



WEEK 11

HCI and the Web

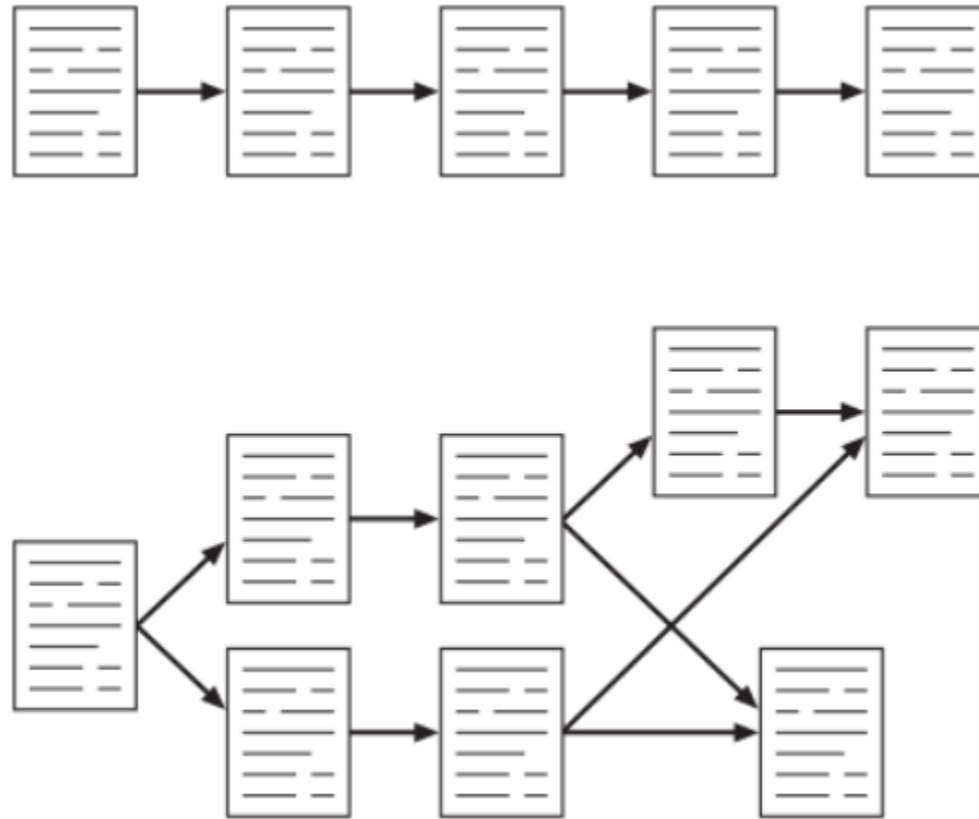
Learning Outcomes

- Discuss the meaning of hypertext, multimedia and world wide web
- Explain the importance of web technology in HCI and its issues
- Differentiate static to dynamic web content

Hypertext

- A hypertext document is one that has links to other sections of the document or to another document.
- A hypertext framework consists of a collection of pages and a set of links that bind them together.
- The locations of these links are known as **hot-spots** which may also be contained within graphs, images, or charts
- Hypertext systems often include diagrams, images, animations, video, audio clips, and other media, and are often referred to as multimedia or **hypermedia systems**.

Hypertext vs. Linear Text



Animation

- Animation is the process of adding motion to images so that they move, alter, and shift over time.
- Animations are essential to allow the user to see the progress and to avoid inactivity from being misinterpreted as a system failure.
- As a result, the user becomes more involved in the system and willing to learn more about it.
- E.g. clock, cursor animation, animated icons, etc.

Video and Audio

- Video and audio editing are now common features on even home PC systems.
- Video and audio materials can be inserted in web pages for quick dissemination using standard formats.
- Any sound used in the application has the ability to be irritating; as a result, audio should be used with caution and should be easily muted.

Computation, Intelligence and Interaction

- Immersive hypermedia may integrate games or software.
- Hypermedia on the user's computer can interact with other programs
- Some hypermedia may have more intelligent components or agents that form the user's experience.

Delivery Technology

1. The Computer
2. The Web
3. The Portable Devices

Making Navigation Easier

1. Provide a map of the hypertext document that shows the reader's current position within it.
2. Use hypertext documents to provide "recommended routes" to the user.
3. Use of a document's "level of access" which gives the user the privilege to access varying amounts of data.

Web Technology and Issues

- The web consists of a set of protocols built on top of the internet that, in theory, allow multimedia documents to be created and read from any connected computer in the world.
- The web supports hypertext, graphics, sound and movies, and, to structure and describe the information, uses a language called HTML (hypertext markup language) or in some cases, XML (extensible markup language).

Web Issues

1. Special file formats and media, such as some movie formats, require additional plug-ins or helper applications.
2. Another problem is information overload, which occurs when the reader is confronted with visual images, gigabytes of graphics, and mountains of text.
3. A significant amount of time may be spent setting up a new connection, which may outweigh the time spent sending data.

Static Web Content

- The content of a website's static web content remains consistent across sites.
- It is fixed and displays the same material to all users.
- Wikipedia, TutorialPoint, and SlideShare are all examples of static material.

Dynamic Web Content

- the content of the website does not remain constant and it changes according to the user's preferences, behavior, interests, and input.
- E.g. you log-in to your YouTube account and the video recommendations are aligned to your preferences it is because it provides a dynamically generated recommendations based on your historic behavior and preference when you browse YouTube.

The End