

Announcements

- Homework 3 due today
- Build your GUI before this weeks lab
- Another debugging tutorial in lab this week (Debugging Loops)
- NO LABS NEXT WEEK!

Review

- Loops
 - Counting loops
 - Input loops
 - String processing loops

Today's Plan

- Ethernet

from The History of the Telephone by Herbert N. Casson, 1910

As for Bell's first telephone lines, they were as simple as clothes-lines. Each short little wire stood by itself, with one instrument at each end. ... There were no switchboards of any account, no cables of any value, no wires that were in any sense adequate, no theory of tests or signals, no exchanges, no telephone system of any sort whatever.

But there had now come a time when more than two persons wanted to be in the same conversational group. ... Here was the new problem, and a most stupendous one -- how to link together three telephones, or three hundred, or three thousand, or three million, so that any two of them could be joined at a moment's notice.

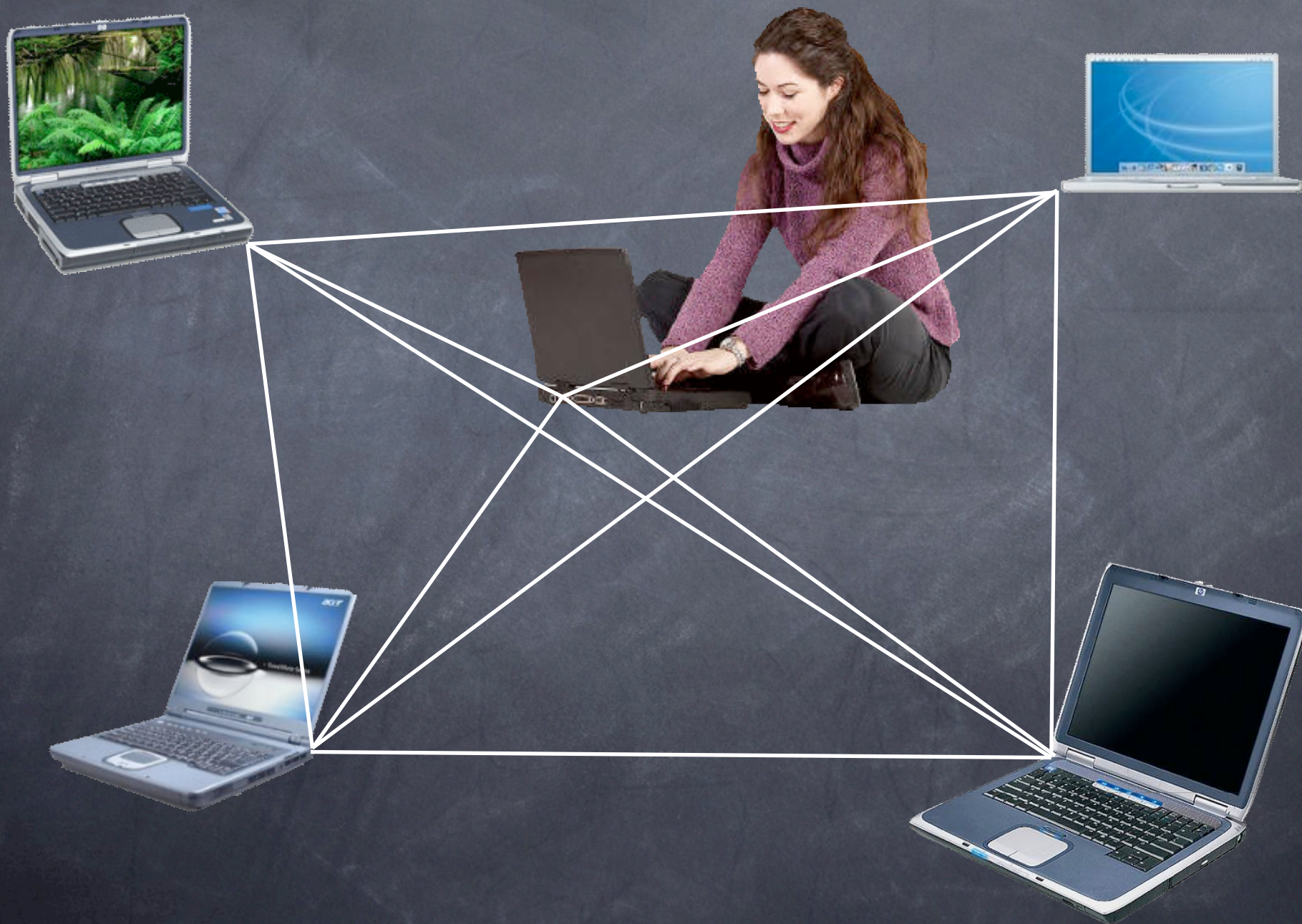
And that was not all. ... They had to make this system so simple and fool-proof that every one ... could use it without any previous experience.

