

Streamlining Ticket Assignment for Efficient Support Operations

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| Team ID | LTVIP2025TMID29011 |
| Project Name | Streamlining Ticket Assignment for Efficient Support Operations |
| Faculty Mentor Name | Dr P L Madhava Rao |
| College Name | Kallam Haranadhareddy Institute of Technology |

Project Report: Streamlining Ticket Assignment for Efficient Support Operations

1. INTRODUCTION

1.1 Project Overview

This project focuses on automating the support ticket routing process using ServiceNow at ABC Corporation. The goal is to streamline support workflows, reduce manual errors, and speed up issue resolution by directing tickets to the appropriate support teams.

1.2 Purpose

To improve customer satisfaction and team efficiency by implementing an automated ticket assignment mechanism.

2. IDEATION PHASE

2.1 Problem Statement

Manual ticket routing often leads to delays, miscommunication, and inefficiencies within IT support teams.

2.2 Empathy Map Canvas

- **Think & Feel:** Wants to resolve issues fast
- **See:** Delayed ticket handling
- **Say & Do:** Complains about inefficiency
- **Pain:** Tickets going to the wrong person
- **Gain:** Auto-assigned tickets to right team

2.3 Brainstorming

- Use categories to route tickets
- Assign users to groups
- Define user roles
- Automate flow with ServiceNow Flow Designer

3. REQUIREMENT ANALYSIS

3.1 Customer Journey Map

From ticket creation to resolution, users interact through the portal and are updated on progress.

3.2 Solution Requirements

- Users and groups setup
- Role-based permissions
- Automated ticket flow
- Data privacy via ACL

3.3 Data Flow Diagram

User submits ticket → Ticket analyzed by Flow Designer → Routed to appropriate group → Agent resolves it

3.4 Technology Stack

- **Platform:** ServiceNow
- **Modules:** Users, Roles, Groups, Flow Designer, ACL

4. PROJECT DESIGN

4.1 Problem Solution Fit

Routing tickets manually is inefficient. Automating the process removes human error and saves time.

4.2 Proposed Solution

Use Flow Designer to set rules based on ticket attributes and assign them to the right group.

4.3 Solution Architecture

1. Create users
2. Create groups
3. Assign roles to users and groups
4. Use Flow Designer for routing logic
5. Set ACLs to manage access

5. PROJECT PLANNING & SCHEDULING

5.1 Project Planning

- Week 1: Ideation & Requirements
- Week 2: User, Role & Group Setup
- Week 3: Flow Design & ACL Implementation
- Week 4: Testing & Documentation

6. FUNCTIONAL AND PERFORMANCE TESTING

6.1 Performance Testing

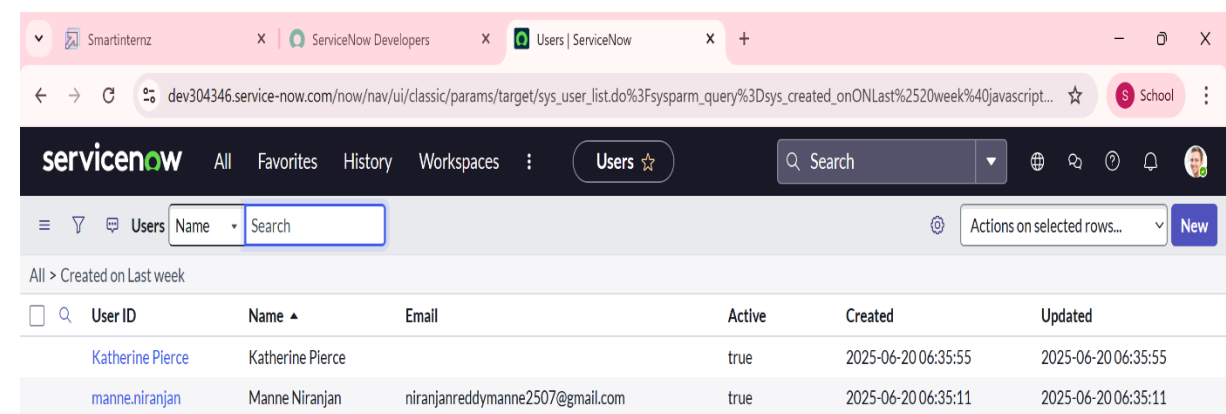
- Ticket assigned in < 5 seconds
- Load tested with 100+ tickets

