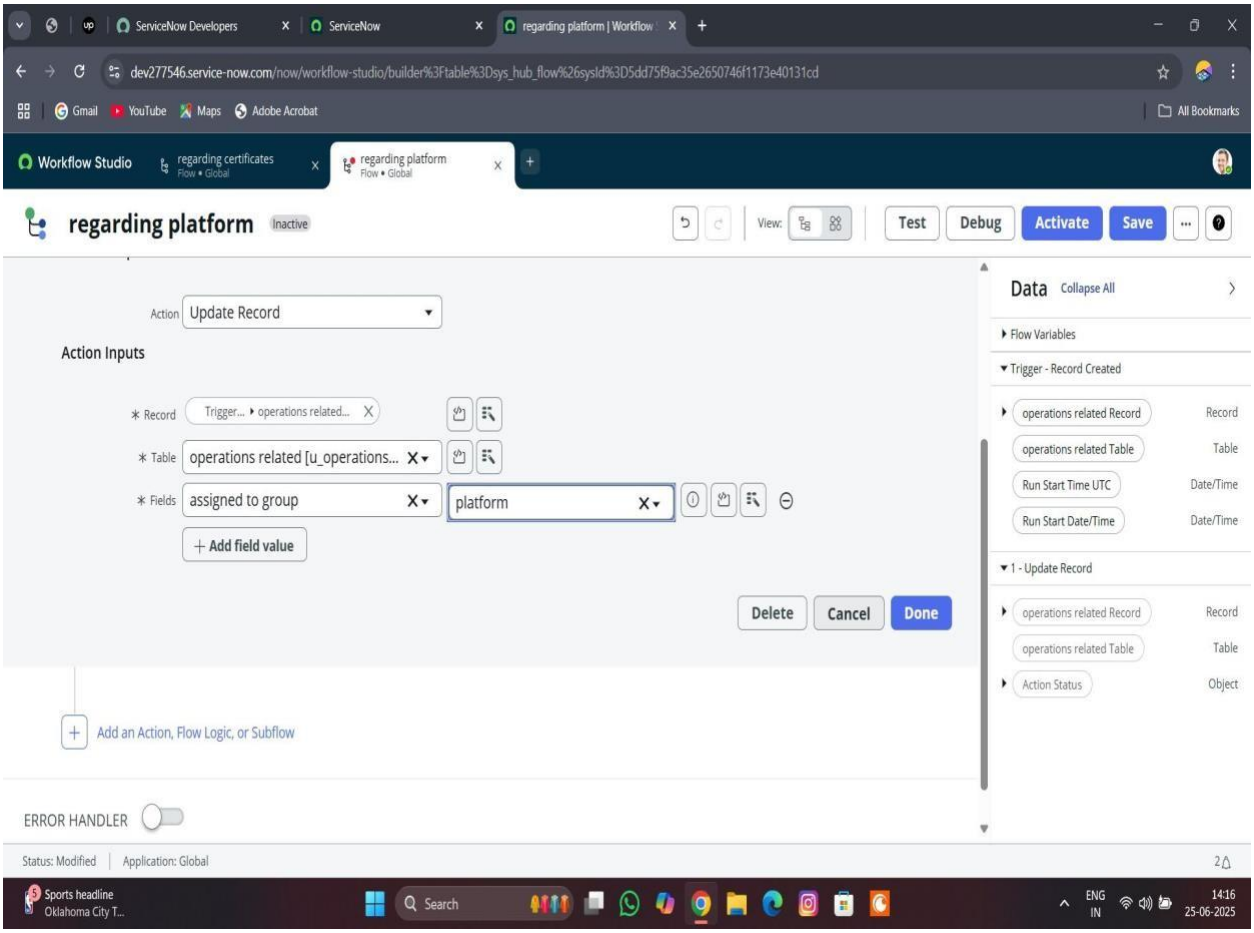
It routes operations tickets to the correct platform specialists automatically, improving response time and support accurate

STEPS:

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 " Regarding Platform ".
6.Application should be Global.
7.Select Run user as " System user " from that choice.
8.Click on Submit.

