

B211 Advanced Internet Computing

Web Site Design vs Web Site Programming

B211 Week 9 Lecture 3: Design vs Programming

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Web Site Responsibilities

- Due to the importance of web sites to most organisations today, there are many competing requirements we have to consider.
- Your lab exercises in this unit only covers some aspects of the whole range of responsibilities.

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Lecture Outline

- Web site responsibilities in an organization.
- Design restrictions due to back-end programming.

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Some Key Web Site Personnel

Design

Information Designers:
- navigation
- site layout

Multimedia content
creators:
- graphics
- audio
- video

Web Site

Page Authors:
- HTML
- Standard JavaScript
(rollovers, validation,
etc)

Back-end
programmers
- PHP, Perl/CGI, ASP

Webmaster
- Web site directories
and files, web server
admin.

Technical

Support Systems

System Administrators
- operating systems,
available software,
user accounts.

Database
Administrators
- queries and updates
to databases.

Other parts of the organisation

Legal team
- accessibility requirements,
standards conformance,
disclaimers

Marketers:
- user profiling, usage
analysis.

Finance:
- funding, cost-benefit
analysis.

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Successful Web Sites

- A successful web site requires successfully handling all the different areas.
- In a small web site, the success depends on whether the personnel involved with the web-site understand and can effectively take on the different responsibilities.

Successful Web Sites

- Large enterprises needs high-level and dedicated expertise in each of the areas.
 - The various responsibilities are distributed to different personnel in different departments.
 - The generic statement “I handle the web site” makes no sense for any particular person.
 - Everyone is responsible for different aspects of the web site, even if they do not touch HTML pages at all.
- A successful web site is reliant on effective communication between the different personnel.

Designing the Web

- As mentioned in previous lectures, HTML and the web was never designed for visual design work.
 - Browsers are suppose to adjust based on how the user configures it, so content producers do not have absolute control over presentation (unlike books, magazines, TV, etc).
- However, design has become an important part of web content today because
 - Visual design is considered an important part of making information easy to digest.
 - HTML has evolved to enable significant implementation of designs (eg. Positioning using tables, plug-ins for animations)

Off-line Designers

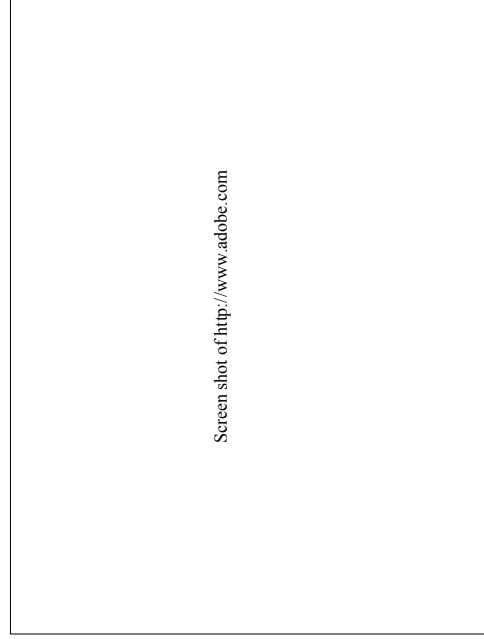
- Conventional off-line designers have relatively **static** content to present, and therefore relatively precise decisions over the “best” final presentation forms.
 - Brochures, magazines, sculptures, architectures etc.
 - Control over shapes, colours, locations, time-sequence, etc.
- This was true for designers of some static-content web sites as well.

On-line Designers

- Today's web sites have the power of **dynamic** back-end processing to support them, and therefore on-line designers have much less precise control over what finally gets presented.
- They have to be careful that the presentation form used will be appropriate for whatever the back-end process have produced.

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Screen shot of <http://www.adobe.com>

www.adobe.com

Not visually very exciting, but each area can be generated dynamically, and the layout can be restructured easily.

This imposes a natural **rectangular** design on the page, since the elements in HTML (`<p>`, `<table>`, `<frames>`) are natural displayed rectangularly.

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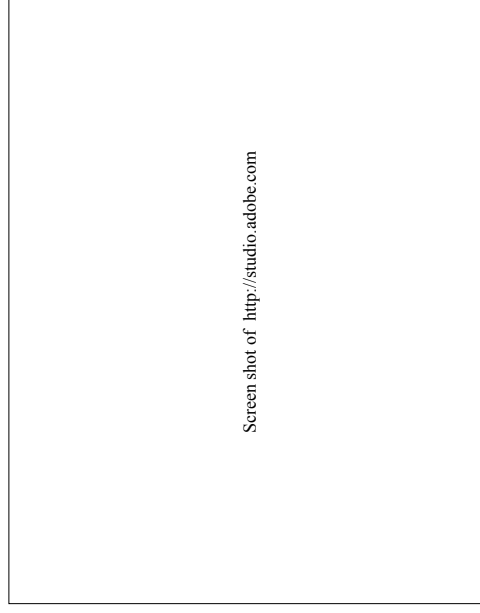
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Restrictions Due to Programming

- Design constraints placed by back-end processing needs:
 - Exact text and content is not fixed - eg. may come from different database entries.
 - Information and requirements will be different in the future, and therefore page structures may change.

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Screen shot of <http://studio.adobe.com>

studio.adobe.com

Imposing a non-rectangular visual display may make the appearance more attractive, but it means less information is generated dynamically, and it is less adaptable to changes.

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Screen shots from http:// www.typographic.com

Screen shots from http:// www.typographic.com

www.typographic.com

Screen shots from http:// www.typographic.com

Design consistency ...

