

Practical time: THURSDAY 2:00pm

COMPUTER COMMUNICATIONS 200

CC200 Assignment Report

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**Source Code Organisation**

The source code is organized to reflect a typical layered network architecture. Global variables were permitted to be used for the CNET network simulator and thus, the header file contains the declaration for these functions. Structures for frames and variables for the routing table, node windows and node buffers are all contained within the *assignment.h* header file.

Layers are present in the *assignment.c* from high to low. i.e. from the transport layer down to the data link layer. Only the network and data link layers were fully implemented in this assignment, with CNET calls utilizing the built-in application and physical layer. Wrapper functions were developed for the transport layer, essentially to illustrate the layering, despite these functions performing little work.

**Design Issues**

with CNET

*Sending Frames*

with CNET

*Receiving Frames*

with CNET

*Frame Re-transmission*

with CNET

**References**

Ling, Li. *"CNET Tips and Discussions."* Class lecture, Computer Communications from Curtin University, Perth, Australia, April 14 2016.

McDonald, C. "The Cnet Network Simulator (v3.3.3)." The Cnet Network Simulator (v3.3.3). Accessed May 11, 2016.

http://www.csse.uwa.edu.au/cnet/.

Tanenbaum, Andrew S. *Computer Networks.* Upper Saddle River, NJ: Prentice Hall PTR, 1996.