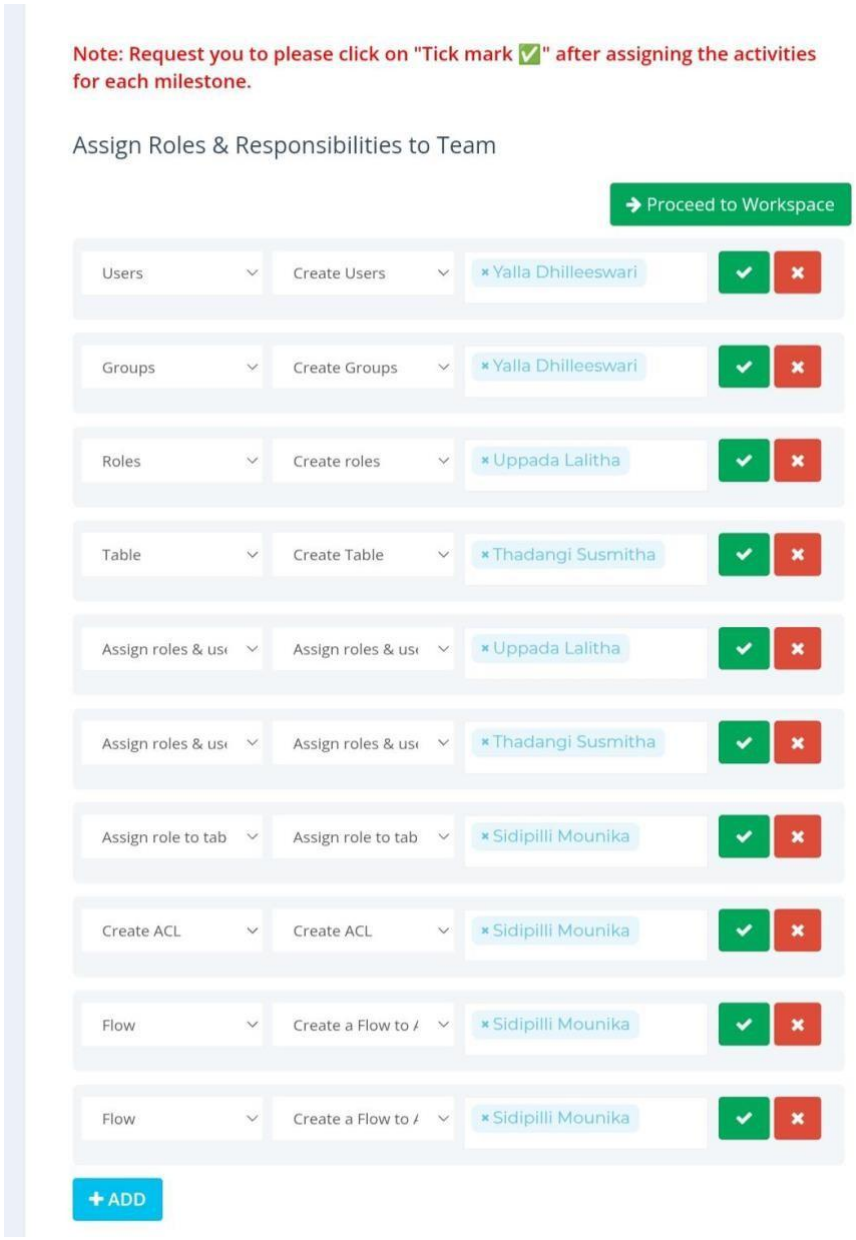
1.Click on Add a trigger
2.Select the trigger in that Search for "create or update a record" and select that.
3.Give the table name as " Operations related ".

4.Give the Condition as
Field : issue
Operator : is
Value : Unable to login to platform
5.Click on New Criteria
Field : issue
Operator : is
Value : 404 Error
6.Click on New Criteria
Field : issue
Operator : is
Value : Regrading User expired
7.After that click on Done.
8.Now under Actions.
9.Click on Add an action.
10.Select action in that search for " Update Record ".
11. In Record field drag the fields from the data navigation from left side
12.Table will be auto assigned after that
13.Give the field as " Assigned to group ". 14.Give
value as " Platform "
15.Click on Done.
16.Click on Save to save the Flow.
17.Click on Activate.



