

# USQ/CSC2406 Web Publishing

## Lecture 6: Future of Web Publishing



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# Outline



- Quick Review on Lecture 5
- Topic 11: Future of Web Publishing
- Examination Revision
- Class Activity: Reading
- Additional Handouts for L6

# Quick Review of Lecture 5



- Quick Review on Lecture 5
- Topic 9: Server Configuration
- Topic 10: Server Security
- Class Activity: Reading

# Topic 11: Future of Web Publishing

## Hollywood & Web Publishing



There are at least 5 examples of very futuristic scenarios of Internet / WP in this movie.  
List some.

MINORITY REPORT



# Topic 11: Future of Web Publishing

## Potential Internet technologies



- The **smell** of fresh Web pages
  - Smell and taste technologies for the Web
- WYSIWYG – **true color**
  - True representation of an object's color
- **Model-based** graphics
  - Observe an object from many angles
- **Virtual** model
  - Three-dimensional images of a mannequin whose body looks similar to yours
- **Touch** it, feel it
  - Tactile shopping through a special input device
- **2-D / 3-D** browsing

# Topic 11: Future of Web Publishing

## Future of Internet



- More new kinds of **content**
  - Everybody's inventing specialized content
- More new kinds of **references**
  - Internationalization, Internet Keywords..
- More new kinds of **protocols**
  - Higher performance content distribution, transactions

# Topic 11: Future of Web Publishing

## Future of Web Content



- HTML -> **XML**
- Convergence of new **image types**
- **Accessibility**
  - Blind, disabled
  - Driving in your car
  - Sitting in a meeting room
  - Walking with a cell phone
  - Watching TV
- Authoring **device-independent**, using “style” to device-specific

# Topic 11: Future of Web Publishing

## Web Content through XML



- **What is XML?**
- XML is **eXtensible Markup Language**.
- XML is a derivative of SGML (Standard Generalized Markup Language) like HTML.
- XML allows **dynamic tagging of data** to be shared.
- XML provides a **document definition structure**.
- XML provides **multiple presentation options**.
- Example of an XML tag:
  - `<name>Stoshu Chodkiewicz</name>`

