

Exploring Computer Science

HTML

Starting from Scratch: HTML Video

<http://www.dontfeartheinternet.com/html/don%e2%80%99t-fear-starting-from-scratch>

(Again can't be viewed by students internally, try from home)

A decorative graphic at the bottom of the slide. It features a horizontal band with a gradient from orange to grey. Overlaid on this band is binary code (0s and 1s) in white and orange. To the right, there are several overlapping circles in shades of orange and grey. The background behind the graphic is a light blue and white gradient.

01001010100111101000010010111010010 110101010111010000100101001001
0010000101001010010010100001011010010101000011110100101010011101000010010111010010
1101010101011101000010000101001001001010000101101001010100001111010010101

thanks to Marty Stepp; most of this content from his excellent book [Web Programming Step by Step](#)

Hypertext Markup Language

- describes the *content* and structure of information on a web page
 - not the same as the *presentation* (appearance on screen)
- surrounds text content with opening and closing **tags**
- each tag's name is called an **element**
 - syntax: `<element> content </element>`
 - example: `<p>This is a paragraph</p>`

HTML

```
<html>  
  <head>  
    information about the page  
  </head>
```

```
  <body>  
    page contents  
  </body>  
</html>
```

- the **header** describes the page and the **body** contains the page's contents
- an HTML page is saved into a file ending with extension .html

Title

```
<html>  
  <head>  
    <title>Justin Bieber rocks!!</title>  
  </head>  
  ...
```

- placed within the head of the page
- displayed in the web browser's title bar and when bookmarking the page



Block elements

- placed within the body of the page
- specify the kind of text to display
 - heading: h1, h2, h3
 - plain body text: p

Phrase elements

em: emphasized text (often in italic)

strong: strongly emphasized text (often in bold)

```
<p> HTML is <em>really</em>, <strong>REALLY</strong> fun! </p>
```

HTML is *really*, **REALLY** fun!

More complex tags

- some tags can contain additional information called **attributes**
 - syntax: `<element attribute="value" attribute="value"> content </element>`
 - example: `Next page`
- some tags don't contain content; can be opened and closed in one tag
 - syntax: `<element attribute="value" attribute="value" />`
 - example: `<hr />`
 - example: ``

Links

```
<p>
```

```
  Search
```

```
  <a href="http://www.google.com/">Google</a> or our
```

```
  <a href="lectures.html">Lecture Notes</a>.
```

```
</p>
```

- uses the href attribute to specify where to link
 - can be **absolute** (to another web site)
or **relative** (to another page on this site)
- anchors must be placed in a block element such as p or h1

Images

```

```

- the src attribute specifies where to get the image from
- the alt attribute provides textual descriptions for blind people, etc

Lists

ul represents a bulleted list of items

li represents a single item within the list

```
<ul> <li>No shoes</li> <li>No shirt</li> <li>No  
problem!</li> </ul>
```

- No shoes
- No shirt
- No problem!

Lists inside of lists

```
<ol>
  <li>Simpsons:
    <ul>
      <li>Homer</li>
      <li>Marge</li>
    </ul>
  </li>
  <li>Family Guy:
    <ul>
      <li>Peter</li>
      <li>Lois</li>
    </ul>
  </li>
</ol>
```

1. Simpsons:
 - Homer
 - Marge
2. Family Guy:
 - Peter
 - Lois

ol represents a numbered list of items

Lists inside of lists

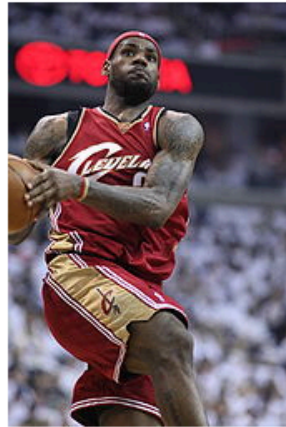
```
<ol>
  <li>Simpsons:
    <ul>
      <li>Homer</li>
      <li>Marge</li>
    </ul>
  </li>
  <li>Family Guy:
    <ul>
      <li>Peter</li>
      <li>Lois</li>
    </ul>
  </li>
</ol>
```

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 - Peter
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Your celebrity page!

LeBron James



LeBron James is a 25 year old basketball superstar from Ohio who currently plays for the Miami Heat. He has been an NBA All-Star *every* season since 2005!

LeBron's teams

- St. Vincent–St. Mary High School
- USA national team
- Cleveland Cavaliers
- [Miami Heat](#)

Top reasons to like LeBron

1. He is evidence that young people can be great
2. He jumps really, really high
3. He has made 74% of free throws attempted in his career