

CMP4050 Wireless

Distributed File System Assignment

Team 9

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Sec** | **B.N** | **Code** |
| Ahmed Hosny | 1 | 2 | 9202077 |
| Ahmed Sabry | 1 | 4 | 9202119 |
| Basma Elhoseny | 1 | 16 | 9202381 |
| Zeinab Moawad Fayez | 1 | 28 | 9202611 |

## System Servies Design:

A diagram of a flowchart

Description automatically generated

## System Data Structures:

A diagram of a flowchart

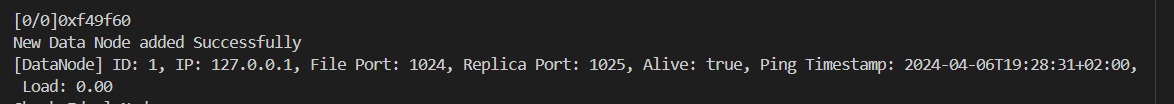
Description automatically generated A diagram of a flowchart

Description automatically generated

## Testing Scenarios:

### Scenario (1): Testing Node Registration Service

* go run .\master\_tracker\main.go
* go run .\data\_keeper\main.go 127.0.0.1



### Scenario (2): Testing Ping Service Between Nodes and Master:

* go run .\master\_tracker\main.go
* go run .\data\_keeper\main.go 127.0.0.1
* kill data\_keeper terminal

A screen shot of a computer

Description automatically generated

### Scenario (3): Upload file

The least loaded node is chosen by the master to be the node of uploading.

A screenshot of a computer

Description automatically generated

A black background with white text

Description automatically generated

### Scenario (4) No Data Nodes:

* go run .\master\_tracker\main.go
* go run .\client \main.go 127.0.0.1

A screenshot of a computer

Description automatically generated

### Scenario (5): Replication of file

* go run .\master\_tracker\main.go
* go run .\data\_keeper\main.go 127.0.0.1
* go run .\data\_keeper\main.go 127.0.0.1
* go run .\client\main.go 127.0.0.1

A screen shot of a computer program

Description automatically generated

A black rectangle with white text

Description automatically generated

### Scenario (6): One Replica is Down of file

A screenshot of a computer

Description automatically generated

* go run .\master\_tracker\main.go
* go run .\data\_keeper\main.go 127.0.0.1
* go run .\data\_keeper\main.go 127.0.0.1
* go run .\data\_keeper\main.go 127.0.0.1
* go run .\data\_keeper\main.go 127.0.0.1
* go run .\client\main.go 127.0.0.1
* Kill terminal for node (1)

A screenshot of a computer screen

Description automatically generated

A screenshot of a computer

Description automatically generated

### A screenshot of a computer Description automatically generatedScenario (7): Parallel Downloading

* go run .\master\_tracker\main.go
* go run .\data\_keeper\main.go 127.0.0.1
* go run .\client\main.go 127.0.0.1
* go run .\data\_keeper\main.go 127.0.0.1

A screen shot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

### Scenario (8) Delayed Confirmation for file from mater to the client [MUST modify Master to sleep]

* go run .\master\_tracker\main.go
* go run .\data\_keeper\main.go 127.0.0.1
* go run .\client\main.go 127.0.0.1

A screenshot of a computer program

Description automatically generated

A computer screen with white text

Description automatically generated

### Scenario (9) Full system:

* go run .\master\_tracker\main.go
* go run .\data\_keeper\main.go 127.0.0.1
* go run .\data\_keeper\main.go 127.0.0.1
* go run .\data\_keeper\main.go 127.0.0.1
* go run .\data\_keeper\main.go 127.0.0.1
* go run .\client\main.go 127.0.0.1
* go run .\client\main.go 127.0.0.1

1. Client 1 Upload file\_1.mp4

A screenshot of a computer

Description automatically generated

1. Client 2 Upload file\_2.mp4

A screenshot of a computer program

Description automatically generated

**A screenshot of a computer

Description automatically generated**Notice Load Balancing Node 4 is chosen to Uplaod file\_2.

**Few Moments Later ⌚⌚**

A screen shot of a computer

Description automatically generated

1. Client 1 Download File 2

A screenshot of a computer

Description automatically generated

A screenshot of a computer screen

Description automatically generated

A black rectangle with white text

Description automatically generated

1. Client 2 Download File 1

A computer screen with white text

Description automatically generated

A screenshot of a computer screen

Description automatically generated

A screenshot of a computer

Description automatically generated

1. Kill Node 1

A screenshot of a computer program

Description automatically generated

A screenshot of a computer

Description automatically generated

**Now You Have a Robust Distributed File System 😉😉**