

# **Computer Science 100**

## **Web Programming**

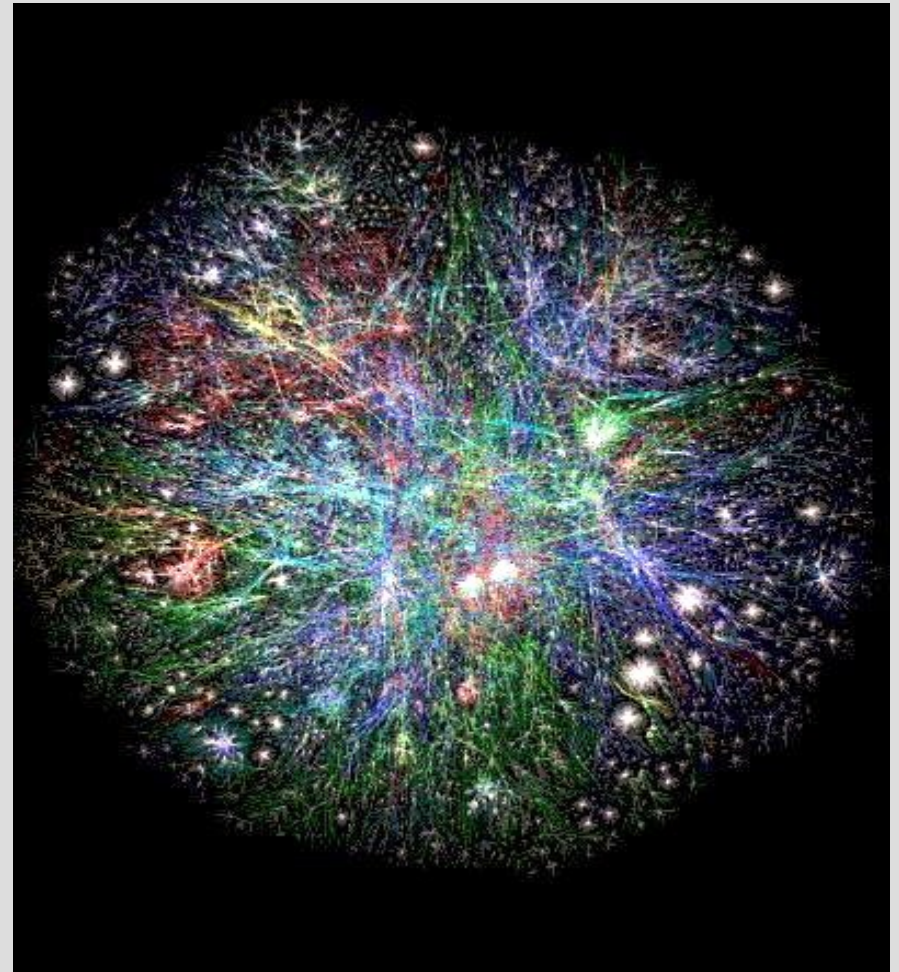
**Web Programming in a Nutshell**

# Outline

- **The Web**
- **Short History and Highlights**
  - **Beginnings @ CERN**
  - **The Browser Wars**
  - **The W3C**
  - **Web 1.0, Web 2.0 and Web 3.0**
- **“Components” of Web Programming**

# The World Wide Web

- Aka **The Web**
- System of interlinked hypertext documents (or hypermedia) contained in the Internet.
- A document in the Web is called a **web page**.
- Group of related web pages OR a single location in the Internet where web pages can be accessed from is a **web site**.

