# **PROJECT DESIGN**

# <u>Proposed Solution Template</u>:

Project team shall fill the following information in the proposed solution template

S.No.	PARAMETERS	DISCRIMINATION
1.	Problem Statement (Problem to be solved)	Users can be deleted from the system even if they are assigned to active incidents, leading to data inconsistencies, disruptions in incident management workflows, and potential security risks. This can result in inaccurate incident records, delayed resolution times,
2.	Idea/Solution description	Implement a validation check to prevent users from being deleted if they are assigned to active incidents. When a user deletion request is made, the system will verify if the user is assigned to any incidents. If assigned, the deletion request will be blocked, and an error message will be displayed, informing the administrator of the assignment.
3.	Novelty/Uniqueness	<ol> <li>Context-Aware Validation: The system validates user deletion requests based on incident assignments, ensuring data consistency and workflow integrity.</li> <li>Proactive Prevention: The solution proactively prevents user deletion if assigned to incidents, reducing errors and disruptions.</li> <li>Incident-Centric Approach: The project focuses on incident management workflows, ensuring that user deletion doesn't compromise incident resolution or accountability.</li> </ol>
4.	Social Impact/Customer	1. Improved Incident Resolution :

	Satisfaction	Ensures incident resolution processes are not disrupted due to user deletion.  2. Enhanced Collaboration: Promotes collaboration among team members by maintaining
		accurate incident assignments.  3. Reduced Errors: Minimizes errors caused by deleted users, leading to better incident management.
5.	Business Model (Revenue Model)	<b>1.</b> Subscription-Based : Offer the incident management platform as a subscription-based service, with the prevention feature included in the premium tier.
		2. Per-User Licensing: Charge customers based on the number of users, with discounts for larger enterprises.
		3. Custom Implementation: Offer customized implementation services for enterprises with complex incident management workflows.
6.	Scalability of the Solution	Efficient Database Queries:     Optimized queries to quickly check user assignments.
		2. Caching: Cache frequently accessed incident assignments.
		3. Distributed Architecture: Designed to handle increased traffic and data volume.
		<b>4</b> . Cloud-Based Infrastructure:Scalable resources to match growing demands.

**Project Name**: Prevent User Deletion If Assigned To An Incident

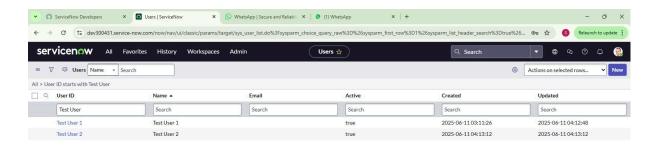
#### Milestone-1: User Creation

<u>User Creation</u>: User creation refers to the process of adding a new user account to a system, application, or platform. This process typically involves defining who the user is and what they are allowed to do within that system.

<u>Purpose of User Creation</u>: The purpose of user creation typically depends on the context, but in general, it serves to:

- **1.Identity Management**: Assign a unique identity to each user in a system.
- **2. Assign Roles & Responsibilities**: Grant access to specific features and functionalities based on user roles.
- **3. Communication**: Associate contact info with the account for customer support or system alerts. Enable direct communication (e.g., notifications, emails).
  - **4. Access Control**: Determine what resources a user can access.
  - 5. Audit and Security:
    - a. Track actions taken by each user (e.g., logs for auditing or troubleshooting).
    - b.Increase accountability and system security

- **1.**Go to ServiceNow? All? Users (under System Security)
- 2.Click on New
- 3. Create two users (e.g., kiran123, ajaykumar)
- 4. Submit and verify user records.





