**OSI MODEL**

**The OSI Model (Open Systems Interconnection) is a framework with 7 layers that standardizes how devices communicate over a network:**

1. **Physical - Transmits raw bits over a physical medium (e.g., cables, Wi-Fi).**
2. **Data Link - Ensures error-free data transfer between devices on the same network (e.g., MAC addresses).**
3. **Network - Handles routing and forwarding of data between devices (e.g., IP addresses).**
4. **Transport - Ensures reliable data delivery (e.g., TCP, UDP).**
5. **Session - Manages connections between applications.**
6. **Presentation - Translates data into a readable format (e.g., encryption, compression).**
7. **Application - Provides interfaces for end-user services (e.g., HTTP, FTP, email).**