

Identification of Use Cases

1. Register

Allows a new user to create an account in the ASSISTX system.

2. Login

Enables registered users and administrators to authenticate themselves before accessing system features.

3. Raise Query

Allows the user to submit a customer support query or issue to the system.

4. Classify Query (AI)

The AI Agent analyzes the submitted query and classifies it based on intent, category, or urgency.

5. Generate Auto-Response

The AI Agent generates an automated response for the user based on the classified query.

6. Flag for Escalation

If the AI is unable to confidently answer the query, the system flags it for escalation to higher-level handling.

7. Admin Dashboard

Allows the administrator to monitor system activity, view escalated queries, and manage overall system operations.

Identification of Actors

The ASSISTX system interacts with the following external actors:

1. User

- Registers and logs into the system
- Raises customer support queries
- Receives automated responses from the system

2. AI Agent

- Classifies user queries
- Generates automated responses
- Determines whether a query should be escalated

3. Admin

- Logs into the system
- Accesses the Admin Dashboard
- Monitors escalated queries and system performance
- Each actor plays a distinct role, ensuring proper separation of responsibilities within the system.

Use Case Relationships (As Shown in the Diagram)

1. Association Relationship

- User is associated with Register, Login, and Raise Query
- Admin is associated with Login and Admin Dashboard
- AI Agent is associated with Classify Query and Generate Auto-Response

2. Include Relationship (<<include>>)

- Raise Query includes Classify Query
- Classify Query includes Generate Auto-Response
- These steps are mandatory for processing any user query.

3. Extend Relationship (<<extend>>)

- Flag for Escalation extends Generate Auto-Response
- This occurs only when the AI agent has low confidence or cannot resolve the query automatically.