PROJECT PLANNING & SCHEDULING:

Assigned task to the group members are shown below



Functional requirements	User story	No.of activities	Team members

Users	As an admin,I want to create user profiles with details like name, skills, availability, and role,So that the system can automatically assign tickets to the right support agents quickly and accurately.	1	Y.dhilleeswari
Groups	As an admin,I want to create groups based on skills, departments, or ticket types,So that tickets can be quickly assigned to the right team for faster and more efficient support.	1	Y.dhilleeswari
Roles	As an admin,I want to create roles with specific permissions and responsibilities,So that users can access only the features and data they need to perform their tasks efficiently and securely.	1	U.lalitha
Tables	As an admin,I want to create tables to store and organize data like users, groups, roles, and tickets,So that the system can easily manage and quickly access the information needed for efficient ticket assignment.	1	T.susmitha
Assign roles & users to groups	As an admin,I want to assign specific roles and users to appropriate groups,So that tickets can be automatically routed to the right teams and handled by qualified agents quickly and efficiently.	2	U.lalitha
Assign role to table	As an admin,I want to assign specific roles to tables,So that only authorized users can view, edit, or manage the data, ensuring secure and organized ticket assignment operations.	1	T.susmitha
Create ACL	As an admin,I want to create Access Control Lists (ACLs) that define who can access or modify different parts of the system,So that ticket assignment and support data remain secure and only authorized users can make changes	1	S.Mounika
Flow	As an admin,I want to create automated workflows that guide how tickets are assigned and processed,So that tickets move smoothly to the right agents or teams without delays, improving support efficiency.	2	S.Mounika

FUNCTIONAL AND PERFORMANCE TESTING

MILESTONE -8 FLOW

ACTIVITY-1 Create a Flow to Assign operations ticket to group

PURPOSE:

Purpose of Creating a Flow to Assign Operations Ticket to Group: The purpose is to automate the process of directing operations-related tickets to the right support group.

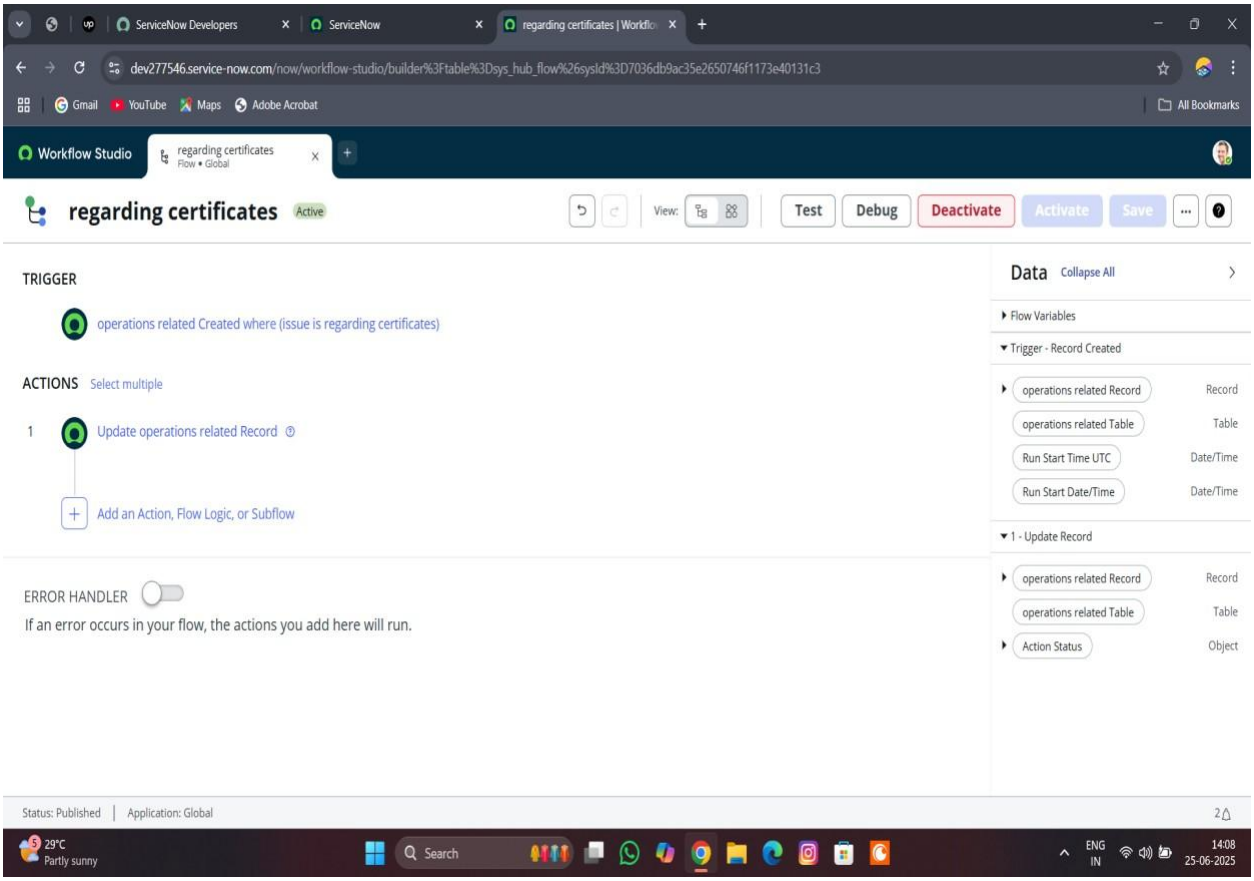
USES:

