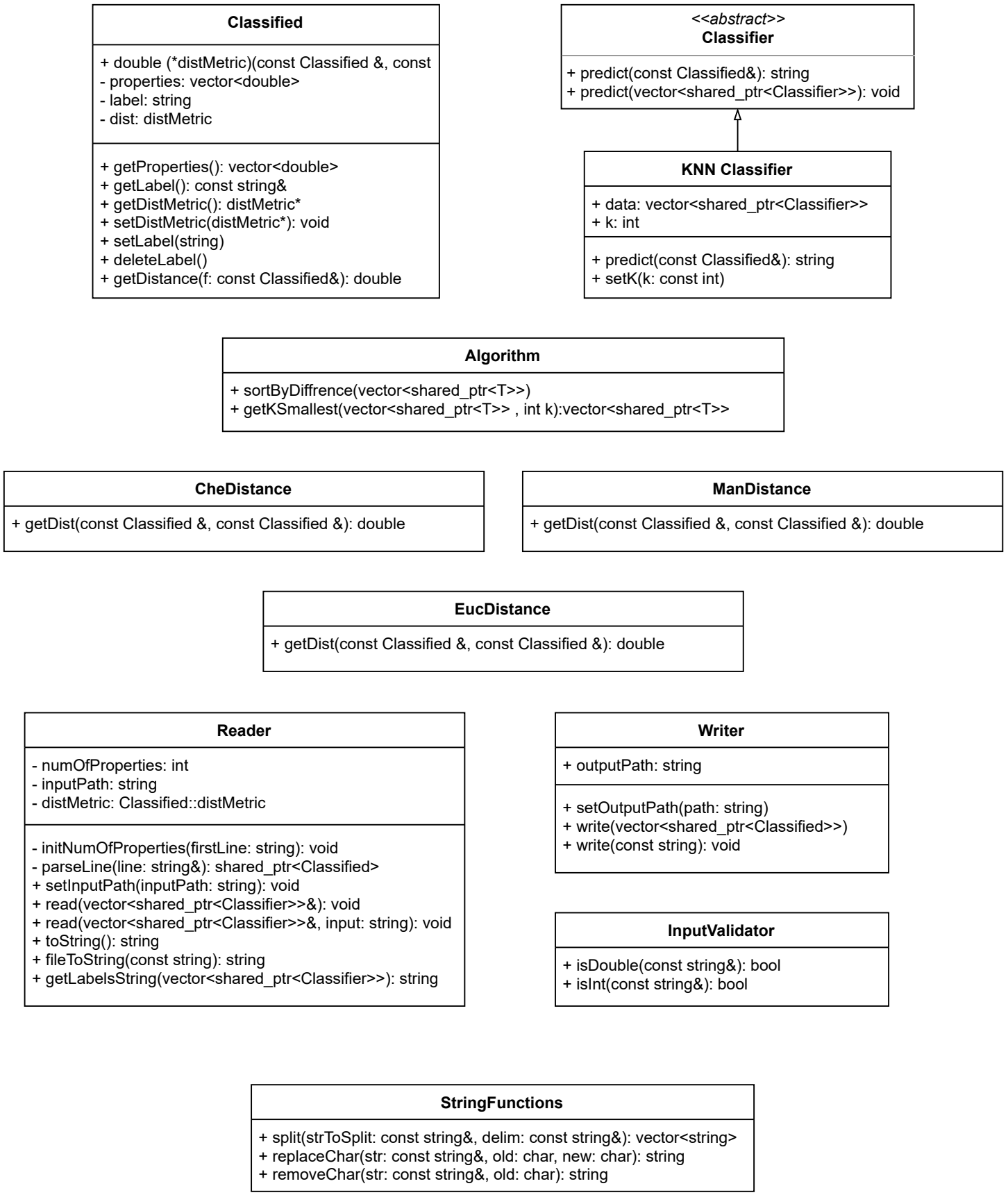
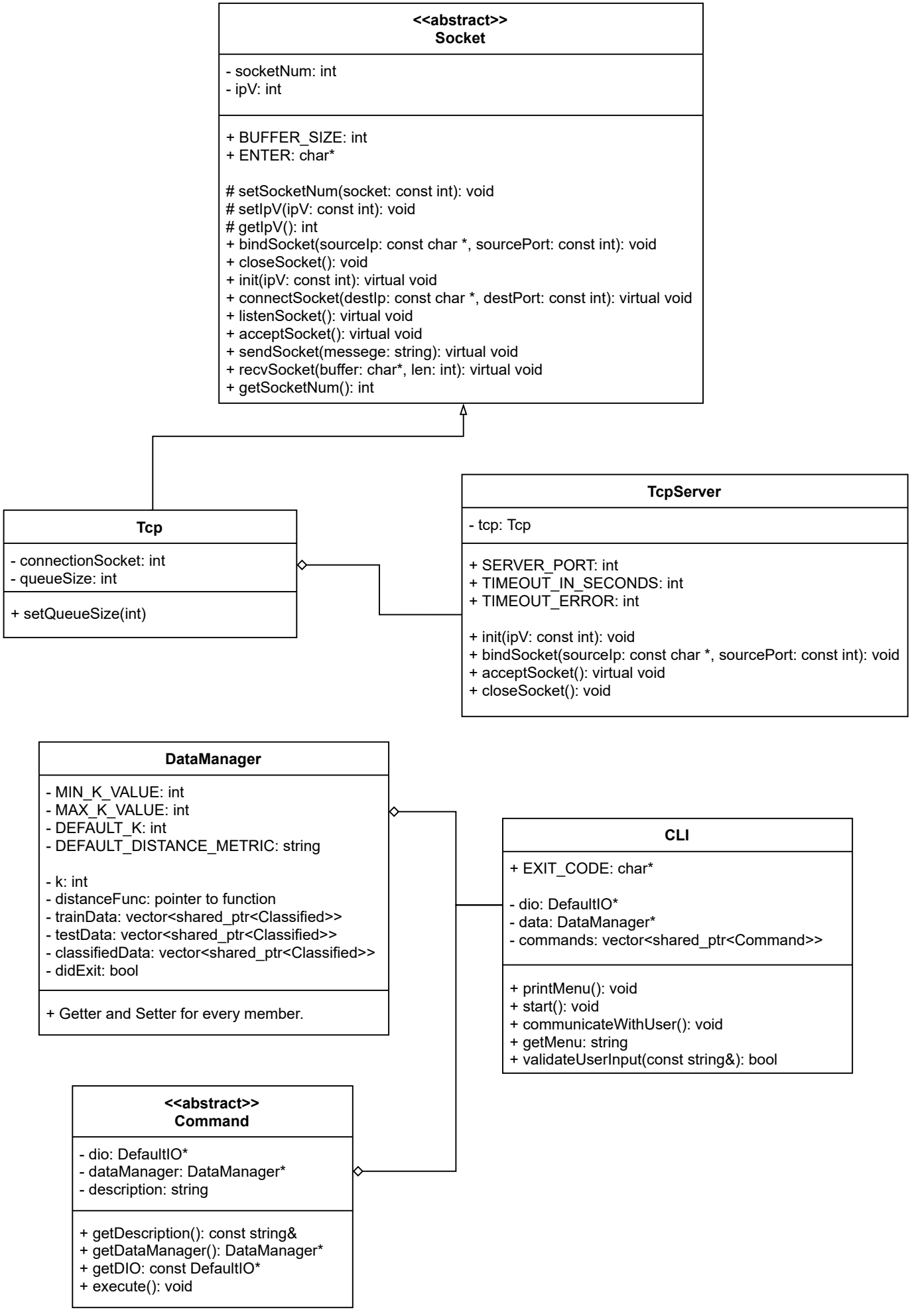
