
P2P File Sharing Software

Cedric Bone

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CONTENTS:

1	cedric_bone_project	3
1.1	cli module	3
1.2	main module	3
1.3	node module	3
1.4	utils module	5
2	Indices and tables	7
	Python Module Index	9
	Index	11

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CEDRIC_BONE_PROJECT

1.1 cli module

Command-line interface for P2P file sharing app

class `cli.CommandLine(node)`

Bases: `object`

Command-line interface

connect(*args*)

Connect to peer

download(*args*)

Download a file

download_thread(*peer, filename*)

Thread function for downloading

list(*args*)

List local files

peers(*args*)

List peers

search(*args*)

Search for files

start()

Start the CLI

1.2 main module

Main for P2P file sharing app

`main.main()`

1.3 node module

P2P node for file sharing

```
class node.P2PNode(shared_dir)
    Bases: object
    Modded simple version P2P file sharing from BitTorrent

    add_peer(ip, port)
        Manually add a peer

    download_chunk(peer, filename, chunk_index)
        Download a file chunk

    download_file(peer, filename)
        Download file

    get_file_info(file_path)
        File metadata

    get_files()
        list of local files

    get_peers()
        Get list of peers

    handle_chunk_request(client, request)
        Handle file chunk request

    handle_client(client, addr)
        Handle client request

    handle_info_request(client, request)
        Handle file info request

    handle_list_request(client)
        Request for file list

    index_files()
        Index files indirectory

    maintenance()
        Periodic maintenance

    remove_peer(ip, port)
        Remove a peer

    request_file_info(peer, filename)
        Request file

    request_file_list(peer)
        Request file list from peer

    run_server()
        Run server to handle incoming requests

    search_files(query)
        Search for files matching query

    start()
        Start P2P node
```


stop()

Stop P2P node

1.4 utils module

Utility function for P2P file sharing application

utils.find_free_port()

Find available port

INDICES AND TABLES

PYTHON MODULE INDEX

c

`cli`, 3

m

`main`, 3

n

`node`, 3

u

`utils`, 5

INDEX

A

`add_peer()` (*node.P2PNode method*), 4

C

`cli`

module, 3

`CommandLine` (*class in cli*), 3

`connect()` (*cli.CommandLine method*), 3

D

`download()` (*cli.CommandLine method*), 3

`download_chunk()` (*node.P2PNode method*), 4

`download_file()` (*node.P2PNode method*), 4

`download_thread()` (*cli.CommandLine method*), 3

F

`find_free_port()` (*in module utils*), 5

G

`get_file_info()` (*node.P2PNode method*), 4

`get_files()` (*node.P2PNode method*), 4

`get_peers()` (*node.P2PNode method*), 4

H

`handle_chunk_request()` (*node.P2PNode method*), 4

`handle_client()` (*node.P2PNode method*), 4

`handle_info_request()` (*node.P2PNode method*), 4

`handle_list_request()` (*node.P2PNode method*), 4

I

`index_files()` (*node.P2PNode method*), 4

L

`list()` (*cli.CommandLine method*), 3

M

`main`

module, 3

`main()` (*in module main*), 3

`maintenance()` (*node.P2PNode method*), 4

`module`

cli, 3

main, 3

node, 3

utils, 5

N

`node`

module, 3

P

`P2PNode` (*class in node*), 3

`peers()` (*cli.CommandLine method*), 3

R

`remove_peer()` (*node.P2PNode method*), 4

`request_file_info()` (*node.P2PNode method*), 4

`request_file_list()` (*node.P2PNode method*), 4

`run_server()` (*node.P2PNode method*), 4

S

`search()` (*cli.CommandLine method*), 3

`search_files()` (*node.P2PNode method*), 4

`start()` (*cli.CommandLine method*), 3

`start()` (*node.P2PNode method*), 4

`stop()` (*node.P2PNode method*), 4

U

`utils`

module, 5