Requirement Analysis (Requirement Analytics)

Project Title	**Streamlining Ticket Assignment for Efficient Support Operations**
Date	**02.11.2025**
Team ID	**NM2025TMID01861**
Maximum Marks	**4 Marks**

Objective

The objective of this requirement analysis is to identify and define all **functional** and **non-functional requirements** necessary to implement an automated ticket routing system in **ServiceNow**.

This system ensures that each support ticket is automatically assigned to the correct group (Platform or Certificates) without manual intervention.

Functional Requirements

Functional requirements describe **what the system must do** — the specific features and behaviors of the ServiceNow solution.

ID	Functional Requirement	Description
FR-01	**User Management**	The system must allow the creation and management of users within ServiceNow.
FR-02	**Group Management**	The system must support creating groups such as *Certificates Group* and *Platform Group*.
FR-03	**Role Assignment**	Each user should be assigned to a group and role defining their permissions (e.g., Platform_Role, Certificate_Role).
FR-04	**Table Creation**	Create a custom table (*Operations Related*) to store all support tickets with relevant fields (Issue, Description, Assigned Group).
FR-05	**Flow Automation**	The system must automatically assign tickets to groups based on the “Issue” field using **Flow Designer**.

FR-06	**Notification System**	The system should send notifications to the assigned group when a new ticket is created.
FR-07	**Access Control (ACL)**	Access to ticket records should be restricted based on roles and permissions.
FR-08	**Reporting & Tracking**	The system should allow managers to view reports on ticket status and performance.

Non-Functional Requirements

Non-functional requirements define **how the system performs** rather than what it does.

ID	Non-Functional Requirement	Description
NFR-01	**Performance**	Ticket assignment must occur automatically within seconds of creation.
NFR-02	**Usability**	The interface must be easy to use for both employees and administrators.
NFR-03	**Scalability**	The system should support adding new issue types, groups, and flows easily.
NFR-04	**Security**	Only authorized users should be able to view or edit tickets relevant to their role.
NFR-05	**Reliability**	The automation workflow must perform consistently without manual errors.
NFR-06	**Maintainability**	Administrators should be able to modify or extend flows with minimal effort.
NFR-07	**Integration Readiness**	The system should support future AI (TensorFlow) or API integrations.
NFR-08	**Auditability**	The system should log all ticket routing and updates for accountability.

System Requirements

These specify the hardware, software, and tools needed for implementation.

Category	Requirement
Platform	ServiceNow (Latest version)
Automation Tool	Flow Designer
Database	ServiceNow internal database (for custom table storage)
Programming	Basic use of ServiceNow scripting if required
Optional Tool	TensorFlow (for future AI-based classification)
Hardware	Standard laptop/desktop with stable internet
Browser	Chrome / Edge / Firefox
User Roles	System Administrator, Support Engineer, Employee

System Inputs and Outputs

System Component	Input	Output
Ticket Form	Issue details entered by employee	Ticket record created
Flow Designer	Issue field value	Assigned Group (auto-filled)
Notification Engine	Assigned group	Alert or message to group member
Reports	Ticket data	Graphs and summaries for managers

Requirement Traceability Matrix (RTM)

Requirement ID	Mapped Component	Status
FR-01	User Creation Module	Implemented

FR-02	Group Creation Module	Implemented
FR-03	Role Assignment	Implemented
FR-04	Operations Related Table	Implemented
FR-05	Flow Designer Automation	Implemented
FR-06	Notification Rules	Planned
FR-07	ACLs	Implemented
FR-08	Reporting Dashboard	Planned

Summary

The requirements analysis ensures that the **automated ticket assignment system** in ServiceNow:

- Meets user needs (employees, engineers, admins, managers).
- Performs reliably and securely.
- Is flexible for future growth (AI and data analytics integration).
- Reduces manual workload and improves response efficiency.

In short, the system is designed to make ticket management **faster, smarter, and more efficient**.