Intro to Web Design
How does the Internet work?

- User
- Client
- Network
- Server
- Data Store
HISTORY

- Lawrence G. Roberts designed ARPANET.
- ARPANET design was initially designed for 2.4 kbps but was upgraded to 50 kbps.
History

- Ethernet technology, developed by Bob Metcalfe at Xerox PARC in 1973

- Domain Name System (DNS) was invented by Paul Mockapetris of USC/ISI.

- One of the more interesting challenges was the transition of the ARPANET host protocol from NCP to TCP/IP as of January 1, 1983
The diagram illustrates the development of the Internet from 1968 to 1996. Key milestones include:

- **1968**: ARPANET Demonstrated
- **1980**: ARPANET Transition To TCP/IP
- **1986**: MILNET/ARPANET Split
- **1993**: Internet Society Founded
- **1996**: Many Thousands of Everything

The number of operational networks on the Internet grows from 3 in 1968 to 50,000 in 1996.
World Wide Web vs Internet

The **World Wide Web** (www, W3) is an **information space** where documents and other **web resources** are identified by **URIs**, interlinked by **hypertext** links, and can be accessed via the **Internet**.

The **Internet** is a global system of interconnected **computer networks** that use the **Internet protocol suite** (TCP/IP) to link several billion devices worldwide.
How does the Internet work?

TCP/IP (Transmission Control Protocol/Internet Protocol) is the basic communication language or protocol of the Internet. It can also be used as a communications protocol in a private network (either an intranet or an extranet). When you are set up with direct access to the Internet, your computer is provided with a copy of the TCP/IP program just as every other computer that you may send messages to or get information from also has a copy of TCP/IP.
How does the Internet work?

**Hyper Text Transfer Protocol**

Hypertext is structured text that uses logical links (hyperlinks) between nodes containing text.

HTTP is the protocol to exchange or transfer hypertext.
How does the Internet work?

HTML

HyperText Markup Language

is the standard markup language used to create web pages.
How does the internet work?

HTTP Requests

- **GET** - retrieve data and should have no other effect
- **POST** - request method is designed to request that a web server accept the data
- **PUT** - Requests that the enclosed entity be stored under an existing resource
- **DELETE** - Deletes the specified resource
What is a url?

Uniform Resource Locator

http://74.125.224.18/
What is interaction design?

Interaction designers strive to create useful and usable products and services. Following the fundamental tenets of user-centered design, the practice of interaction design is grounded in an understanding of real users—their goals, tasks, experiences, needs, and wants.

http://www.uxbooth.com/articles/complete-beginners-guide-to-interaction-design/
Careers

● UI & UX Designer
  ○ App Design
  ○ Web Design
  ○ Museums/Physical Design
UX Design

USER EXPERIENCE DESIGN DIAGRAM

- Consciously Aware +

Written Language
- English, Spanish, Mandarin, etc.

Graphic Design
- Shape, symbolism, line, color, spatial composition, texture, dimension, and other facets of visual rendering.

Sound
- Music or spoken word (e.g., voice over, V.O.) audio.

Motion
- Animation, change, motion, time, rhythm, scale.

Information Design
- Textual style, graphics, and composition for information structure, meaning, relationship, and user comprehension.

Interface Design
- Graphical and information design elements utilized to indicate controls for data manipulation.

Interaction Design
- Task flow, system flow/behavior, and human comprehensibility of controls provided by the user interface.

Programming
- "Front-end" (client executed) or "back-end" (server executed) code for data input, processing, and retrieval.

The mind’s eye does not naturally distinguish between individual elements that comprise an interactive system. Parts of the interactive communications/software environment are not experienced separately by the user, but as a complete synthetic language which is apprehended and used as a unified whole.

User Experience Design is the art and science of integrating all of the various elements that comprise an interactive system so that:
1) The user's needs, limitations, goals, desires, and expectations are served.
2) The publishing organization’s objectives are served as a result of serving the user’s (#1).
3) The whole is greater than the sum of its parts.

"Sound is seldom used in contemporary web apps but is a multimedia element common to other types of web-based software, thus important to UX."
App Design
Web Design
Best Of The Web

- https://wetheeconomy.com/
- http://www.rawnet.com/
- http://smartypins.withgoogle.com/
- http://www1.nyc.gov/
- https://medium.com/
- http://www.sagmeisterwalsh.com/
- http://www1.nyc.gov/
Trends

https://creativemarket.com/blog/2016/01/04/top-web-design-trends-for-2016
Worst website ever

http://www.theworldsworstwebsiteever.com/
Worst

- http://sundaymorning.ekwc.nl/
- http://www.johnprocario.com/
- https://www.touchofmodern.com/
- http://www.spectrumpowderworks.com/
- http://www.dsrny.com/
- http://www.reforms.net/