

CS551

Internet Architecture

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Architecture: Definition

- ➔ A style and method of design and construction
- ➔ Orderly arrangement of parts
- ➔ The manner of construction of something and the disposition of its parts
- ➔ Design, the way components fit together
- ➔ Ex: railway system, airline system
- ➔ A single architecture can have many implementations
 - Ex:
 - hub-and-spoke and United/American/Delta
 - direct-flights and Southwest/JetBlue



The Internet

- ➡ The Internet is one implementation of a particular architecture
- ➡ The original Internet architecture
 - = a system of store-and-forward packet-switched gateways that provides unreliable packet delivery between any two nodes in the network
 - = there have been other implementations of this architecture
 - ARPANET, NSFNet, DECNet, etc.
- ➡ Other architectures
 - = a virtual circuit based architecture: XUNET

