COMP 101
Fluency in Technology
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Agenda

- Logistics
- What is technology fluency and why should you care?
- Browsers, servers, software: the big picture
Logistics

- The source of all information: http://www.cs.unc.edu/Courses/comp101-f14/

- Important:
  - Laptops everyday
  - Keep up with the little things

- OFFICE HOURS

- Software
  - Open source
  - Microsoft Office

- NO TEXT
Course Methodology

- Just do it!
- Will give you the basics and you will learn the rest
- As you learn new skills, we’ll delve deeper
  - Don’t do things that you don’t understand!
- I’ll also show you how to go beyond what we learn

- Rules
  - not the only way
  - best practices
Classes: Flipped Classroom

- Lectures posted after prior class
- Tonight will be late
- Have your laptop every class
- Labs
  - Designed for 3 people
  - Multi-part
  - Require research
- Must be graded before you leave
- Teams will rotate
Grading Policy

- Lates apply to assignments and projects (EXCEPT the final)
  - 7 assignments and 5 projects
  - Late = 24 hours
  - 3 free, then point for day deduction
- Grades on a 3, 10 or 20 point scale
- Assignments and projects due on Friday (NOT holiday weekends)
- Will be returned by Tuesday
Grading Components: focus on 3 audiences

- Creator
  - Underlying structure
- Computer
- Correct
- Reader
- End result
What this course is about

- How to communicate data and information in today’s technologies
- To be comfortable with the underlying principles
- To learn to think quantitatively
Course Goals

- Demystify computers
  
  *Fear is the main source of superstition … To conquer fear is the beginning of wisdom.*
  
  Bertrand Russell (1872 – 1970)

- Skills to use computers and especially
  - Web pages
  - Spreadsheet
Want to create

- Artifacts usable by people as well as computers
  - Working isn’t enough!
- Solutions to complex problems
  - More than one step
Why you should care

**Challenge:**
- Name a field not impacted by technology

**Reality:**
- Future leaders will be those with the vision to embrace and harness technology
- Do you want to lead, follow or get left behind?
What We Are Doing
Question: What film character is a good analogy to a computer?

Answer

It is actually a very simple machine: It does exactly what it is told to do.
What is the Internet?

- The machines
- The connections
- The content
The Internet in 1980

ARPANET GEOGRAPHIC MAP, OCTOBER 1980

SATELLITE CIRCUIT
○ IMP
□ TIP
▲ PLURIBUS IMP
◇ PLURIBUS TIP
● C30

(NOTE: THIS MAP DOES NOT SHOW ARPA’S EXPERIMENTAL SATELLITE CONNECTIONS)
NAMES SHOWN ARE IMP NAMES, NOT (NECESSARILY) HOST NAMES
Viewing a Web Page

**SERVER**
- web page repository

**WEB PAGE**
- instructions stores information and instructions

**BROWSER**
- retrieves web page and follows instructions
Web Pages

- Text file that says what to display
  - Web pages use HTML (HyperText Markup Language)
- Two types of information
  - Instructions on how or what to display
  - Text (the data)
- Instructions are in the form of **tags**
  - `< command >`
- Do NOT need any special tools to build
  - BUT tools can make it easier
The Tools
Choosing Tools

- Very fancy tools exist
  - Ease of building vs. control
  - Cost
- We will use an editor that helps you get it right
- We will NOT use tools that hide what you are doing
- We will use Komodo Editor
Sharing Web Pages

- Using Komodo Editor creates a web page on your machine
  - You can use the browser to look at it
- But who else can see it?
  - NOBODY
- Want it to be on a SERVER
  - UNC provides: ISIS
Creating Web Pages

- To create your page, we will use Komodo Editor
- To share your web page, we will use the UNC SERVER, ISIS (http://help.unc.edu/?id=108)
- To transfer your page to ISIS, we will use Filezilla
Wireless Networks

UNC-GUEST
- limited function
- public network

UNC-SECURE or UNC-PSK
- requires registering your MAC address under your onyen
  - MAC address defines your connection hardware
Folder Structure

- Create a single folder that mirrors ISIS
- Keep ALL labs and assignments both places
- Why?
  - Will want them when you change partners
  - Backup!
Keys to Success

- Simple steps
  - Create your home page locally
  - Transfer pages
  - Test it from another machine
- Have ONE folder where you always work locally
- Be sure that you have the current version of your page
Chrome

- We will test our website on Chrome
- Mainly because of Inspect Elements
- Also has useful add-ons