King Fahd University of Petroleum and Minerals
College of Computer Sciences and Engineering
Department of Computer Engineering

COE 451 – Computer and Network Security (T191)

<u>**Mini-Programming Project-**</u>Phase I <u>**(due date:** Sunday 29/09/2019 by 11:59 PM**)**</u>

Description:
Build a <u>**client-server**</u> file transfer application using any programming language of your choice. The application <u>**must use TCP**</u> as a transport layer to ensure reliability. The <u>**client**</u> application must <u>**continuously**</u> provide the user with a command prompt allowing the user to select between 3 commands; *GET*, *PUT*, and *QUIT*. The *GET* command (syntax: *GET filename*) retrieves a copy of a specified file from the server side. The *PUT* command (syntax: *PUT filename*) places a copy of a specified file from the client side on the server side. Once a *GET* command or a *PUT* command has been executed, the command prompt should be provided back to the user. If the user issues a *QUIT* command, then the client application should close the TCP connection and terminate the client application.

You may use any file transfer application source code that you may find on the Internet, but you must provide the website URL from which you obtained the source code.

Make sure to understand the code very well, and to test it preferably using 2 virtual machines. You can use either *VirtualBox* or *VMware* to set up the 2 virtual machines.

Deliverables:
Submit on Blackboard a **well-documented** soft copy of your implementation along with a **readme file** on how to execute your implementation.

If you acquired the source code from the Internet, then make sure to include the website URL from which you obtained the source code. **Failure to do so will result in losing <u>all marks</u> of the 3 phases of the mini-project!**