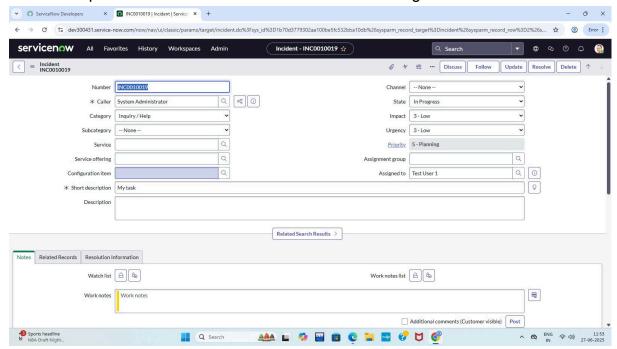
# Milestone-2: Assign Incident

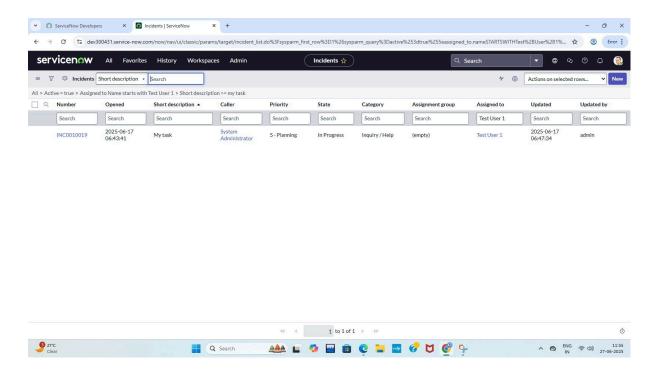
<u>Assign Incident</u>: The action of allocating a reported issue or incident to a specific individual, team, or group for resolution, particularly in IT service management, customer support, or security operations.

# Purpose of Assigning an Incident:

- **1.Ownership and Responsibility**: Ensures someone is accountable for investigating and resolving the incident.
- **2. Workflow Management**: Helps track progress and enforce service-level agreements (SLAs).
- **3. Communication**: Keeps relevant parties informed (e.g., assigner, assignee, requester).

- **1.**Navigate to the Incident table.
- **2.**Create a new incident and assign it to one of the created users (e.g., kiran123)
  - **3.**Keep the incident Active = true and State = In Progress.





Milestone-3: Business Rule Creation

**Business Rule Creation**: Business rule creation involves defining and configuring rules within the system (e.g., ServiceNow) to enforce specific logic or validation.

# Purpose of Business Rules:

1. Check for Incident Assignment:

Verify if a user is assigned to an active incident.

- 2. Prevent Deletion: Block user deletion if assigned to an incident.
- **3. Display Error Message**: Show an informative error message to the administrator.

## Steps:

- 1.Go to System Definition? Business Rules
- 2.Click on New
- 3.Fill in:
- 4. Name: Prevent User Deletion if Assigned to an Incident
- 5.Table: sys\_user6. When: Before7. Delete: Checked
- 8.Script:

(function executeRule(current, previous /\*null when async\*/) {
var incGr = new GlideRecord('incident');
incGr.addQuery('assigned\_to', current.sys\_id);
incGr.setLimit(1); // Just need to check existence

```
// incGr.addQuery('active', true); we can use the above or this line of code to
check where the user is assigned with any incident
   incGr.query();
   if (incGr.next()) {
       gs.addErrorMessage('This user cannot be deleted because they are assigned
to one or more incidents.');
       current.setAbortAction(true);
// Add your code here
})(current, previous);
                    ow Developers X 

Prevent user deletion if assign: X 

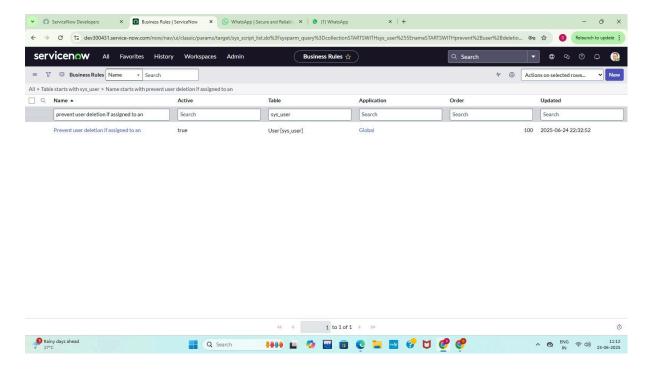
WhatsApp | Secure and Reliable X | (1) WhatsApp | x | +
             Business Rule
Prevent user deletion if assigned
                            Name Prevent user deletion if assigned

Table User [sys_user]
                                                                              Application Global
                                                                                Active 🔽
             When to run Actions Advanced
                                                                                Insert
                                                                                Update 

                                                                                 Delete 🔽
                                                                                 Query [
                       Filter Conditions Add Filter Condition Add OR Clause
                                              Role conditions
                                🔡 Q. Search 1809 🐷 🤣 🔯 🙋 💆 🔮 🔮 🔮
                                                                                                        ^ 🖎 ENG 🌼 Φ) 11:15
             SERVICENOW All Favorites History Workspaces :
                                      incGr.setLimit(1); // Just need to check existence
                                      // incGr.addQuery('active', true); we can use the above or this line of code to check where the u assigned with any incident
                                        current.setAbortAction(true);
```