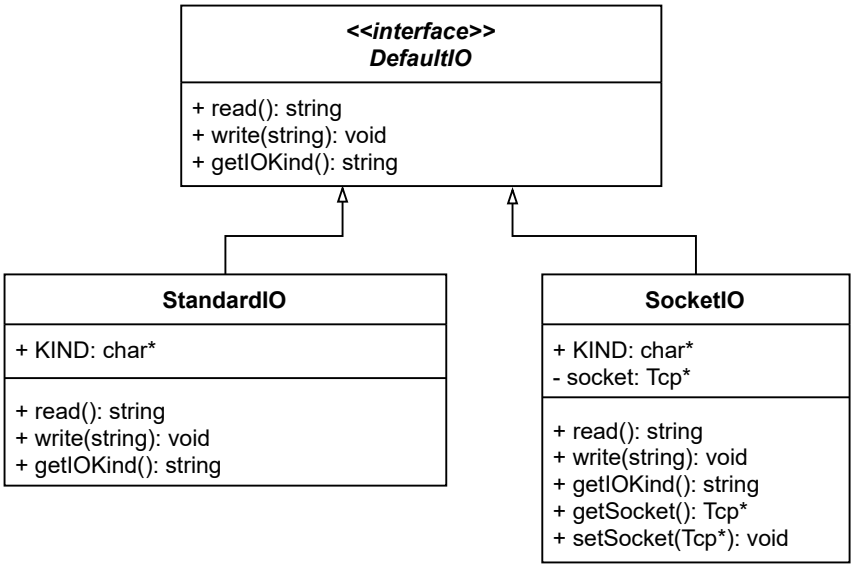
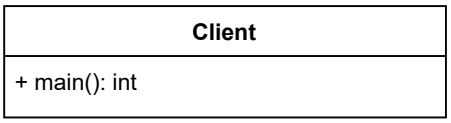
UML Diagram - Ex3 AP1

