Exploring Computer Science

Web pages & HTML

Thanks to Ms Martin once again for elements of this presentation
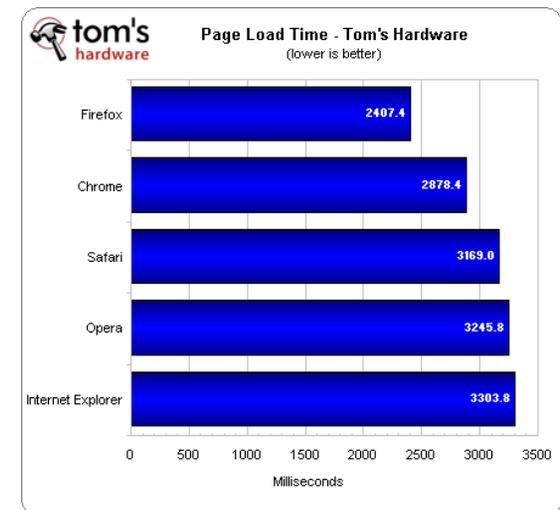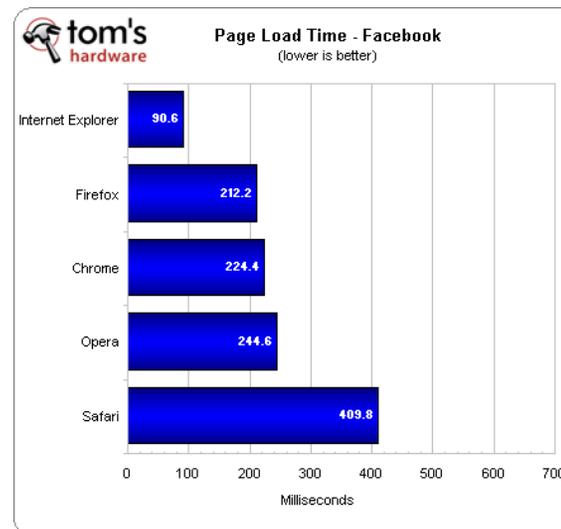and additional material from Mr. Davidson of Roosevelt HS.

Browsers conclusions

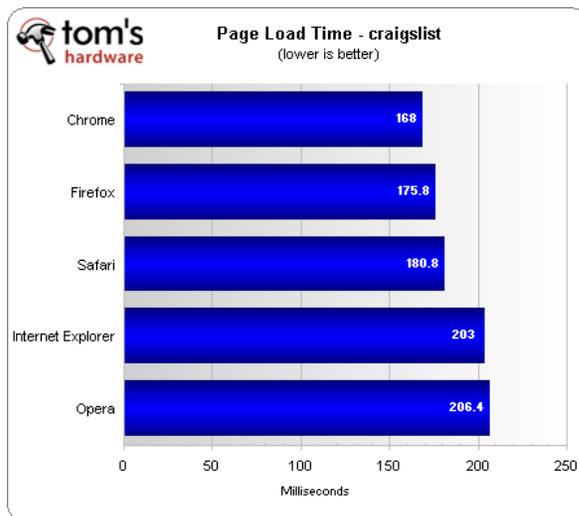- What have you found exploring the various browsers? Does one suit you best?

- There is a good survey of different browsers and how well the perform, you may want to check this out:

  http://www.tomshardware.com/reviews/firefox-chrome-opera,2558.html

Browsers conclusions

Notice:
- Page load time depends on lots of things
- Designers can optimize for browsers

Web pages

- Browsers access and display web pages
- You have been using most pages hosted remotely by a Server on the web, but they can be stored locally like in a folder of your computer.
- Pages can be static pages: fixed content
- Or they can be Dynamic pages: generated based on conditions (who is logged in, etc)

The pages we create will be Static and for now will be stored locally…

Local static pages

- You will save pages locally in your folder
  - o Eventually, we may put them on garfieldcs.com
- We will be using both HTML (the information) and CSS (styling & format)

FYI: Dynamic pages use programming
  - o client side: JavaScript, Flash
  - o server side: PHP, Ruby on Rails, Python, etc.

HTML

- **H**yper**t**ext **M**arkup **L**anguage
- It's a Language to describe web pages
- Uses tags to indicate how information should be displayed by the browser
  - This is an Example of a data convention!

  Videos:

  - Internet Primer: (and web pages...)
  http://www.dontfeartheinternet.com/the-basics/not-tubes

  - HTML: the Hamburger Text Markup Language
  http://www.dontfeartheinternet.com/html/html
  (Sorry these are still blocked for students.)

Tags

- Open <lunch> and close </lunch> around content
- Why are they surrounded by < and > ?

Here's a good first example of a web page:

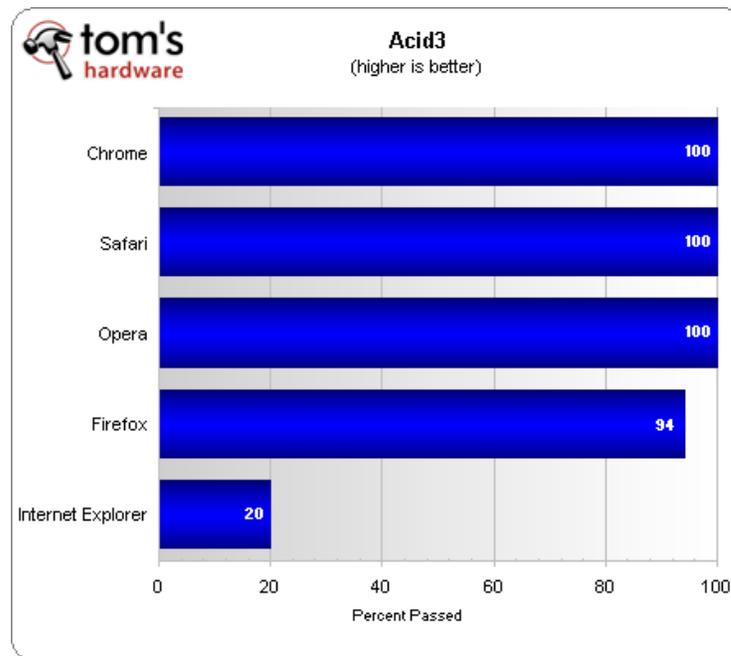```
<html>
 <body>
  <h1>Hello, world!</h1>
  <p>Some text goes here</p>
 </body>
</html>
```

# Describing structural information

- HTML is for structural information
  - What kind of information we have (list, header, etc)
  - Which elements contain others
- HTML is NOT for presentation
  - What colors things are, etc
  - We will use CSS for that later
- **Key idea:** division of labor HTML for structure & information, CSS for styling & presentation

# Compatibility

- Do all websites look the same in all browsers?
- There are standards from the **World Wide Web Consortium (W3C)** http://en.wikipedia.org/wiki/W3C

# Your task

- Start the W3Schools HTML Tutorial:
  http://www.w3schools.com/html/html_intro.asp
- Learn basic tags
  - HTML format: html, head, title, body
  - Headers: h1, h2, h3, h4
  - Paragraphs: p
  - Images: img
  - Links: a href
- Make a page about yourself, sport, artist...
- Feel free to Experiment!