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Sunday, October 4, 2009





Ethernet Frame Format

PREAMBLE	TO	FROM	LENGTH/ TYPE	DATA	ERROR CHECK
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64

48

48

16

between

32

46

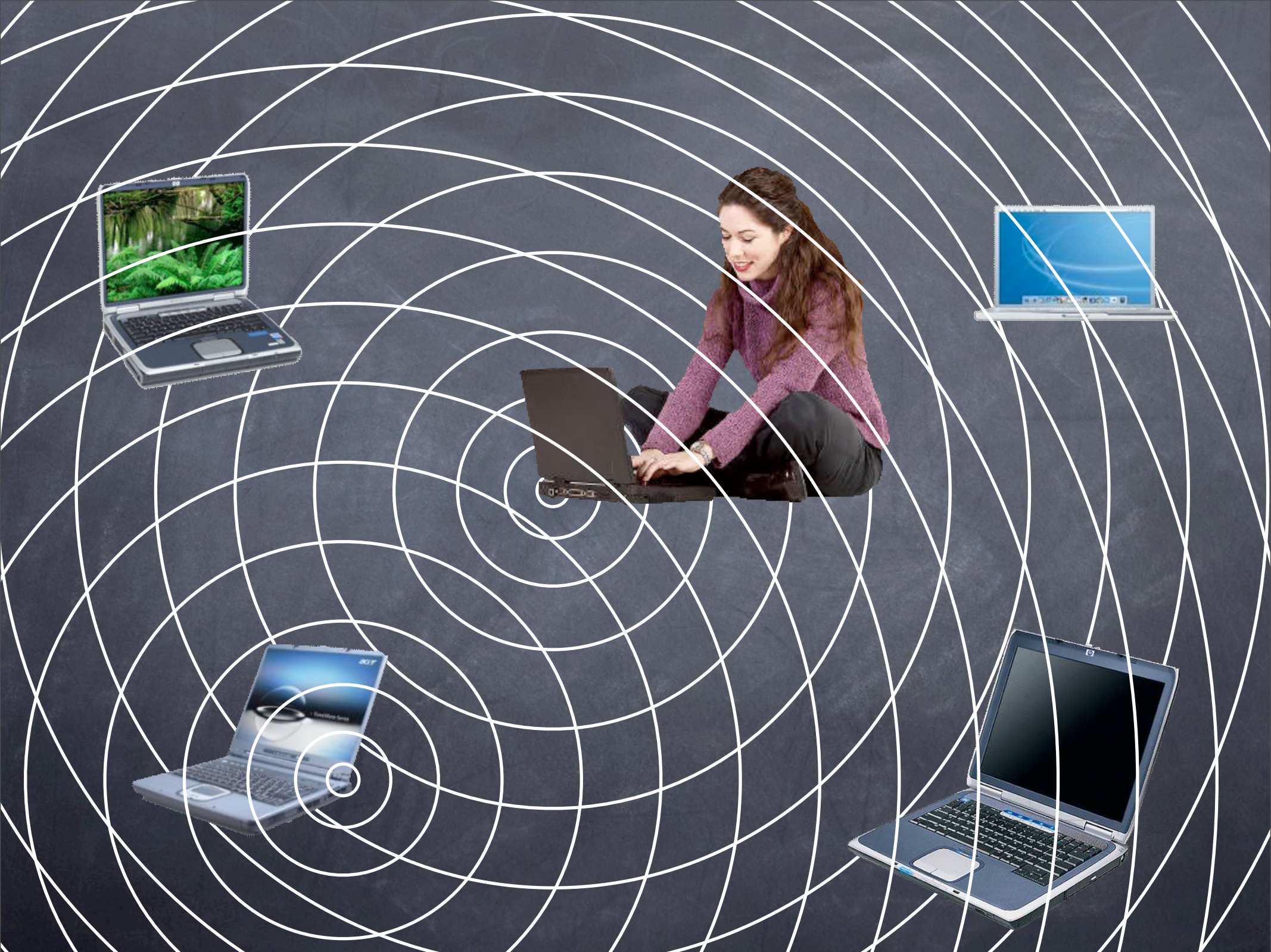
and

1500

bytes

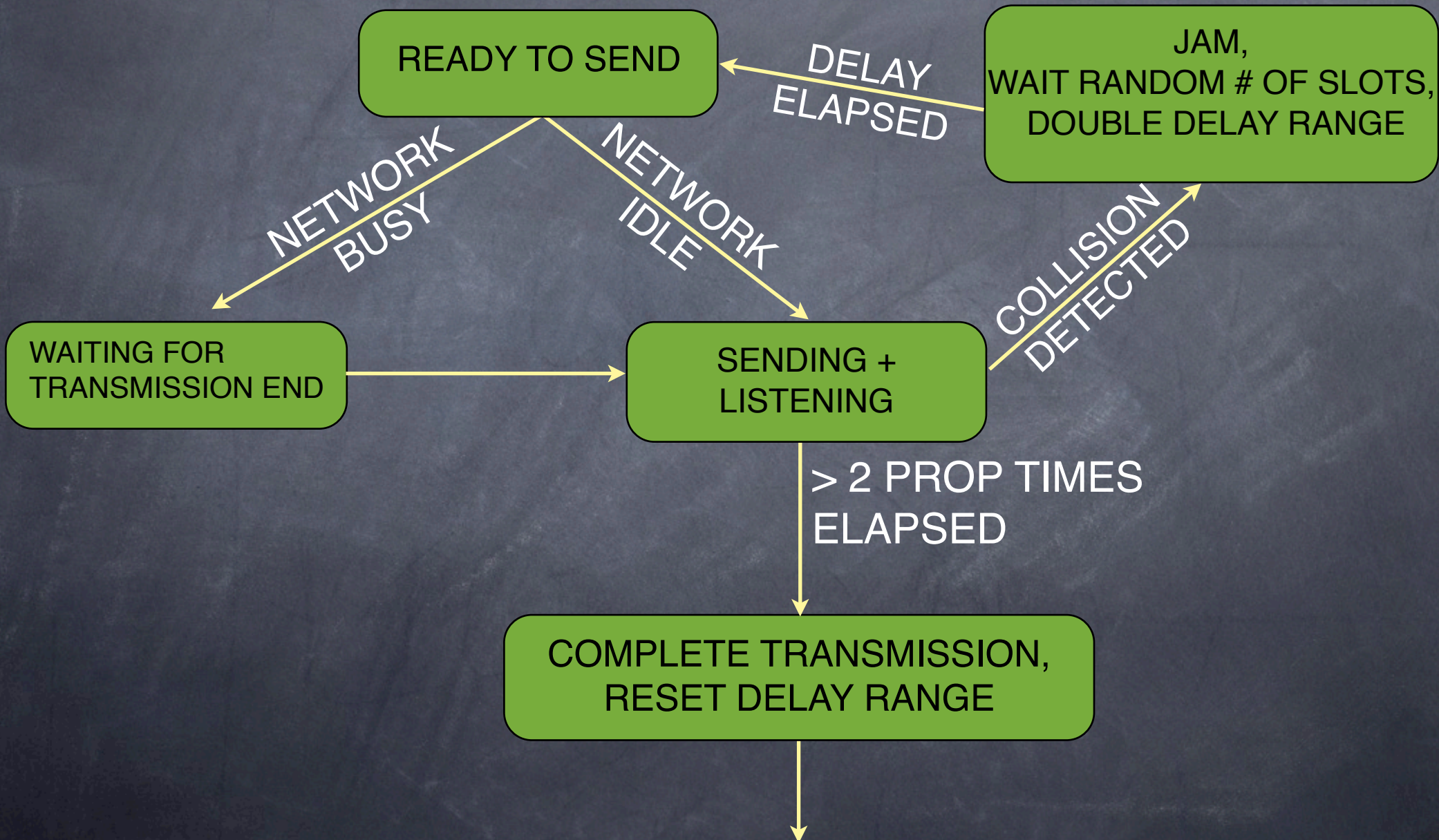
802.11 (WiFi) Frame Format

16	16	48	48	48	48	16	up to 2312 bytes	32
Frame Control	Dura- tion	Addr 1	Addr 2	Addr 3	Sequence Control	Addr 4	Data	Error Check



Sunday, October 4, 2009

ETHERNET TRANSMISSION ALGORITHM



AMAZING ANIMATED DEMONSTRATION!!!

<http://www.cs.williams.edu/~cs134/lectures/etherDemo.html>

ETHERNET TRANSMISSION ALGORITHM