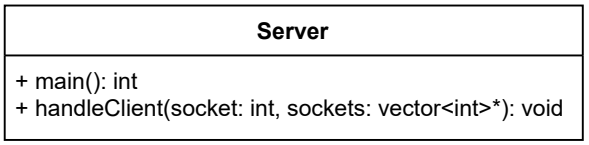
Made by Idan Turkenits & Tommy Zaft



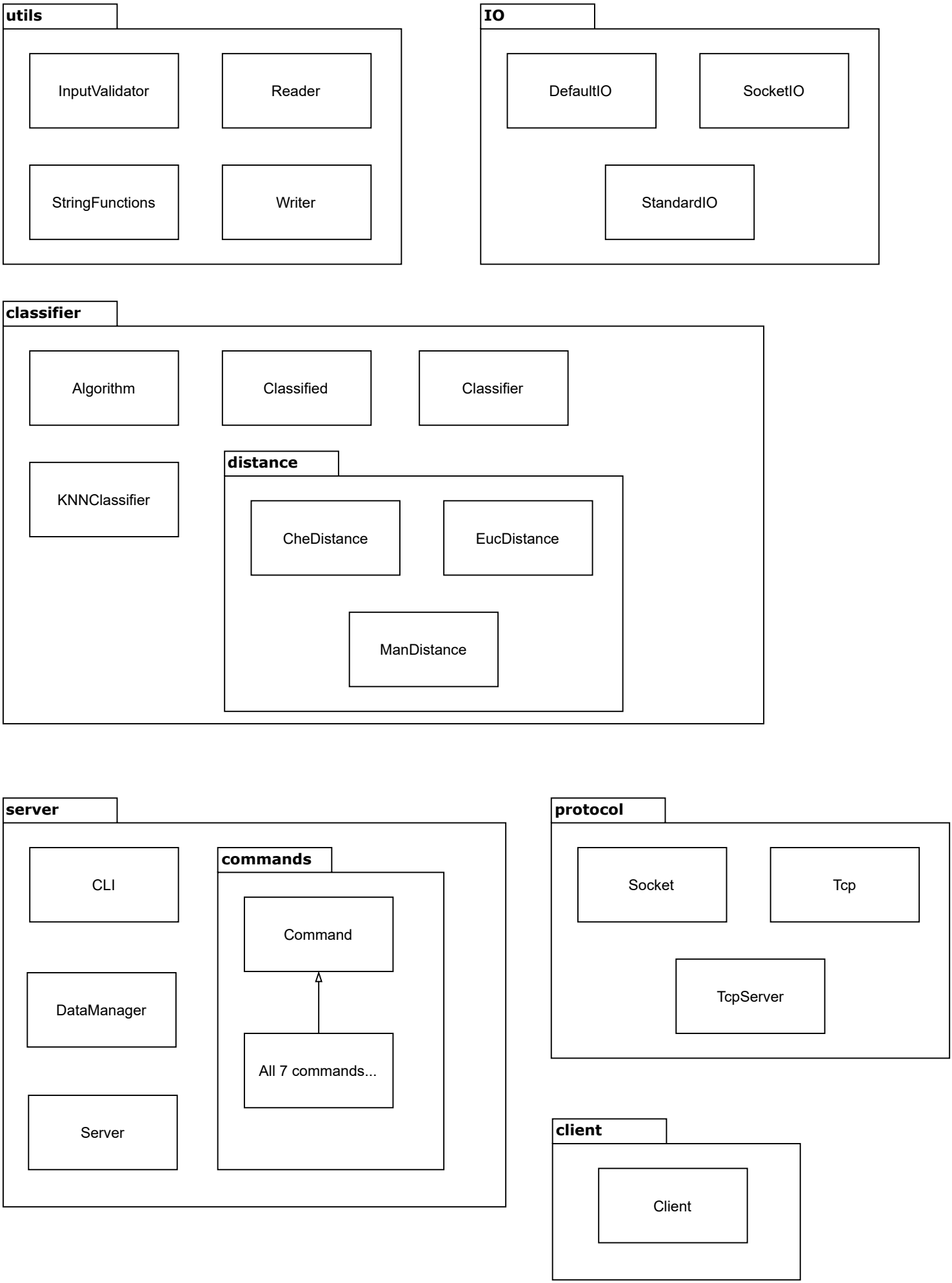

<<abstract>>
Socket
- socketNum: int
- ipV: int
+ BUFFER_SIZE: int
+ ENTER: char*
# setSocketNum(socket: const int): void
# setIpV(ipV: const int): void
# getIpV(): int
+ bindSocket(sourceIp: const char *, sourcePort: const int): void
+ closeSocket(): void
+ init(ipV: const int): virtual void
+ connectSocket(destIp: const char *, destPort: const int): virtual void
+ listenSocket(): virtual void
+ acceptSocket(): virtual void
+ sendSocket(messege: string): virtual void
+ recvSocket(buffer: char*, len: int): virtual void
+ getSocketNum(): int
Tcp
- connectionSocket: int
- queueSize: int
+ setQueueSize(int)
TcpServer
- tcp: Tcp
+ SERVER_PORT: int
+ TIMEOUT_IN_SECONDS: int
+ TIMEOUT_ERROR: int
+ init(ipV: const int): void
+ bindSocket(sourceIp: const char *, sourcePort: const int): void
+ acceptSocket(): virtual void
+ closeSocket(): void
DataManager
- MIN_K_VALUE: int
- MAX_K_VALUE: int
- DEFAULT_K: int
- DEFAULT_DISTANCE_METRIC: string
- k: int
- distanceFunc: pointer to function
- trainData: vector<shared_ptr<Classified>>
- testData: vector<shared_ptr<Classified>>
- classifiedData: vector<shared_ptr<Classified>>
