Course Project Phase(3)

- ➢ Modify the simple stop-and-wait file request-reply UDP client-server program that you developed in phase 2.

- ➢ Your new program will be using a sliding window similar to the one used by TCP.

- ➢ Your window will start with slow start mode (growing exponentially) and then switch to congestion avoidance mode (additive increase) when a threshold is reached.

- ➢ There will be no timers !!!

- ➢ You will impose some packet corruption and packet loss.

- ➢ The receiver will send a NAK when he receives a corrupted packet➔ the sender will cut his window to half and start the congestion avoidance mode.

- ➢ The receiver will send a double ACK when he receives a packet and misses a previous one➔ the sender will return to slow start mode after cutting his threshold to half the window size.

- ➢ You need to design a FSM for your protocols and show that in your report. Also clarify the packet format that you used.

- ➢ Moreover, modify the UDP program and make concurrent program. The server must be capable to handle concurrent calls from the clients, receive new calls while old calls are still active but handled by the children processes.

Due date: Tuesday, November, 29, 2011   (hard deadline!!!)