

## Video Thumbnail Extraction with Java and RabbitMQ

This project demonstrates how to build a simple messaging-based application that uploads video files and asynchronously processes them to extract thumbnails using RabbitMQ as a message broker and FFmpeg for video processing.

The system consists of two components:

- Sender (VideoUploader): Uploads the video and sends the video file path as a message to RabbitMQ.
- Consumer (ThumbnailExtractor): Receives the message from RabbitMQ, processes the video file using FFmpeg, and extracts a thumbnail.

This project leverages RabbitMQ to handle the communication between the sender and the consumer using a message queue. Below is the flow of the architecture:

- Sender: The sender uploads the video and places a message (video file path) in a RabbitMQ queue.
- Queue: RabbitMQ holds the message in the queue until the consumer picks it up.
- Consumer: The consumer listens for new messages, processes the video file to extract a thumbnail, and stores it in the local directory.