- didExit: bool
+ Getter and Setter for every member.
CLI
+ EXIT_CODE: char*
- dio: DefaultIO*
- data: DataManager*
- commands: vector<shared_ptr<Command>>
+ printMenu(): void
+ start(): void
+ communicateWithUser(): void
+ getMenu: string
+ validateUserInput(const string&): bool
<<abstract>>
Command
- dio: DefaultIO*
- dataManager: DataManager*
- description: string
+ getDescription(): const string&
+ getDataManager(): DataManager*
+ getDIO: const DefaultIO*
+ execute(): void


<<interface>>
DefaultIO
+ read(): string
+ write(string): void
+ getIOKind(): string
StandardIO
+ KIND: char*
+ read(): string
+ write(string): void
+ getIOKind(): string
SocketIO
+ KIND: char*
- socket: Tcp*
+ read(): string
+ write(string): void
+ getIOKind(): string
+ getSocket(): Tcp*
+ setSocket(Tcp*): void


Client
+ main(): int


Server
+ main(): int
+ handleClient(socket: int, sockets: vector<int>*): void

Packages


utils
InputValidator
Reader
StringFunctions
Writer
IO
DefaultIO
SocketIO
StandardIO
classifier
Algorithm
Classified
Classifier
KNNClassifier
distance
CheDistance
EucDistance
ManDistance
server
CLI
commands
Command
DataManager
All 7 commands...
Server
protocol
Socket
Tcp
TcpServer
client
Client