# **LUBE**

by Bartbes

# Client

## Easy part:

The client is located in "Client.lua".

The table that contains every client function and variables is called "client". For most (if not all) actions there is a function, with an easy to remember name.

#### **Functions:**

(all in client table/namespace)

Init

Returns: -

Arguments: -socket type (string, optional, default=udp)

Does: the initializing

## setCallback

Returns: -

Arguments: -callback (function): receives all incoming messages

Does: set the callback used with *update* 

#### <u>setHandshake</u>

Returns: –

Arguments: -handshake (string): string containing handshake with server

Does: sets an optional handshake

## connect

Returns: -

Arguments: -host (string): ip/dns name

-port (number)

-dns (boolean): if name should be DNS-translated

Does: "connects" socket

Remarks: Implemented in socket type

#### disconnect

Returns: – Arguments: –

Does: "disconnects" socket

Remarks: Implemented in socket type

#### send

Returns: udp: -results of sendto call

else: unknown, see documentation of socket type

Arguments: -data (string): anything you want to send

Does: sends data to server

Remarks: Implemented in socket type

#### receive

Returns: -data (string): anything the server sent to you

Arguments: -

Does: receives data from server Remarks: Implemented in socket type <u>update</u>

Returns: -

Arguments: -

Does: checks if there is incoming data and calls the callback set by setCallback if necessary

Remarks: recommeded to use in update() callback of Löve

## Variables:

(all in client table/namespace)

host (string): as set in Init, the host IP port (number): as set in Init, the host port connected (boolean): if socket is "connected" socktype (string): type of socket (default=udp) protocol (string): protocol of socket type (tcp/udp)

socket (socket): as returned by LuaSocket

callback (function): to be called whenever update gets data handshake (string): string to be sent on connect and disconnect

## Server

### Easy part:

The server is located in "Server.lua".

The table that contains every client function and variables is called "server". For most (if not all) actions there is a function, with an easy to remember name.

Is a lot like the client

#### **Functions:**

(all in server table/namespace)

<u>Init</u>

Returns: -

Arguments: -socket type (string, optional, default=udp)

Does: the initializing

## <u>setCallback</u>

Returns: -

Arguments: -callback recv (function): receives all incoming messages

-callback connect (function): receives all connect messages

-callback disconnect (function): receives all disconnect messages

Does: set the callbacks used with *update* 

## <u>setHandshake</u>

Returns: -

Arguments: -handshake (string): string containing handshake of client

Does: sets an optional handshake

send

Returns: udp: -results of sendto call

else: unknown, see documentation of socket type

Arguments: -data (string): anything you want to send

-rcpt (string/ip, optional, default=all): client to send to

Does: sends data to 1 client or all clients depending of rcpt argument

Remarks: Implemented in socket type

receive

Returns: udp: -results of receive from call

Arguments: -

Does: receives data from clients Remarks: Implemented in socket type

<u>update</u>

Returns: – Arguments: –

Does: checks if there is incoming data and calls the callback set by setCallback if necessary

Remarks: recommeded to use in update() callback of Löve

#### Variables:

Clients (table): contains a list of clients, index = ip, value = port, <u>IT DOES NOT SUPPORT</u>

**MULTIPLE CLIENTS SHARING AN IP** 

(following in server table/namespace)
socket (socket): as returned by LuaSocket
handshake (string): string to be sent on connect and disconnect
callback (function): to be called whenever update gets data
connectcallback (function): to be called whenever a client connects
disconnectcallback (function): to be called whenever a client disconnects
protocol (string): protocol of socket type (tcp/udp)
socktype (string): type of socket (default=udp)

# Binary packing

## Easy part:

The binary packing is located in "Binary.lua".

The table that contains every client function and variables is called "bin".

For most (if not all) actions there is a function, with an easy to remember name.

## **Functions:**

(all in bin table/namespace)

pack

Returns: -result (string) Arguments: -in (table)

Does: turns the table into a string

packvalue

Remarks: for internal use only

unpack

Returns: -result (table) Arguments: -in (string)

Does: opposite of pack, turns string into a table

unpackvalue

Remarks: for internal use only