It automatically routes operations tickets to the correct group, speeding up ticket handling and improving support efficiency.

STEPS:

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 " Regarding Certificate".
6.Application should be Global.
7.Select Run user as " System user " from that choice.
8.Click on Submit.

1.Click on Add a trigger
2.Select the trigger in that Search for "create or update a record" and select that.
3.Give the table name as " Operations related ".
4.Give the Condition as
Field : issue
Operator : is
Value : Regrading Certificates
5.After that click on Done
6.Now under Actions.
7.Click on Add an action.
8.Select action in that search for " Update Record ".
9.In Record field drag the fields from the data navigation from left side
10.Table will be auto assigned after that
11.Give the field as " Assigned to group "
12.Give value as " Certificates "
13.Click on Done.
14.Click on Save to save the Flow.
15.Click on Activate.



ACTIVITY-2 Create a Flow to Assign operations ticket to Platform

PURPOSE:

To automatically assign operations tickets to the right platform experts, ensuring faster and accurate support.

USES:

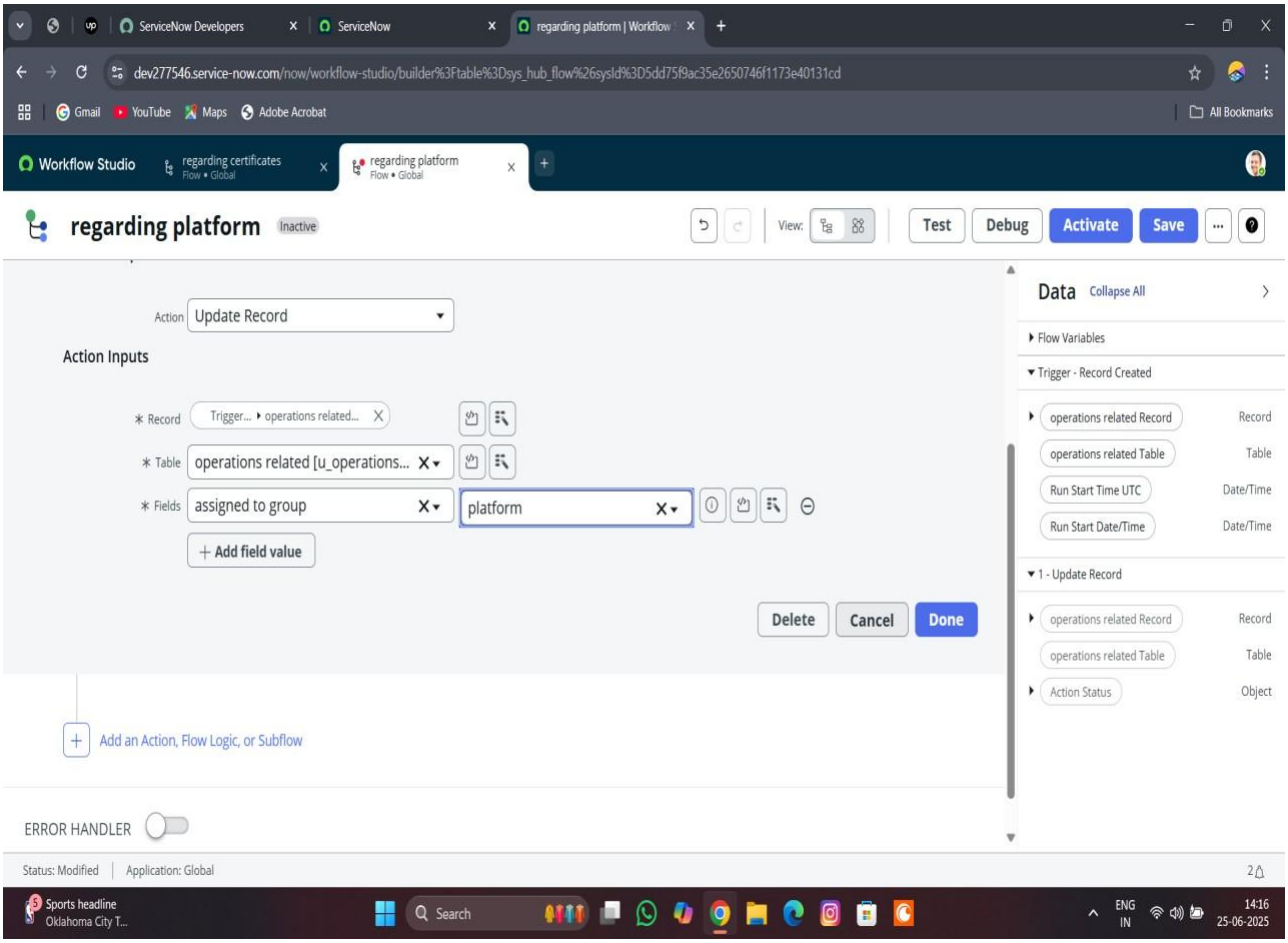
It routes operations tickets to the correct platform specialists automatically, improving response time and support accurate

