

README

Tech Stack

- Java 17+
- Spring Boot
- Spring Data JPA
- RabbitMQ
- H2 Database
- Maven

How It Works

- Sending:
The API receives notification data and saves it to the database. It then publishes the notification to a RabbitMQ queue for asynchronous processing.
- Processing:
A background consumer listens to the queue, processes each notification (simulating delivery), updates its status, and persists the result.
- Retries:
If a notification fails to deliver, the system retries delivery (configurable number of times).

Bonus Features

- Queue-based processing:
RabbitMQ decouples API requests from notification delivery, improving scalability and reliability.
- Retry logic:
Failed notifications are retried automatically before being marked as failed.