**ENDPOINTS:**

**QUEUE ENDPOINT:**

A queue endpoint is associated with a message queue, which follows the point-to-point through messaging. In this endpoint, messages are sent to a specific queue and consumed by a single recipient. The sender puts messages into the queue, and the receiver retrieves and processes them. Once a message is consumed from the queue, it is typically removed and no longer available for other recipients.

Each message is delivered to exactly one recipient, ensuring that the message is processed by a single consumer. This pattern is useful in scenarios where there is a one-to-one relationship between the sender and the receiver, and message order and reliability are important.

For example

Email Processing

When users send emails to a support system, the emails are added to a queue endpoint. Support agents consume the messages from the queue and respond to the emails in a timely manner, ensuring that each email is handled by a single agent.

**TOPIC ENDPOINT:**

A topic endpoint is associated with a publish-subscribe system, which follows the publish-subscribe messaging pattern. In this pattern, messages are published to a topic, and multiple subscribers can receive and process the messages. The publisher sends messages to the topic without any knowledge of the subscribers, and the subscribers receive all the messages based on their interests or subscriptions.

Subscribers can express their interest in specific topics and receive relevant messages. This pattern is suitable for scenarios where there are multiple recipients interested in the same or similar messages.

For example

News Broadcasting:

A news organization uses a topic endpoint to publish news articles to a "News" topic. Subscribers, such as mobile apps, websites, and social media platforms, subscribe to the "News" topic and receive the latest news updates in real-time.