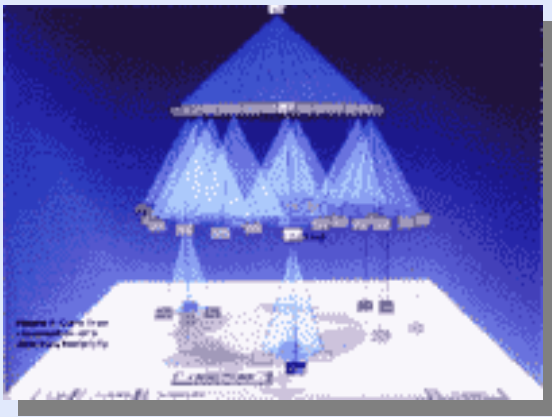


# Topic 11: Future of Web Publishing

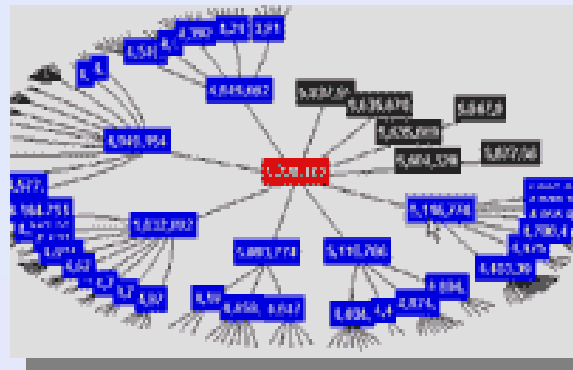
## 2-D/3-D Browsing of Information



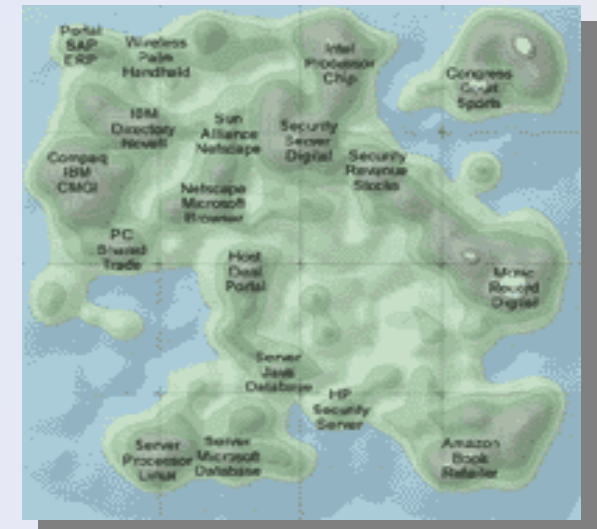
- The visualisation / control of **textual information**.
- A variety of methods: Cone Trees, Hyperbolic Tree, Fish-Eye Views, Treemaps, Magic Lens, Thememaps, etc.
- “Information Visualisation: An Overview” by Louis Vroomen  
<http://www.crim.ca/~vroomen/writing/technical/reports/infovis.html>



**3D Cone Trees**



**Hyperbolic Tree (Patents Vis)**



**Thememaps** by cartia.com  
(E-commerce Vis  
past 6 months articles)



# Examination Revision

## Group Quiz



A

### Topic 1: Introduction

- o Explain the difference between the Internet and the World Wide Web.
- o In what way is the Internet heterogeneous?
- o Describe the advantages of organizing the Internet into a hierarchy of networks and sub-networks.
- o What distinguishes a Server from a Client?

B

### Topic 2: HTML

- o Why should logical text elements be used in preference to font text elements.
- o What is the difference between an HTML tag and an HTML element?
- o Explain how 6 hexadecimal numbers can describe a colour?

C

### Topic 2b: Advanced HTML

- o What is a property in the style sheet language. Give an example.
- o Why have tables been used as layout engines in HTML?
- o Write a basic frameset document.
- o Write a basic 2x2 table.
- o How are browser windows “targetted”?

# Examination Revision

## Group Quiz (cont)



D

### Topic 3: Document and Site Design and Style Guidelines

- o Why is the Web not WISIWYG?
- o What is the difference between “site design” and “page design”?
- o When designing a site hierarchy what is meant by the terms “breadth” and “depth”?
- o What are the elements in “good” home page design?
- o What is an “orphan page”?

E

### Topic 4: Graphics & Image Map

- o What is the difference between vector and raster formats?
- o What is lossy compression?
- o Why is compression necessary in image formats?
- o What is the most significant difference between the GIF and JPEG formats?

A

### Topic 5: Javascript

- o What is a “Dynamic HTML” page?
- o How is Javascript code incorporated into an HTML document?
- o Why is Javascript code contained within the HTML constructs “<!--” and “-->”?
- o When are Javascript statements executed?

# Examination Revision

## Group Quiz (cont)



**B**

### **Topic 6: HTTP & MIME**

- o Why was base64 encoding developed?
- o Why is the common mail encoding scheme called base64 ?
- o Why does the Web server need to send the MIME type of the document to the client?
- o How are new MIME types defined for the server?

**C**

### **Topic 7: HTML Forms**

- o The HTML FORMS tag has a number of attributes. Explain the ACTION and method attributes.
- o How does the user tell the client to send the contents of the form to the server?
- o How are the contents of the form sent to the server?
- o Why have hidden fields in a form?

**D**

### **Topic 8: CGI Scripts**

- o How does the client request the server to run a script?
- o How does the client parse information to a script?
- o How does the server know that a particular URL points to a script?
- o Why are server scripts considered stateless?
- o How do server scripts maintain state information? List all possible ways.

# Examination Revision

## Group Quiz (cont)



E

### Topic 9: Server Configuration

- o What is the difference between the Document Root and the Server Root?
- o Why is it a good idea to keep CGI scripts in a separate directory?
- o What is the .htaccess file? What is its purpose? Why should its name be changed from the default?
- o What is the purpose of the access control file?

A

### Topic 10: Server Security

- o What is the major flaw in symmetric key encryption?
- o How is access granted to a directory based on groups?
- o What is the difference between symmetric key encryption and public key encryption?

# End of Lecture 6

Best wishes for your exams & future endeavors.

