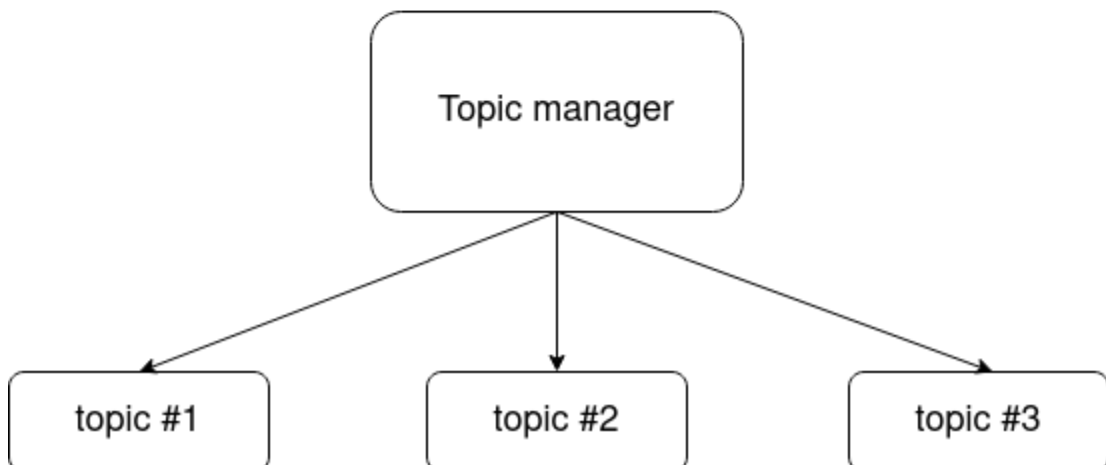
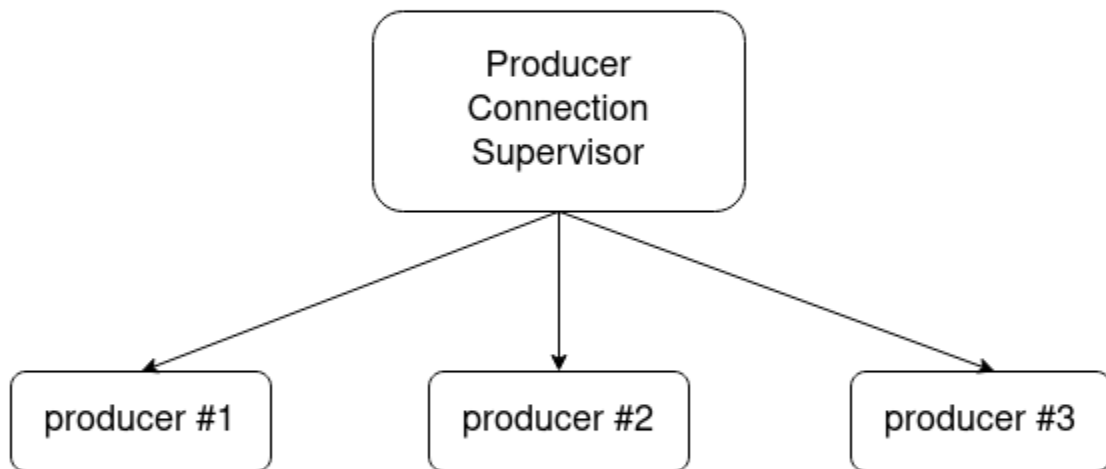