It is easy to design when you know what content the site will present, and you can manipulate that content.

Screen shots from http://www.cnn.com

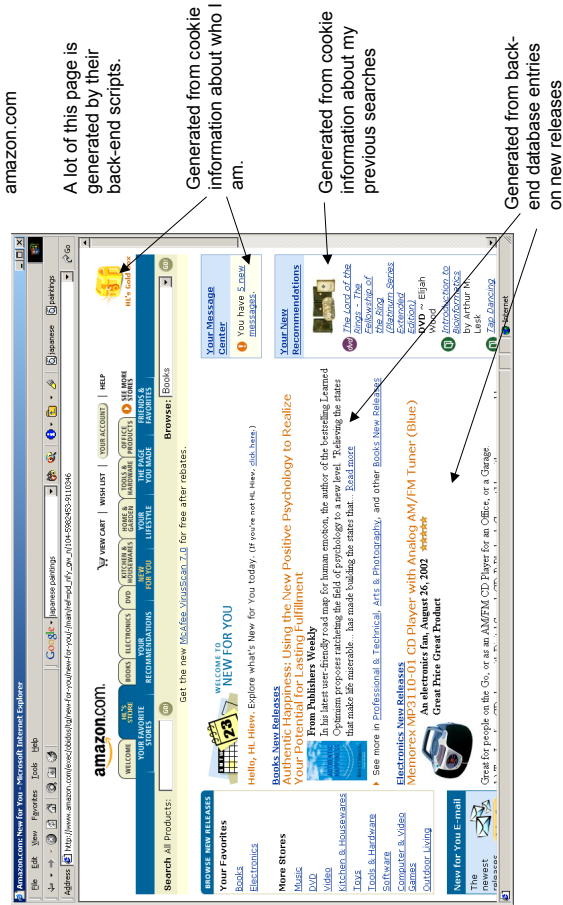
Screen shots from http://www.australianit.com.au

www.cnn.com

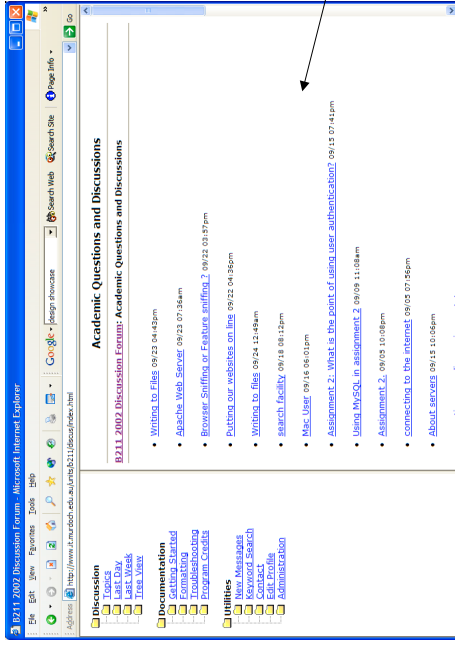
www.australianit.com.au

Design consistency ...

It is much harder to design when you don't know what media and text content will be used, and you can't manipulate them before hand.
Most of the text and images above are created day by day and extracted by server-side scripts.



Uncontrolled display...



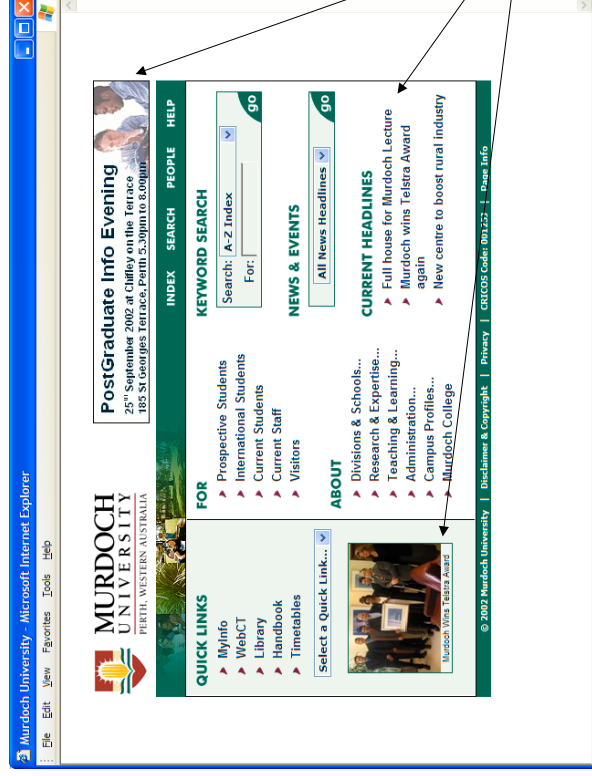
There is no attempt to design the display of this section. If there are 1000 discussion threads in the database, it will display 1000 lines from top to bottom.

Generic Designs for Dynamic Content

- For very dynamic sites, your layout designs needs to be very generic, that fits all possible content that your back-end processing may produce.
 - Think about how to arrange the content, the amount of text that will appear, the display sizes of the images, etc, and design appropriately to adjust for all of them.

Dynamic Content on the Front Page

- Most sites with dynamic content puts that content right on the front page, at the expense of clean design.
 - Experience says that if your readers are after the dynamic content and you have a static front page, they will bookmark your dynamic pages and skip the front page anyway (no matter how stimulating the front page is).
 - That's why you see so many cluttered front pages on the web today.



Dynamic content