**CS2031 – Telecommunications II**

**Assignment 1.1 Report**

***RecieverProcess***

The process of running the two given example programs began with running the *ReceiverProcess* class. This begins with extracting the local host address and the receiver port from the arguments. Following this it creates a buffer to store the data in, as well as a packet and a socket.

The program then attempts to receive incoming packets by invoking the *receive* method on the socket created earlier. It continues with this attempt until data is received.

***SenderProcess***

The *SenderProcess* class is then run following the above steps in order to transmit/send data to the receiver. Similarly, this begins by extracting the local host address and the destination port from the arguments. The string ‘Hello World’ is then converted into an *ObjectOutputStream* object which is then flushed and further converted to an array of byte’s i.e a buffer.

From this a *DatagramPacket* object is created containing the above buffer. This packet is then sent to the destination port at the local address extracted earlier via a *DatagramSocket*.

***Receiving and handling of Data***

If the process is successful the *DatagramPacket* created in the *RecieverProcess*’s buffer is filled with the transmitted data (“Hello World”). The data is then extracted from the *DatagramPacket’s* buffer and into the buffer created earlier as an array of bytes in the. This data is then converted into a *ByteArrayInputStream* object, and then further converted into an *ObjectInputStream* object named *‘ostream’*. The data is then finally printed to the console by invoking the *readUTF* method on *‘ostream’*. The *RecieverProcess* is then terminated.

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