**USER GUIDE**

**Application Requirements:** the following application requires

Linux Mint 17.3 64 bit

**Note:** there is no guarantee that application will run on earlier versions or later versions of the software. Hence the application was not tested for cross-platform complexity.

**How to run client and server**

The Application can be run in **7** steps:

Step 1: Open the folder and check for following files in the sub-folders:

|  |  |
| --- | --- |
| 1. Client subfolder:  * client.c * rdwrn.c * rdwrn .h * Makefile | b. Server subfolder:   * server.c * rdwrn.c * rdwrn .h * makefile * upload   directory |

Step 2: Run 2 terminal windows:

Step 3: Navigate to the main folder on both terminal windows: Example: **cd Desktop/client-server/**

Step 4: Navigate to subfolders on each terminal window:

Step 4.1: Navigate to the server subfolder on one terminal window. Example: **cd Desktop/client-server/server/**

Step 4.2: Navigate to the client subfolder in the other terminal window: Example: **cd Desktop/client-server/server/**

Step 5. Run “make” command on both terminal windows: example: ~/Desktop/coursework2/server $make

Step 6. Run the server on the server window: ~/Desktop/coursework2/server $**./server**: it should display a message “waiting for connections”

**IMPORTANT: DO NOT RUN THE CLIENT FIRST**

Step 7. Next run the client on the client window: ~/Desktop/coursework2/client$ **./client**: it should display a message “Connected to the server” and the server window should also notify to that it has received a connection from a client.

Once the connection is established the MENU should also be displayed on the client window

7. Choose an option to start the interaction with the client interface which will b sending requests to the server.

|  |  |
| --- | --- |
| Example server: | Example client: |

The Application has implement six main functionalities as per the requirement:

1. Requesting for Student name, ID and IP address from the server
2. Generate 5 random numbers from 0-1000
3. Get server system information
4. Get a list of files in the upload directory on the server
5. copy the contents of a file specified by the client user
6. Signal Handler, which exits gracefully

Functionalities not covered:

1. cross-platform complexity
2. Unable to notify the server when SIGINT action happens from the client side
3. Unable to notify the client when SIGINT action happens from the client side