- ACLs verified for access control
- Flows tested for all categories

7. RESULTS

7.1 Output Screenshots

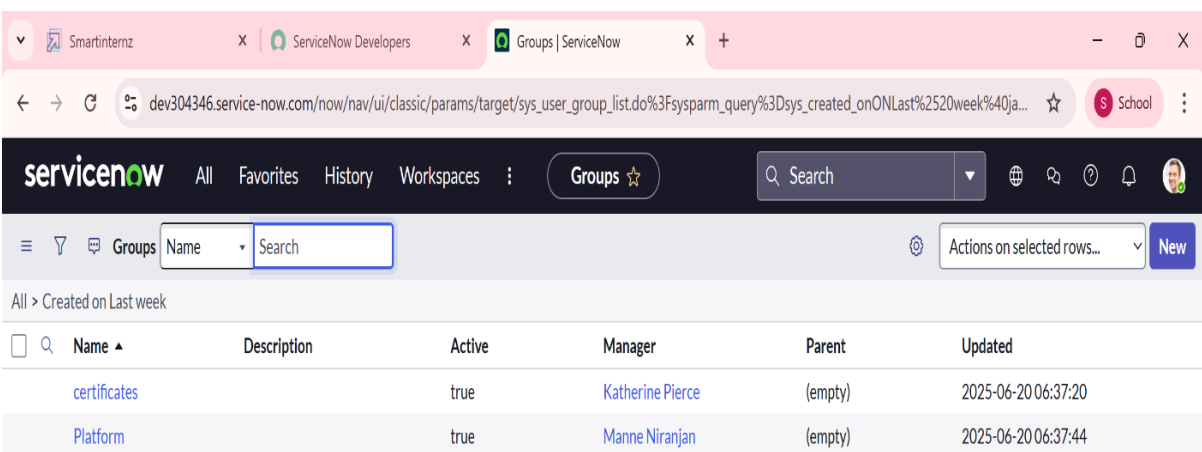
- Users module



The screenshot shows the ServiceNow 'Users' module. The browser tabs include 'Smartinternz', 'ServiceNow Developers', and 'Users | ServiceNow'. The URL is 'dev304346.service-now.com/now/nav/ui/classic/params/target/sys_user_list.do%3Fsysparm_query%3Dsys_created_onONLast%2520week%40ja...'. The interface features a search bar, a filter dropdown set to 'Name', and a 'New' button. Below the header, a table lists users created in the last week.

| User ID | Name | Email | Active | Created | Updated |
|----------------------------------|------------------|----------------------------------|--------|---------------------|---------------------|
| Katherine Pierce | Katherine Pierce | | true | 2025-06-20 06:35:55 | 2025-06-20 06:35:55 |
| manne.niranjan | Manne Niranjan | niranjanreddymanne2507@gmail.com | true | 2025-06-20 06:35:11 | 2025-06-20 06:35:11 |

