COMP2203: Application Scripting

Session DA3

Working with HTML5

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Session DA3 Outline:

- From last time...
- Fundamental rule
- Strict XHTML
- HTML5
- Page layout
- An example
- Checking it

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From last time: HTML Versions

HTML1 to 4:

- Used capitals (<BODY>, <BR>)
- Was a bit sloppy about the markup (used <P> to start a paragraph, but nothing to note the end)

XHTML (strict):

- Uses lower case (<body>, <br />)
- Must have a closing tag (<p> closes with </p>, deprecated tags as in <br />)

HTML5

- Has given up the fight to some extent, but you should keep with the strict XHTML practices

Fundamental Rule

Strict with markup...

- When writing HTML pages, important to get code exactly right
  - helps to ensure browser compatibility
  - makes code easier to maintain
  - helps avoid bugs

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Fundamental Rule

...forgiving in interpretation

- When developing a web browser, important to be forgiving in interpretation
  - helps ensure backwards compatibility
  - helps developers get their web pages right
  - helps the user see sites even when they're badly coded

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The Strict XHTML Experience

- **1 mistake -> W3C checker gives many errors**
  - scary, but helpful
  - need to not panic when page gives 149 errors
  - learn to spot the root cause(s), 142 (consequent) errors will then disappear
  - surprising how many infuriating display "quirks" are caused by "minor" syntactical errors

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XHTML or HTML5?

- XHTML works in all modern browsers
- No current browser fully implements HTML5 yet
- Important HTML5 features work in the main modern browsers
- HTML5 is increasingly supported and will be the standard when you graduate
- HTML5 is a significant step forward compared with previous incremental changes
- So we're going to focus on HTML5

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The Basic HTML5 Page

Has doctype, head and body sections:

```
<!DOCTYPE html>
<html>
  <head>
    <title>Title of the document</title>
  </head>

  <body>
    ...The content of the document...
  </body>
</html>
```

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What new features can I try?

- Wrong question!

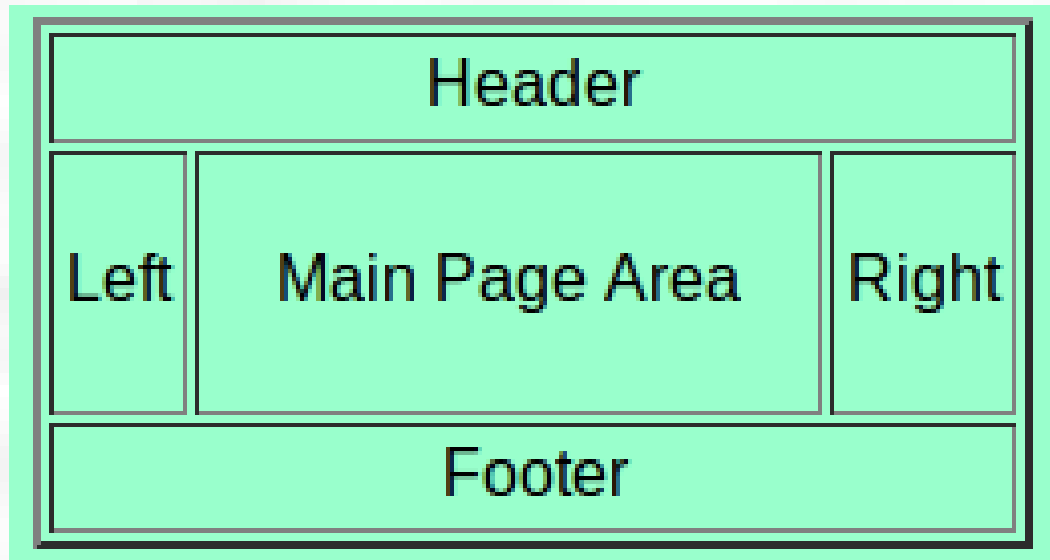# Just because you can doesn't mean you should...

What new features can I try?

- **Wrong question!**
  - OK, it's sensible to find out what HTML5 can do
  - but don't do things just because you can
- **Start by looking at what we want to do**

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Page Layout

- Many ideas exist

Header		
Left	Main Page Area	Right
Footer		

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Page Layout

- **This is a simple yet powerful idea**
  - modern design
  - suits modern usage
  - "recursive"
    e.g. blog individual posts use same basic layout as whole page

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Page Layout

- ## Oh look - this is supported by HTML5!

```
<!DOCTYPE html>
...etc...
  <body>
    <header>...some heading...</header>
    <nav>...menu...</nav>
    <section>
      ...main page content...
    </section>
    <footer>...footer...</footer>
  </body>
</html>
```

An Example

```
<!DOCTYPE html>
<html>
  <head>
    <title>David's Website</title>
  </head>

  <body>
    <header>
      <h3>My Website</h3>
      <p>Subtitle</p>
    </header>

    <nav>
      <a href="">Option 1</a>
      <a href="">Option 2</a>
    </nav>

    <section>
      <h3>Welcome!</h3>
      <p>Welcome to my Site!</p>
    </section>

    <footer>
      <p>&copy;2013 David</p>
    </footer>
  </body>
</html>
```

David's Website   ×

argles.org/test/

August DA900C...   Barclays F

My Website

Subtitle

Option 1 Option 2

Welcome!

Welcome to my Site!

©2013 David

But That's Rubbish!

- **Hold on a moment...**
  - Separation of Concerns!
  - The *content* is fine
  - The *presentation* is what we don't like
  - But the presentation should **all** be handled by the CSS...
- **...which we're going to look at in the next slot!**

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Checking It Out

- Before we finish, we should check our handiwork

- W3C checker: http://validator.w3.org/

- Oops - a problem! So let's include the required character encoding

  - see W3C: http://www.w3.org/International/questions/qa-html-encoding-declarations#httpsummary

  - insert `<meta charset="UTF-8">` in the `<head>` section

  - Oh look, it validates now!

- Also: Chrome's Developer Tools are your friends!

  - [Note to self - demo now]

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Break

What are your experiences with coding in HTML?

Try coding up a simple HTML5 page

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