MSc. Advanced Computer Systems
CM50123 Networking
Assignment 2: Reassessment

This assignment is worth 15% of the total marks for the course. It is due in to the Department Office **16.00 on Monday 16th. April 2010**. Extensions may only be granted by the Director of Studies (Mr. Hayes).

Learning Outcomes: a successful student will know the `tcpdump` tool and how to interpret its output, and will understand how to interpret TCP/IP packets and their interaction, and to comment on TCP implementations.

1. The BUCS file `/u/ma/s/masjhd/CM50123-2009-10-Reassess.txt` contains a packet trace generated on `birch.bath.ac.uk` with tcpdump. Annotate* this file, marking every packet, or group of packets, with its function, and commenting on TCP/IP features you observe, such as slow start, Nagle etc.
   The trace was generated by running a web browser, which was fetching a file via FTP. However, there may be other, unrelated, packets in the trace — just mark then as unrelated. **[5]**

2. *Based on this evidence*, comment on the quality of the TCP implementation as you see it on `birch.bath.ac.uk`. If you believe that it breaks any MUST or SHOULD statements in an RFC, say so and give a description, with the appropriate reference to the RFC. **[3]**

3. *Based on this evidence*, comment on the quality of the TCP implementation as you see it on the otehr end. If you believe that it breaks any MUST or SHOULD statements in an RFC, say so and give a description, with the appropriate reference to the RFC. **[3]**

4. Explain the growth in delivered bandwidth (bytes/second) as the session progresses, and highlight any limits to growth, as they apply to this connection. **[4]**

Assignment of Marks
Threshold: evidence of interpreting some `tcpdump` output successfully.
Good: substantially correct interpretation of the data, and some analysis.
Distinction: Correct interpretation of the data, and significant analysis.
JHD 26.02.2010

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* You may wish to take a copy of the file and edit it to add your annotations.