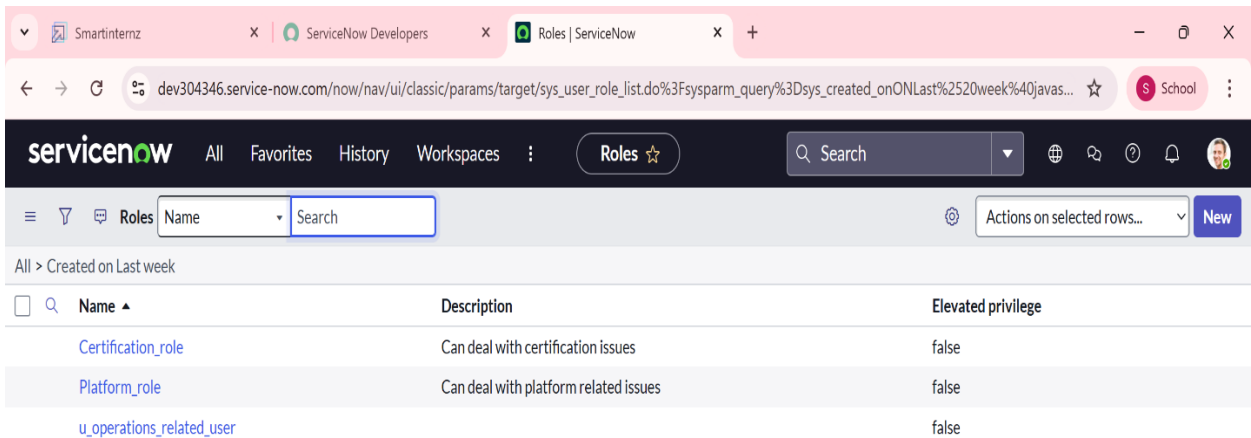
- Groups setup



The screenshot shows the ServiceNow 'Groups' module. The browser tabs include 'Smartinternz', 'ServiceNow Developers', and 'Groups | ServiceNow'. The URL is 'dev304346.service-now.com/now/nav/ui/classic/params/target/sys_user_group_list.do%3Fsysparm_query%3Dsys_created_onONLast%2520week%40ja...'. The interface features a search bar, a filter dropdown set to 'Name', and a 'New' button. Below the header, a table lists groups created in the last week.

| Name | Description | Active | Manager | Parent | Updated |
|------------------------------|-------------|--------|----------------------------------|---------|---------------------|
| certificates | | true | Katherine Pierce | (empty) | 2025-06-20 06:37:20 |
| Platform | | true | Manne Niranjan | (empty) | 2025-06-20 06:37:44 |

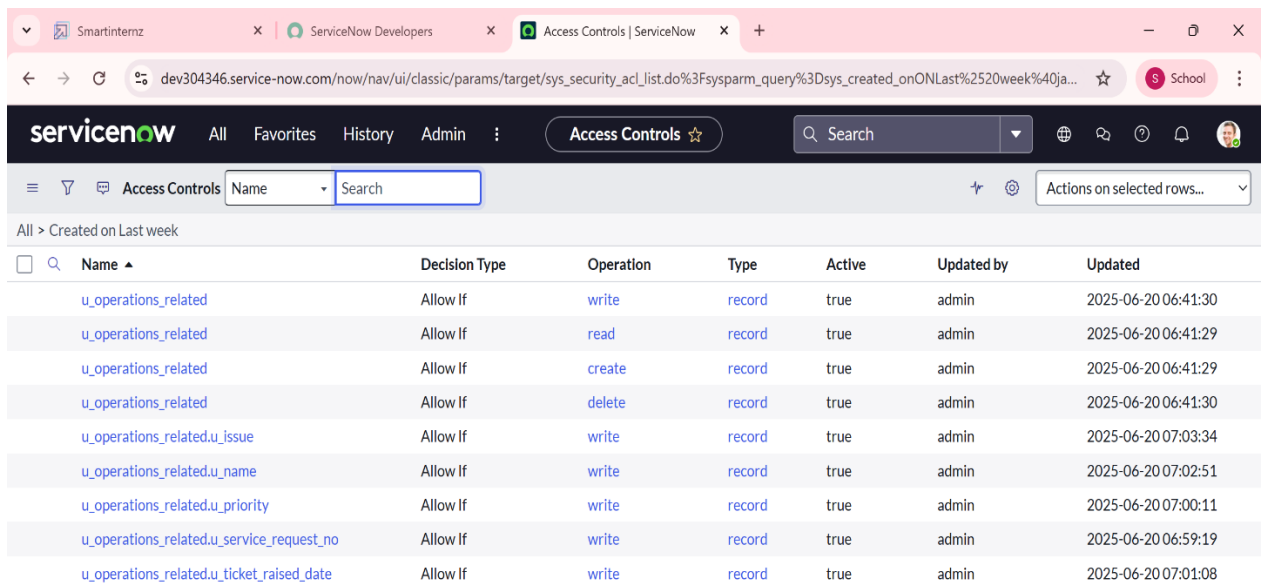
- Role assignment



The screenshot shows the ServiceNow 'Roles' page. The breadcrumb trail is 'All > Created on Last week'. The table has three columns: 'Name', 'Description', and 'Elevated privilege'. There are three rows of roles listed.

