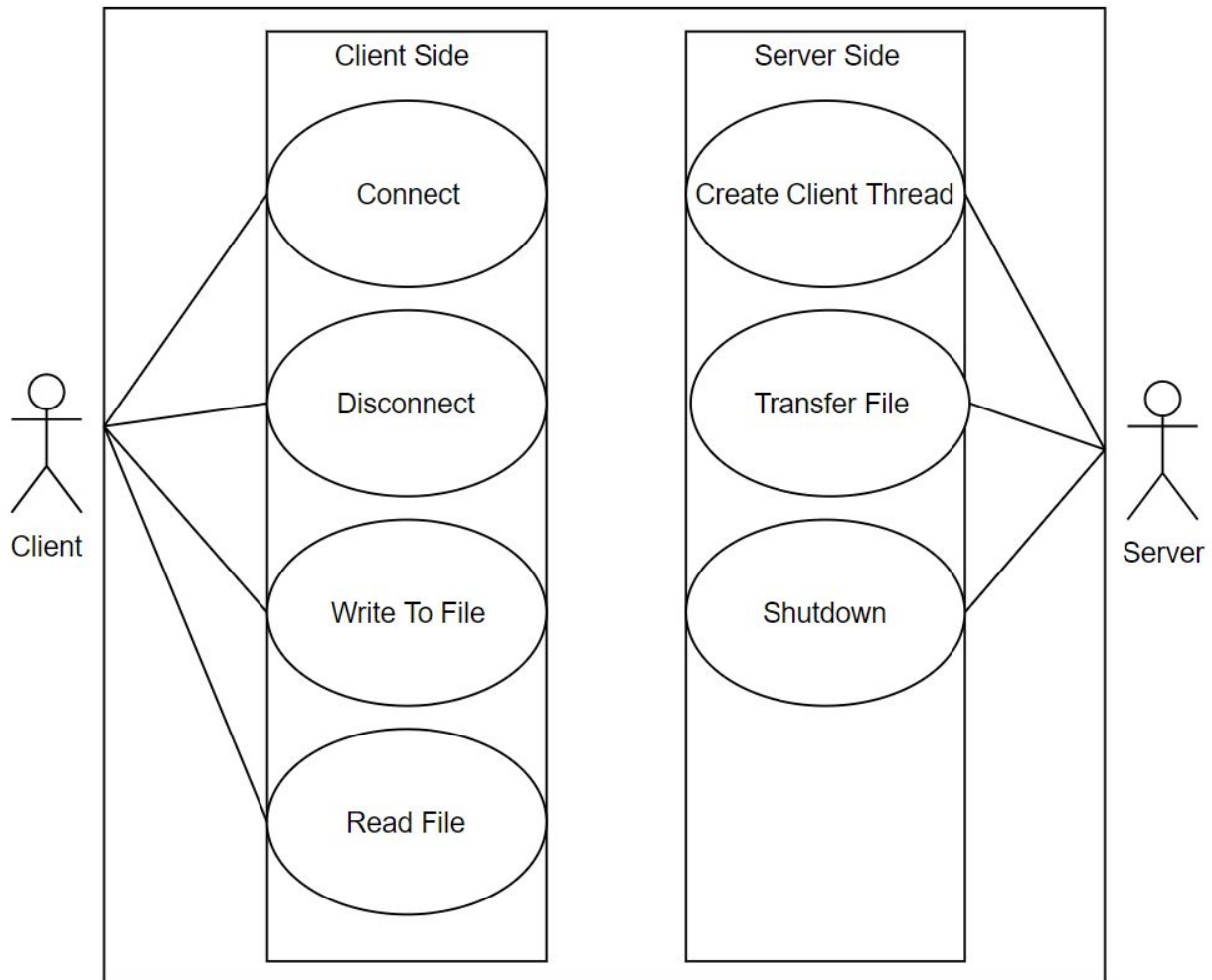**Use Case Diagram**

Read File

       Description: User requests to read file from server

       Actor: User/client

       Precondition:

              512 byte array must be available for transferring

              User must have established a connection to the server

       Assumptions:File must exist

       Main Sequence:

          1. Client sends a read request with file name to the server
          2. Server checks validity of request
          3. If it is valid it send back the data block number
          4. Client sends data back in block of 512 bytes(max size) can be smaller
          5. Step 3 and 4 happen until the entire file is read in

Post Condition:Entire file must be read in

Alternate Sequence:

     If invalid request, server disconnects from user

Write to File:

Description: Client requests file for reading from server

Actor: User/Client

Precondition:

User is connected to Server and Precondition:

512 byte array must be available for transferring

Assumptions:

Main Sequence:

1. Client sends a write request to the Server
2. Server checks validity of request
3. If valid, server sends an acknowledgement 0 to the client
4. User sends the file information that is being written in blocks of 512 bytes
5. Once the data is received the server sends acknowledgements
6. Steps 4 and 5 loop through until the entire file is written

Post Conditions: The entire file must be written in

Alternate Sequence:If invalid request, server disconnects from user