

# High-Level Microservices Architecture

## With Docker & Kubernetes

- Developers build microservices → each service packaged into Docker images.
- Docker Compose (local) or Kubernetes (cloud) manages containers for:
  - - Config Server, Eureka Discovery, API Gateway
  - - Booking, Payment, Inventory, Auth services
  - - ActiveMQ broker, MySQL database
- Users send requests → API Gateway routes → Microservices communicate internally.
- ActiveMQ JMS handles async communication (Booking → Payment → Inventory).
- Kubernetes ensures scaling, self-healing, and load balancing.

■ Completed	■ Pending
<ul style="list-style-type: none"><li>- Microservices code</li><li>- Eureka, Config, Gateway setup</li><li>- ActiveMQ integration in Booking-MS</li><li>- Dockerfiles created for most services</li></ul>	<ul style="list-style-type: none"><li>- Kubernetes deployment manifests</li><li>- Full container orchestration testing</li></ul>