STEPS:

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 " Regarding Platform ".
6.Application should be Global.
7.Select Run user as " System user " from that choice.
8.Click on Submit.

1.Click on Add a trigger
2.Select the trigger in that Search for "create or update a record" and select that.
3.Give the table name as " Operations related ".

4.Give the Condition as
Field : issue
Operator : is
Value : Unable to login to platform
5.Click on New Criteria
Field : issue
Operator : is
Value : 404 Error
6.Click on New Criteria
Field : issue
Operator : is
Value : Regrading User expired
7.After that click on Done.
8.Now under Actions.
9.Click on Add an action.
10.Select action in that search for " Update Record ".
11. In Record field drag the fields from the data navigation from left side
12.Table will be auto assigned after that
13.Give the field as " Assigned to group ". 14.Give
value as " Platform "
15.Click on Done.
16.Click on Save to save the Flow.
17.Click on Activate.


ServiceNow Developers
ServiceNow
regarding platform | Workflow
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Gmail
YouTube
Maps
Adobe Acrobat
All Bookmarks
Workflow Studio
regarding certificates
Flow • Global
regarding platform
Flow • Global
regarding platform
Inactive
View:
Test
Debug
Activate
Save
Action
Update Record
Action Inputs
* Record
Trigger... ▸ operations related...
* Table
operations related [u_operations...
* Fields
assigned to group
platform
+ Add field value
Delete
Cancel
Done
Add an Action, Flow Logic, or Subflow
ERROR HANDLER
Data
Collapse All
Flow Variables
Trigger - Record Created
operations related Record
Record
operations related Table
Table
Run Start Time UTC
Date/Time
Run Start Date/Time
Date/Time
1 - Update Record
operations related Record
Record
operations related Table
Table
Action Status
Object
Status: Modified
Application: Global
Sports headline
Oklahoma City T...
Search
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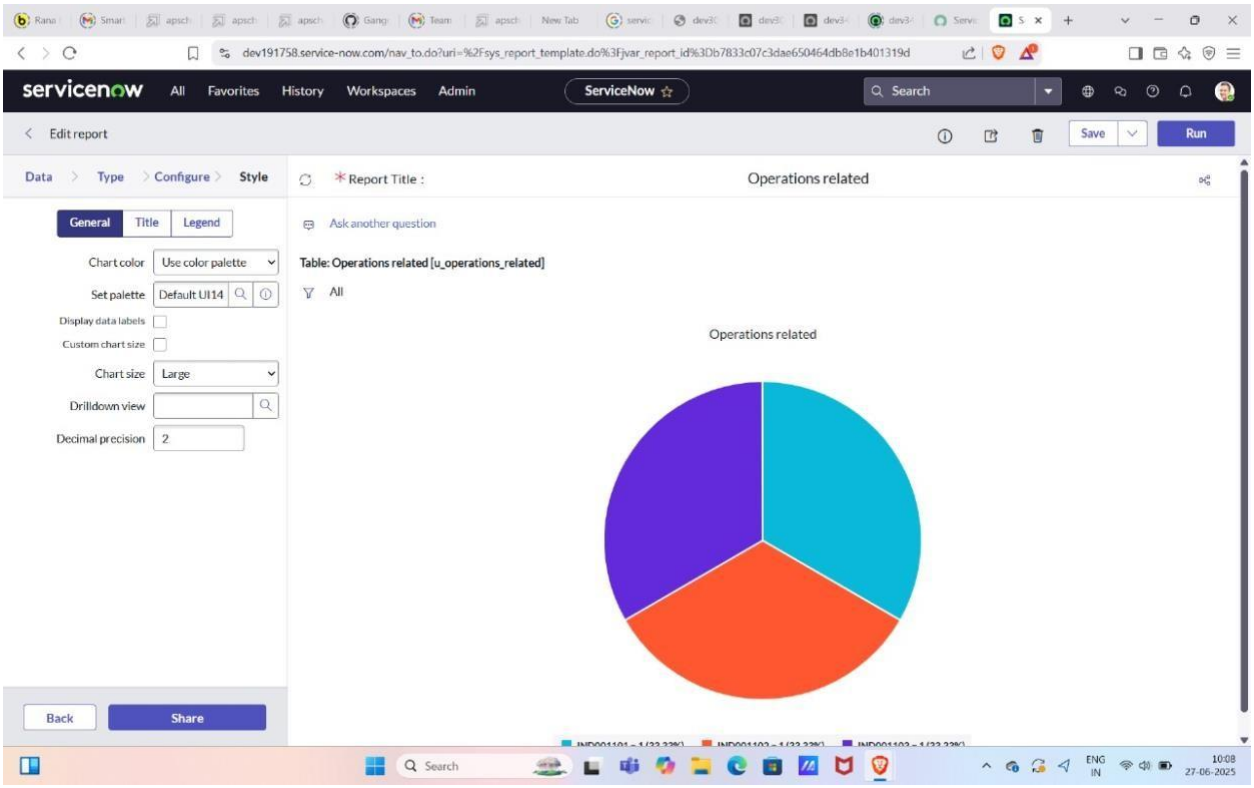
RESULTS:



Advantages and disadvantages

ADVANTAGES:

1. Faster ticket response and resolution
2. Balanced workload among support agent
3. Improved customer satisfaction
4. Reduced manual errors in ticket assignment
5. Better tracking and accountability of tickets
6. Higher agent productivity and efficiency
7. Improved SLA compliance
