

# ECAP615

## Programming in Java



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# Learning Outcomes



After this lecture, you will be able to

- Learn the basic concept Socket programming.
- Understand the process of creating client and server.
- Implementation of Socket Programming.

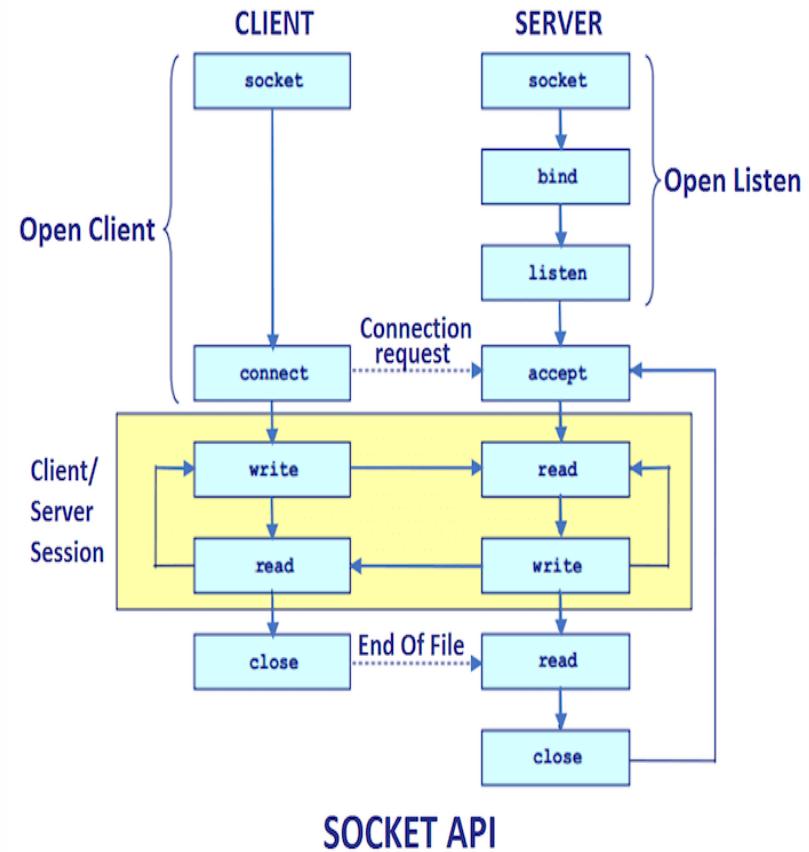
# Java Socket programming

- Java Socket programming is used for communication between the applications running on different JRE.
- It can be connection-oriented or connection-less.
- `Socket` and `ServerSocket` classes are used for connection-oriented socket programming.
- `DatagramSocket` and `DatagramPacket` classes are used for connection-less socket programming.

# Java Socket programming

The client in socket programming must know two information:

- IP Address of Server
- Port number.



# Creating Server

- To create the server application, we need to create the instance of ServerSocket class.
  - The accept() method waits for the client.
  - If clients connects with the given port number, it returns an instance of Socket.
- ✓ `ServerSocket ss=new ServerSocket(9999);`
- ✓ `Socket s=ss.accept();`

# Creating Client

- To create the client application, we need to create the instance of Socket class.
- Here, we need to pass the IP address or hostname of the Server and a port number.  
`Socket s=new Socket("localhost",9999);`

**That's all for now...**