OSI Models

Client: USA charity's

We are cyber titans

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OSI Model Overview

- What is an OSI Model.

- An OSI Model is the Open Systems Interconnection (OSI) model it describes seven layers that computer systems use to communicate over a network.

Physical Layer

Data Link

Network Layer

Transport Layer

Session Layer

Presentation Layer

Application Layer

What's the Physical Layer and Why Do We Need It?

What is it?

The Physical Layer is all about the actual stuff that connects computers, like cables and switches.

Why we need it?

We need it because, without it, devices wouldn't be able to physically connect and share data.

What's the Data Link Layer and Why Do We Need It?

What is it?

The Data Link Layer makes sure that data moves from one device to another without errors.

It also turns data into frames and checks for mistakes.

Why we need it.

We use this layer to keep data transfer smooth and error-free between devices on the same network.

What's the Network Layer and Why Do We Need It?

What is it?

The Network Layer helps data find its way across different networks using addresses like IP addresses.

It decides the best path for the data to travel.

Why we need it.

We need this layer to make sure data reaches the right destination, even if it has to pass through several networks.

What's the Transport Layer and Why Do We Need It?

What is it?

The Transport Layer makes sure that data gets to its destination correctly and in order.

It's like a delivery service that checks everything's right.

Why we need it.

We use this layer to make sure important data, like text messages or files, arrives without missing any pieces.

What's the Session Layer and Why Do We Need It?

What is it?

- The Session Layer manages the "conversations" between two devices.

- It keeps track of who's talking and when.

Why we need it.

- We need this layer for activities like video calls or online gaming, where keeping the connection going is important.

What's the Presentation Layer and Why Do We Need It?

What is it?

The Presentation Layer acts like a translator, making sure data is in the right format for the application using it.

It also handles encryption and compression.

Why we need it.

We use this layer to ensure that data is readable and secure, like when opening an image or a document.

What's the Application Layer and Why Do We Need It?

What is it?

- The Application Layer is the closest to the user.

- It's what we interact with when we use apps like web browsers or email.

Why we need it.

- We need this layer to provide the services we use every day on the internet, like browsing websites or sending messages.

Conclusion and Q&A

- In Conclusion, the seven layers help the entire OSI Model do it's job sending data from one computer to another.

- Time for Q&A