8. Easier handling of high ticket volumes
9. Quicker identification of critical issu
10. Supports automation and smart routing

DISADVANTAGES;

1. May require complex initial setup and configuration
2. Risk of incorrect auto-assignment if rules are not properly defined
3. Reduced flexibility for handling unique or exceptional cases
4. Dependence on accurate and updated agent skill data
5. Potential over-reliance on automation, reducing human oversight
6. System errors or misconfigurations can delay ticket resolution
7. Can require ongoing maintenance to keep assignment rules effective
8. May not account for sudden changes in agent availability or workload
9. Can lead to agent dissatisfaction if workload balancing is not properly tuned
10. Initial training and adoption may take time for support teams **CONCLUSION:**

Streamlining ticket assignment is a critical strategy for improving the efficiency and effectiveness of support operations. By automating the process of routing tickets to the most appropriate agents or teams, organizations can significantly reduce response and resolution times. This leads to faster service delivery, ensuring that customer issues are addressed promptly, which directly enhances customer satisfaction and builds trust.

An efficient ticket assignment process also ensures that workloads are evenly distributed among agents, preventing burnout and improving overall team morale. It minimizes manual errors, reducing the chances of misrouted or delayed tickets that could impact service quality. Additionally, streamlined assignment supports better SLA compliance by ensuring tickets are prioritized and handled within the required timeframes.

Automating ticket assignment also improves visibility and accountability, as it clearly defines ownership from the start, making it easier to track ticket progress and agent performance. It enables support teams to scale efficiently, especially when handling large volumes of tickets, and lays the groundwork for advanced technologies like AI-based routing and predictive analytics.

However, it’s important to regularly review and update the assignment rules to accommodate changing team structures, workloads, and skill sets. Without proper configuration and ongoing maintenance, the system may introduce new challenges, such as incorrect routing or lack of flexibility for special cases.