

Client
<ul style="list-style-type: none"> - sendPacket : DatagramPacket - receivePacket : DatagramPacket - sendReceiveSocket : DatagramSocket - request : boolean - filename : String - in : BufferedOutputStream - out : BufferedOutputStream - sendPort : int + Mode : enum - verbose : boolean - path : String - terminate : boolean - destAdd : InetAddress - expAdd : InetAddress - expPort : int
<ul style="list-style-type: none"> + packetInfo(DatagramPacket) : String + analyzePacket(DatagramPacket) : void + checkValidOpcode(DatagramPacket) : boolean + error(byte, InetAddress, int) : void + updateBlockNum(byte[]) : void + checkAddPort(DatagramPacket, InetAddress, int) : boolean + areEqual(DatagramPacket, DatagramPacket) : boolean + verify(DatagramPacket, byte[]) + writeData(DatagramPacket) : void + checkTypeError(DatagramPacket) : boolean + constructRRQ(byte[]) : DatagramPacket + constructWRQ(byte[]) : DatagramPacket + updateACK(byte, byte, byte[]) : void + CreateOutStream(DatagramPacket) : boolean + readRequestHandler() : boolean + writeRequestHandler() : boolean

ErrorSimListener
<ul style="list-style-type: none"> - Selection : int - verbose : boolean - clientSocket : DatagramSocket - receiveClientPacket : DatagramPacket - clientData : byte - clientPort : int - clientLength : int - delay : int - Read : boolean - Write : boolean - errorReceived : boolean - packetType : int - packetNumber : int - serverAddress : InetAddress
<ul style="list-style-type: none"> + receiveClientRequest() : void - printInformation(DatagramPacket) : void

ErrorSimulator
<ul style="list-style-type: none"> - Selection : int - verbose : boolean - clientSocket : DatagramSocket - receiveClientPacket : DatagramPacket - clientData : byte - clientPort : int - clientLength : int - delay : int - Read : boolean - Write : boolean - errorReceived : boolean - packetType : int - packetNumber : int - serverAddress : InetAddress - lastPacketWrite : boolean - lastPacketRead : boolean - firstPacket : boolean - end : boolean - errorReceived : boolean - clientAddress : InetAddress - errorAddress : SocketAddress - errorPort : int - serverAddress : InetAddress - clientReply[] : byte - serverReply[] : byte - serverData[] : byte - trueLastPacket[] : byte
<ul style="list-style-type: none"> + normalMode() : boolean + lostMode() : boolean + duplicateMode() : boolean + delayedMode() : boolean + verifyPacketSize() : void + doneTransfer() : void + simulateError4() : boolean + simulateError5() : boolean + clientReceive() : void + clientSend() : void + serverReceive() : void + serverSend() : void + foundPacket(DatagramPacket p) : boolean + printInformation(DatagramPacket p) : void

Server
<ul style="list-style-type: none"> - path : String - fileSet : HashSet<File> - receivedMode : String - transferSocket : DatagramSocket - activeThreads : Stack<Integer> - shutdown : boolean - terminate : boolean - verbose : boolean - expAdd : InetAddress - expPort : int
<ul style="list-style-type: none"> + packetInfo(DatagramPacket) : String + analyzePacket(DatagramPacket) : void + checkTypeError(DatagramPacket) : boolean + verifyBlock(byte[], byte[]) : boolean + areEqual(DatagramPacket, DatagramPacket) : boolean + updateBlockNum(byte[]) : void + writeData(DatagramPacket, BufferedOutputStream, String, DatagramSocket) : void + verify(DatagramPacket, byte[], DatagramSocket) : boolean + checkAddPort(DatagramPacket, InetAddress, int, DatagramSocket) : boolean + isValid(byte[], int, int) : boolean + write(byte[], int, InetAddress, String) : boolean + read(byte[], int, InetAddress, String) : boolean + error(byte, InetAddress, int, DatagramSocket) : void + receivePacket(DatagramSocket, DatagramPacket, int, int) : DatagramPacket + extractName(byte[]) : String + runServer() : void