

1. History of the Internet

Key points from the video:

- Computers were bulky, costly, and slow in the 1950s. They were also challenging to use and program.
- The Soviet Union launched Sputnik 1, the first man-made satellite, in 1957. The US and the USSR developed a Cold War rivalry as a result of this incident, which raised both countries' technological spending.
- The Defense Advanced Research Projects Agency (DARPA) was established by the US in 1958 to create new technologies for the armed forces. DARPA started developing the ARPANET, a computer network that would eventually serve as the Internet's main hub.
- Because the ARPANET was intended to be a decentralized network, it could function even in the event that a number of its nodes were destroyed. During the Cold War, when nuclear war was feared, this was a crucial feature.
- Researchers in England created a novel technology known as packet switching in the 1960s. With the use of this technology, data could be transferred over a network more effectively by being divided up into smaller packets.
- Researchers in France created a brand-new network known as Cyclades in the 1970s. The end-to-end principle, which exempted the network's computers from having to understand how to transfer data between them, was first applied by Cyclades. All they needed to know was the destination computer's address.
- The 1980s saw the start of the Internet's explosive growth. The creation of new protocols, like the Internet Protocol (IP) and Transmission Control Protocol (TCP), was partially to blame for this.
- The Internet was launched in 1990 when the ARPANET was shut down.

2. Basic concepts of web applications, how they work and the HTTP protocol

Key Points:

- A web application is a piece of software that can be accessed from a web browser.
- A web server is a network application that hosts web applications.
- A web client is an application that communicates with a web server to get its job done.

- The HTTP protocol is the most used protocol in the web client and web server club.
- A resource is a document that is hosted by a web server.
- A URL is a unique string that identifies a resource on the web.
- The HTTP protocol is a request-response protocol.
- An HTTP transaction is one pair of request and response.
- The HTTP protocol is a stateless protocol.