**SCHOOL OF COMPUTING, ENGINEERING AND BUILT ENVIRONMENT**

**Department of Computing**

**BSc/BSc (Hons) Software Development for Business**

**BSc/BSc (Hons) Computing**

**Systems Programming**

**Module code M3I324183-18-B**

Documentation

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This documentation provides a user guide for a client-server application using the socket mechanism developed in the C language.

The system enables the user to perform a variety of functions including

1. Display the server IP address, the student’s name and the student’s ID number.
2. The system is able to show an array of random 5 numbers from 0 to 1000.
3. Provide information on hostname, system name, details of the version and machine.
4. Display a list of the file names in the server.
5. The system gets and copies files in the server upload directory.
6. Exit

With regard to the above, in order to show this functionalities below is a list of steps to follow.

Open a terminal for the client and server respectively: This can be done by right clicking on both folders then choosing - open a new terminal. You can then have terminals for both the client and the server adjacent to each other. This is to enable you to know if the server is running in order to display the menu.

Since there are multiple files in each folder, the folder is then compiled using the function - **make**

Ones this is done and the user then inputs the command- **./server** this is used to run the server component of the system and then the user then uses the command **./client** to run the client component of the application.

Afterwards, when the user inputs the **./server** command then there is a message presented informing the user that the server is running and waiting.

Ones the connection is established, an interactive menu is displayed, allowing the user to select from 6 options in the client terminal.

In order to display any of the functionalities in the menu, one can do so by selecting/inputting their corresponding numbers.