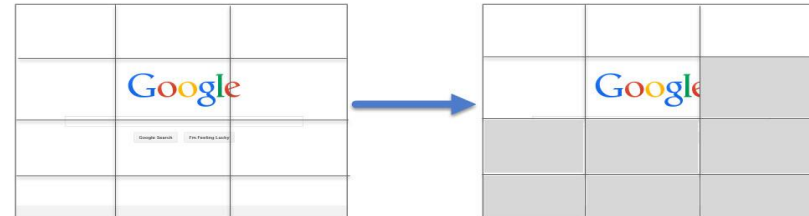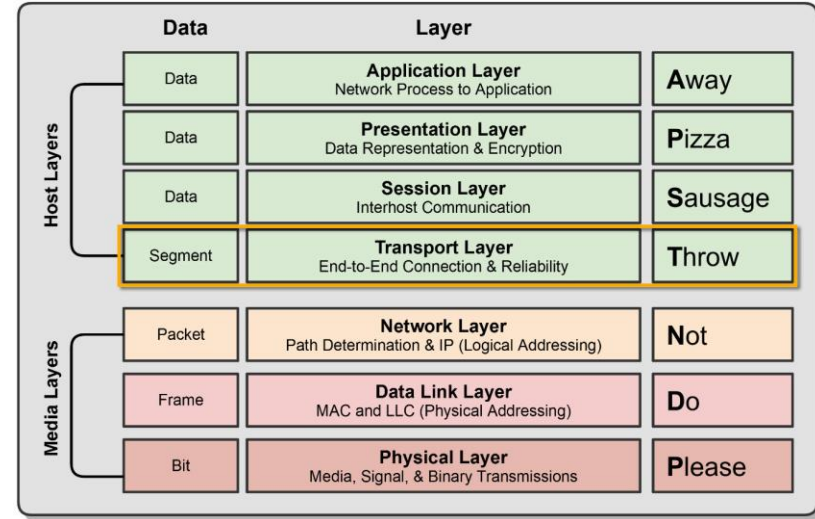# Layer 4 – Transport Layer

- Ensures data is delivered error-free and in sequence.

- Segments data and reassembles correctly.

- Can be connection-oriented or connectionless.

- Considered the "Post Office" Layer
  - **TCP** (Transmission Control Protocol)
  - **UDP** (User Datagram Protocol)
  - Covered in detail in the next section.

Data		Layer	
	Data	**Application Layer** Network Process to Application	**A**way
	Data	**Presentation Layer** Data Representation & Encryption	**P**izza
	Data	**Session Layer** Interhost Communication	**S**ausage
	Segment	**Transport Layer** End-to-End Connection & Reliability	**T**hrow
	Packet	**Network Layer** Path Determination & IP (Logical Addressing)	**N**ot
	Frame	**Data Link Layer** MAC and LLC (Physical Addressing)	**D**o
	Bit	**Physical Layer** Media, Signal, & Binary Transmissions	**P**lease

Host Layers: Application, Presentation, Session, Transport
Media Layers: Network, Data Link, Physical

Layer 4 – Transport Layer

Responsible for two data flow control measures:

- **Buffering**
  - Stores data in memory buffers until destination device is available.

- **Windowing**
  - Allows devices in session to determine the "window" size of data segments sent.

Data	Layer	
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Host Layers: Application Layer, Presentation Layer, Session Layer, Transport Layer

Media Layers: Network Layer, Data Link Layer, Physical Layer