How does CN Works

bigger picture:

You want to send a message (data) from one device to another.

- The message is broken into packets.
- · These packets travel across routers, switches, and cables.
- The destination computer receives and reassembles the packets into the original message.

monolithic and microservices

A monolithic application is built as a single unified unit while a microservices architecture is a collection of smaller, independently deployable services. mi Mircoservices networking:

Synchronous Communication: protocols: HTTP/HTTPS, gRPC, GraphQL

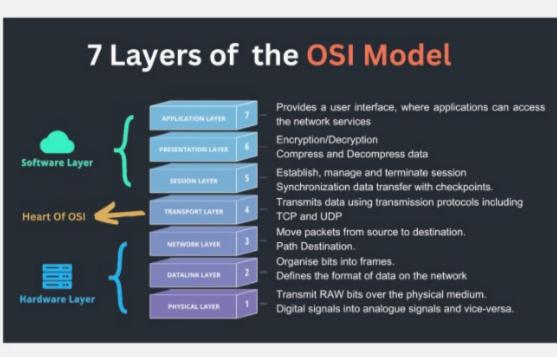
Asynchronous Communication: **AMQP advanced message queueing protocol** (e.g., RabbitMQ), **Kafka**, **SQS**

Cloud Networking

- OSI Model
- Cloud Networking
- How computer networks work?
- What is LAN, Switch, Router, Subnet, Firewall, Gateway
- Microservices Networking

MAC Address

Media Access Control Address is a unique identifier assigned to network interfaces for communication within a network segment



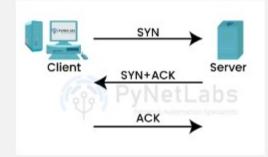
TCP AND UDP

Protocol is a set of rules and guidelines that govern the communication and interaction between different entities in a system.

TCP - Transmission control prootcol

UDP - User datagram protocol

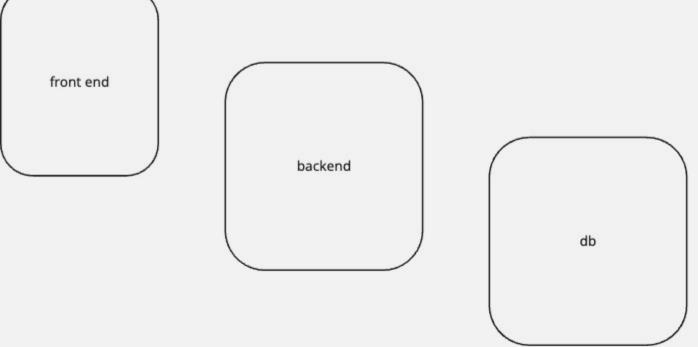
TCP Handshake



You're working on a **web browser** that loads webpages over HTTP/HTTPS. Which transport protocol does it rely on?

session?

How does a firewall handle TCP handshakes?





subnet: sub network