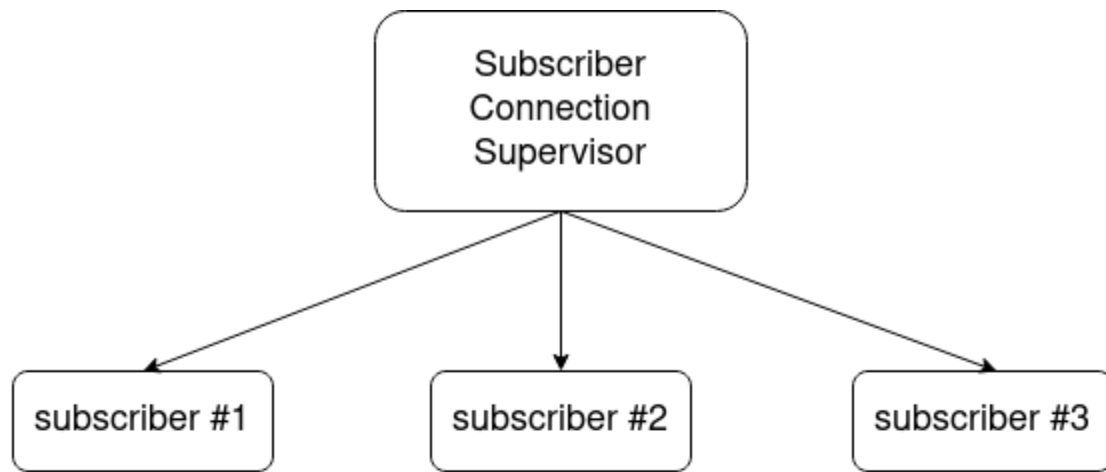
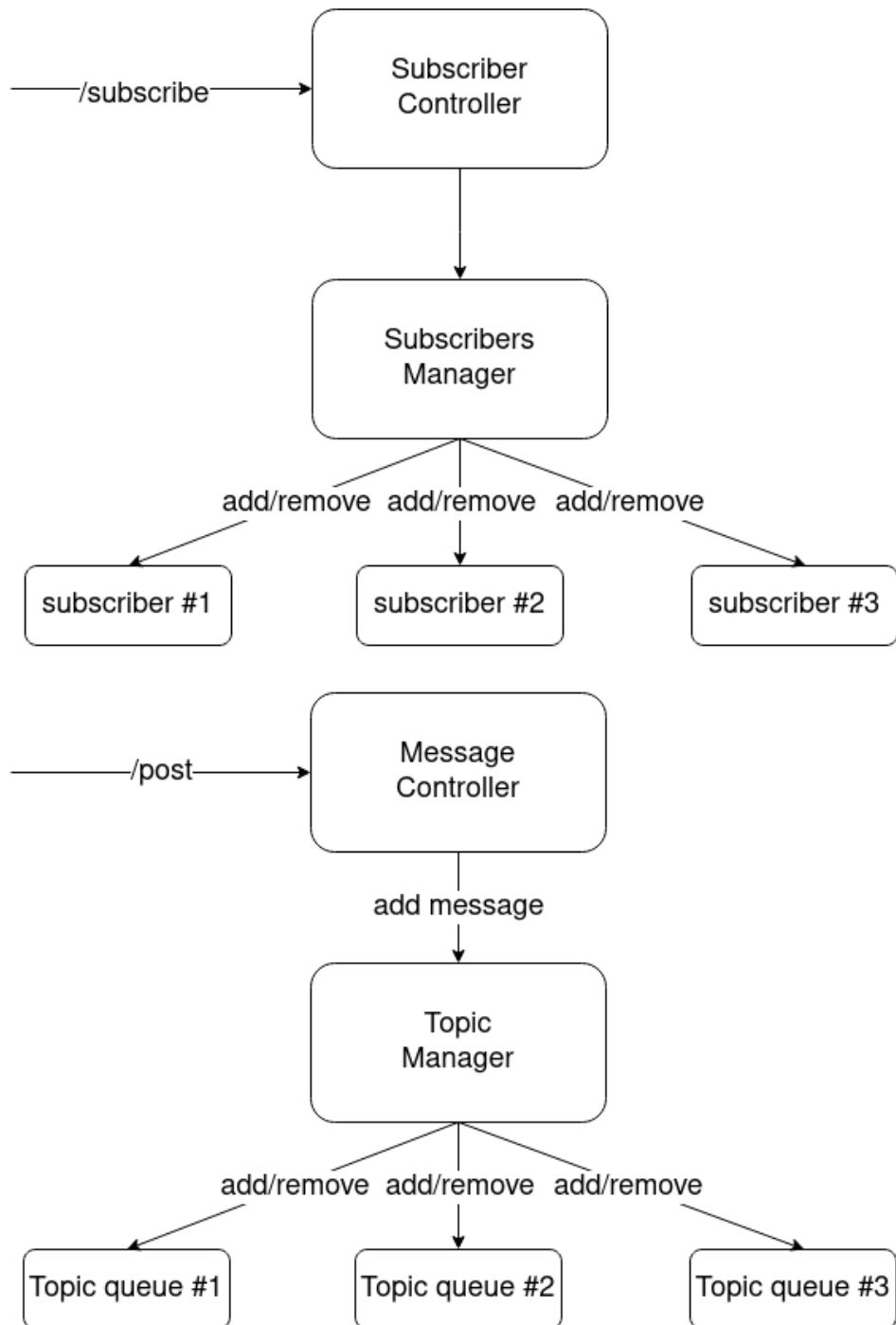