9. Click submit .

Update Delete
Related Links



#### Milestone-4: Test Deletion

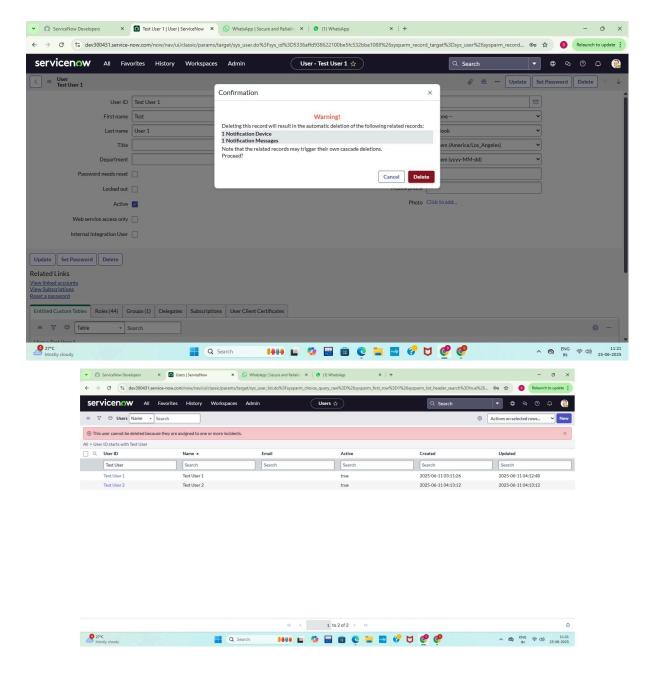
<u>Test Deletion</u>: The process of removing test data or test records from a system, database, or application—usually after testing is complete or to clean up a test environment.

## **Purpose of Test Deletion:**

- **1.Clean Up Test Data**: Remove data that was created during development, testing, or QA phases.
- **2. Maintain Database Integrity**: Keep the database size manageable and remove unnecessary clutter.
- **3. Improve Performance**: Especially in large systems, test data can slow down queries and reports.
  - 4. Ensure Security & Privacy:

Remove any test records that might contain dummy or real user data

- 1.Go to the user record (kiran123)
- 2.Click Delete
- **3.** Verify that deletion is blocked with an error message.



Milestone-5: Test With Unassigned User

<u>Test With Unassigned User</u>: A testing scenario where a system process, function, or workflow is evaluated using a user who is not assigned to any active role, task, or record—especially in systems like ITSM (e.g., ServiceNow), CRM, or custom applications.

# Purpose of Testing with an Unassigned User:

# 1. Validate Business Rules :

Ensure rules behave correctly when a user is not assigned to anything (e.g., an incident or task).

Example: A business rule might allow deletion of a user only if they are not assigned to any incident.

# 2. Verify Error Handling

Check how the system behaves if an action (like notification, task assignment) is attempted on a user who isn't assigned.

# 3. Test Security and Access

Make sure users with no role or assignment can't access restricted features or data.

## 4. Check Workflow Logic

See how automated workflows respond when they encounter an unassigned user (e.g., rerouting logic, fallback conditions).

- **1.**Try deleting the second user (Ajaykumar) who is not assigned to any active incidents.
  - 2.Deletion should succeed.

