**Web:**

The World Wide Web, commonly referred to as the web, is a system of interconnected documents and resources that are accessed through the internet. It was invented by Sir Tim Berners-Lee in 1989 and has since become the primary means of accessing information and communicating online.

The web is built on top of the internet, which is a global network of interconnected computers and servers that allows information to be transmitted across vast distances. The web allows users to access information in the form of web pages, which are written in languages such as HTML, CSS, and JavaScript, and are accessed using a web browser.

Web pages can contain a variety of multimedia content such as text, images, audio, and video, and can be linked to other pages using hyperlinks. The web also supports a range of interactive features such as forms, animations, and user-generated content.

Overall, the web has revolutionized the way we access and share information, and has transformed many industries such as education, entertainment, and commerce.

**Users of web 1.0:**

Web 1.0, also known as the "Static Web," was the first stage of the World Wide Web, which began in the early 1990s and lasted until the early 2000s. During this period, the web was primarily used for the distribution of information and was characterized by static web pages that could not be updated in real-time.

The users of Web 1.0 were mainly businesses, organizations, and individuals who wanted to create static web pages to share information with others. These early websites were typically simple and focused on providing basic information such as company profiles, contact details, and product descriptions.

The main advantage of Web 1.0 was that it allowed users to access information from anywhere in the world using a standard web browser. However, it had several limitations, including a lack of interactivity, personalization, and real-time updates.

Overall, Web 1.0 laid the foundation for the modern web and set the stage for the emergence of more interactive and dynamic web technologies in the years to come.

**Why is blockchain called world wide computer?**

Blockchain is often called a "worldwide computer" because it is a distributed database that runs on a network of computers around the world, rather than being centralized in one location. This means that anyone with an internet connection can access blockchain data and participate in its operations, much like how any user can access the internet and use cloud computing resources from anywhere in the world.

Moreover, just like a computer, blockchain can execute code and perform calculations. It uses smart contracts to automate processes and make decisions based on predetermined rules. These features give blockchain the power to securely and transparently manage a wide range of applications, such as digital currencies, supply chain management, voting systems, and more. So, in essence, blockchain is like a global computer that allows people to collaborate and share information and resources without needing to trust any central authority.

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**Construct transaction:** The first step in any blockchain transaction is to create a digital record of the transaction. This involves creating a block of data that includes information about the transaction, such as the sender's public key, the recipient's public key, the amount of currency being transferred, and any other relevant details.

**Sign Transaction:** Once the transaction has been created, it needs to be verified using digital signatures. The sender of the transaction signs the transaction using their private key, which proves that they are the rightful owner of the assets being transferred.

**Broadcast Transaction:** After the transaction has been signed, it is broadcasted to the network where it will be validated by other nodes. Broadcast refers to sending the transaction to all participants or nodes in the blockchain network.

**Consensus Achieved:** When a transaction is broadcasted to the network, all nodes work together to validate the transaction. They do this by checking that the sender has sufficient funds, that the signature is valid, and that the transaction is not a duplicate or fraudulent one. Once a certain number of nodes have validated the transaction, the network achieves consensus.

**Mine / Validate Transaction:** If the network cannot reach consensus on a transaction, it may need to be mined or validated. Mining is the process of solving complex mathematical problems to confirm transactions and add them to the blockchain ledger. Validation is the process of verifying the transaction through algorithms.

**Ledger Updated:** Once consensus is achieved and the transaction is confirmed, it is added to the blockchain ledger. This means that the transaction is now permanent, transparent, and immutable. The ledger is updated and distributed across the entire network, ensuring that everyone has access to the most current version of the blockchain.