Sockets in Java



What is TCP?

Transmission Control Protocol (TCP) is a communication protocol that enables applications to exchange messages over a network and ensure the successful delivery of exchanged data packets. Due to its reliability, TCP is the favored protocol for many types of common applications.



Sockets

A **socket** is an endpoint that essentially allows us to connect the client and server using transmission control protocol.

Client-Server Architecture

Client-server architecture is made up of the following:

- Client A tool (computer or software) used to request data from a server.
- Server A tool (computer or software) used to respond to client requests.
- Request/Response Communication model used by computer to communicate over a network.

Creating a ServerSocket

To create a ServerSocket in java, use the following code:

ServerSocket firstServerSocket = new
ServerSocket(6868);



DataInputStream

A DataInputStream allows a program to read primitive data from an underlying input stream, while a DataOutputStream is used to write the primitive data.

Port Numbers

A socket is tied to a specific port number so that data can be sent between the client and server.