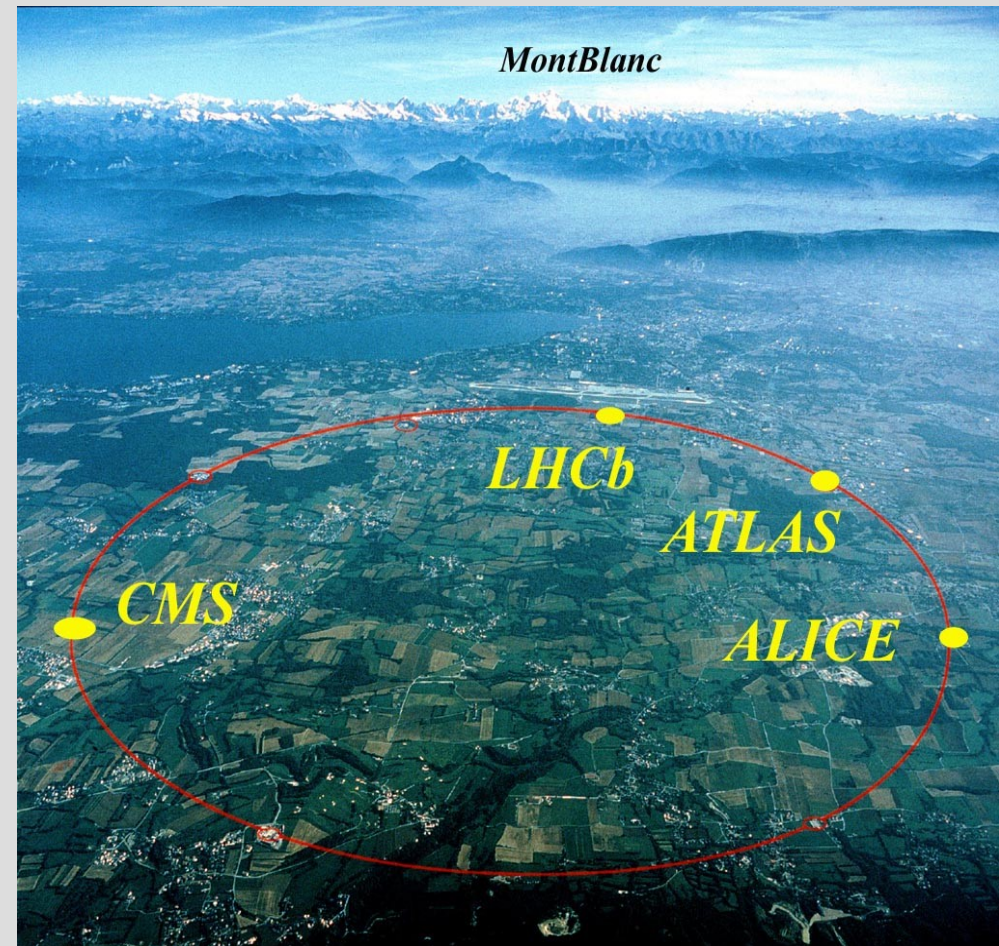


# The World Wide Web: Web Pages

- A Web page may contain:
  - Text
  - Images
  - Embedded objects: videos, audio, binaries (i.e. Java applets, Flash)
  - Tables
  - **Hyperlinks**
- **By default** a web page is a page written using **Hypertext Markup Language (HTML)**

# The World Wide Web: CERN

- The Birthplace of the Web
- *Organisation Européenne pour la Recherche Nucléaire* (French)
- European Organization for Nuclear Research



# The World Wide Web

- Tim Berners-Lee, English physicist, creator of the World Wide Web (1989)
  - First web server
  - First browser (WorldWideWeb)
  - Director of the W3C
- Read:  
**<http://www.w3.org/History/1989/proposal.html>**
  - The original proposal for the WWW.





# WWW Timeline

- **1989** The World Wide Web begins at CERN.
- **1990** Web server and web browser created.
- **Aug 6, 1991** Marked as the day the Web became a publicly available service.
- **1993** NCSA releases **Mosaic** a multiplatform web browser precursor to Netscape Navigator. Other browsers also released.
  - **June 1993** – Stylesheets proposed for HTML
  - **October 1993** CERN announces WWW would be free.
- **1994** Netscape Navigator, Opera browsers released.
- **1995** Internet Explorer released
  - Javascript integrated.
  - The First Browser War starts!

# The Browser Wars

- Metaphorical war, fight for market dominance of the popular web browsers.
- The war in short:
  - **1<sup>st</sup> Browser War:** IE wins over Netscape\*
  - **2<sup>nd</sup> Browser War:** Netscape releases source code (Firefox)
  - **2008-Present :** Google etc., joins the fray.





# The Browser Wars

- **Competition is always good.**
- Better browsers.
  - Web browsers are the web programmer's application user interface platforms.
- Negative side effects of the **1<sup>st</sup> Browser War**
  - Each contender came out with their own “HTML tags” leading to the non-standardization of HTML.

# The W3C

- The World Wide Web Consortium
- Founded October, 1994
- Headed by Tim Berners-Lee
- Develop standards for the Web
- <http://www.w3.org/>



# Other Highlights: The DotCom Bubble: Boom and Burst

- From 1995 to 2001
- Marked by the increase in Internet users (thanks to the web).
- Increase in “Internet startups” (referred to as dot coms) offering services through the Internet (Web).
- Triggered a mild economic recession in 2000.

# Other Highlights: Web 1.0, 2.0 and 3.0

- **Web 2.0:**
  - This “versioning” of the web is unofficial.
  - Associated with web applications which facilitate interactive information sharing, interoperability, user-centered design and collaboration.
  - Popularized in 2004 by Tim O'Reilly
  - Coined in 1999 by Darcy DiNucci in an article.
  - Allows users to run “software applications” via the web browser.
- **Web 1.0**
  - Had to be coined because of the above.
- **Web 3.0 Semantic Web**
  - Advanced application of the WWW.

# Your Assignment:

- **What are WEB APPLICATIONS?**
  - List down web applications that you use/have used/will use and their types. (at least 5)
  - What do you need to create a web application?
  - How is a web application different from a desktop application?

Email your answers to  
uplbcmsscexercises@gmail.com on or before  
Tuesday, November 22, 2011, 12:00 am. Use  
“CMSC 100 Web App Assign” as the subject of  
your email.