Improvement ideas:

make the hole thing more organized, object oriented, smart, natural move find_in_tree from client to the tree class

```
database/__init__.py
```

find user(username, password) save new tree(username, tree)

```
add user(who, hashes)
get_chunk_owners(chk)
get_chunk_owner(chk)
has_user_chunk(chk, username)
register chunk(chk, username)
remove_user(frm)
remove chunk(chk)
get_redundancy(chk)
dump()
find_user_for_storing(chk)
```

keep_chunk_alive(from, chk)

chunk/ init .py

```
Tree (tree/__init__.py)
 _init__(son_str)
 _str__()
get_most_recent(file, smile)
process subtree(client, user tree, server tree)
is_dir(dict)
```

NetworkManager (network/__init__.py)

connection made(transport)

connection_lost(ext)

data_received(data)

loop

```
FADD(directory, from who, filename, tree, client)
FUPDATE(new_tree, from_who, old_tree, client)
make_chunk_disappear(chk)
check for string(s)
send_chunk_to(client, chk)
host_chunk(from, chk)
```

engine/__init__.py

```
CliManager (client/__init__.py)
add cli(username, port, tree sent, transport)
get cli(username)
              Client (client/__init__.py)
 _init__(username, port, tree, transport)
send cmd(msg)
find_in_tree(subtree)
  _del__()
```

```
protocol/__init__.py
JOIN(client, data)
parse(command, transport)
FDELETE(client, cmds)
FADD(client, cmds)
FUPDATE(client, cmds)
send FUPDATE(tree, client)
send_FADD(tree, client)
send_CHDELETE(client, chk)
send CHSEND(from cli, to cli, send, chk)
```

```
Hash (../shared.py)
 init (hah)
 _str__()
pretty()
```