

Engineering the Internet

Ruthie Byers

Junction 2013

1 Introduction

- Introduction
- Computing Primitives: Operating Systems and Code
- Computing Primitives: File system
- Computing Primitives: More interesting shell scripting methods

2 Navigating the Internet

- History of communication over wires
- Layer 1: Link layer
- Layer 2: Internet layer
- Layer 3: Transport layer
- Layer 4: Application layer
- Other internet protocols (student presentations)

3 Client-side Website Technology

At this point, students will start working on a website-building project that will last the rest of the summer. Units 4 and 5 will have shorter and more theoretical lectures to leave time to work on projects in class.

- Website content: HTML
- Website Appearance: CSS
- Website behaviour: Javascript
- Javascript Day 2
- Javascript Day 3

4 Other Topics

These topics were planned by me with input from a survey of the students.

- HTTP servers
- Simple dynamic websites: CGI
- Using a command line text editor
- Internet design philosophy (REST vs. SOAP)
- Website Performance
- Website Security
- Password storage