## PTR LAB 3 CHECKPOINT #1

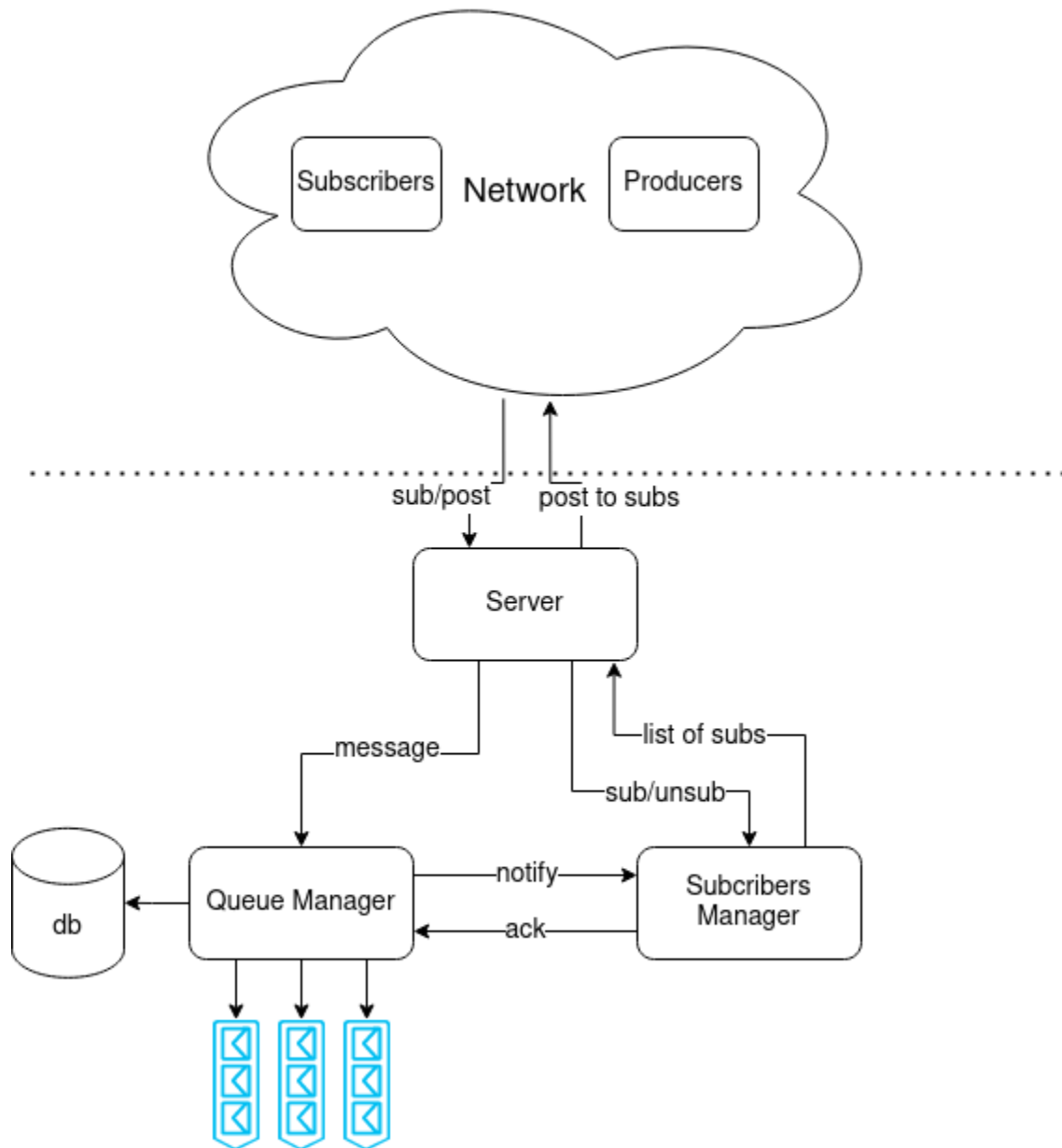
### SUPERVISORS



## CONTROLLERS



## ARCHITECTURE FLOW



## Components:

### Network - subscribers

Message - "subscribe: <topic1>, <topic2>, <topic3>"

### Server - TCP server that handles requests:

- Post message requests from producers
- Subscribe requests from subscribers

Message to Topic Manager - "post to <topic>: <message>"

Message to Subscriber Manager - "subscribe to <topic>"

Acknowledge message is sent if everything went fine;

Failed message is sent if no such topic exists

### Topic and Queue Manager:

- Receives and stores messages based on their topic
- Notifies the subscriber manager about the message received
- Persists the messages to the disk

Message to Subscriber manager: "<topic>: <message>"

### Subscriber manager:

- Supervises subscriber connections
- Notifies subscribers

Message to subscribers: "<topic>: <message>"