| Name | Description | Elevated privilege |
|---|---------------------------------------|--------------------|
| Certification_role | Can deal with certification issues | false |
| Platform_role | Can deal with platform related issues | false |
| u_operations_related_user | | false |

- ACL implementation



The screenshot shows the ServiceNow 'Access Controls' page. The breadcrumb trail is 'All > Created on Last week'. The table has seven columns: 'Name', 'Decision Type', 'Operation', 'Type', 'Active', 'Updated by', and 'Updated'. There are nine rows of access control records listed.

| Name | Decision Type | Operation | Type | Active | Updated by | Updated |
|---|---------------|------------------------|------------------------|--------|------------|---------------------|
| u_operations_related | Allow If | write | record | true | admin | 2025-06-20 06:41:30 |
| u_operations_related | Allow If | read | record | true | admin | 2025-06-20 06:41:29 |
| u_operations_related | Allow If | create | record | true | admin | 2025-06-20 06:41:29 |
| u_operations_related | Allow If | delete | record | true | admin | 2025-06-20 06:41:30 |
| u_operations_related.u_issue | Allow If | write | record | true | admin | 2025-06-20 07:03:34 |
| u_operations_related.u_name | Allow If | write | record | true | admin | 2025-06-20 07:02:51 |
| u_operations_related.u_priority | Allow If | write | record | true | admin | 2025-06-20 07:00:11 |
| u_operations_related.u_service_request_no | Allow If | write | record | true | admin | 2025-06-20 06:59:19 |
| u_operations_related.u_ticket_raised_date | Allow If | write | record | true | admin | 2025-06-20 07:01:08 |

- Working flow of automated assignment

The screenshot shows the ServiceNow Workflow Studio interface for a workflow named 'Regarding Platform'. The main configuration area is for the 'Update Operations related Record' action. The 'Action Properties' section shows the action is 'Update Record'. The 'Action Inputs' section includes:

- * Record: Trigger ... > Operations relate...
- * Table: Operations related [u_operation...]
- * Fields: Assigned to group, Platform

The right-hand 'Data' panel shows the following variables:

- Flow Variables:
 - Trigger - Record Created or Updated:
 - Operations related Record: Record
 - Changed Fields: Array.Object
 - 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

At the bottom, the status bar indicates 'Application: Global'.

The screenshot shows the ServiceNow Workflow Studio interface for a workflow named 'Regarding Certificate'. The main configuration area is for the 'Operations related Created or Updated where (Issue is regarding certificates)' trigger. The 'Trigger' is set to 'Created or Updated'. The '* Table' is 'Operations related [u_operation...]'.

The 'Condition' section is configured as follows:

- Condition: All of these conditions must be met
- Issue is regarding
- Buttons: OR, AND
- Buttons: New Criteria

The 'Run Trigger' is set to 'For every update'. The 'Advanced Options' button is visible at the bottom.

The right-hand 'Data' panel shows the following variables:

- Flow Variables:
 - Trigger - Record Created or Updated:
 - Operations related Record: Record
 - Changed Fields: Array.Object
 - 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

At the bottom, the status bar indicates 'Status: Published' and 'Application: Global'.

8. ADVANTAGES & DISADVANTAGES

Advantages:

- Faster ticket resolution

- Reduced manual workload
- Improved accuracy

Disadvantages:

- Dependent on correct flow logic
- Initial setup time required

9. CONCLUSION

The project successfully implemented an automated ticket routing system that enhances efficiency and ensures correct ticket handling.

10. FUTURE SCOPE

- Add AI-based priority detection
- Integrate with more service modules

11. APPENDIX

- Source code: No external code
- Dataset link: Not Applicable
- Github & Project demo link

GitHub

<https://github.com/Abhishaik1711/streamlining-ticket-assignment-for-efficient>

Project Demo link

<https://drive.google.com/drive/folders/1zcydBQZkMgKKID0z43hIVxgUl6JLeqa4?usp=sharing>

