

# The DOM

The representation of HTML that makes it all possible

# Key Insights

- HTML is a data structure
  - Hierarchical data relationships
- HTML is an application of XML
- What we learn here will carry over to XML

# Some HTML

```
<html>
  <head>
    <title>Binary Tree Selection</title>
  </head>
  <body>
    <p>Below are two binary tree options:</p>
    <div>
      Our <em>depth-first</em> trees are great for folks that
      are far away.
    </div>
    <div>
      Our <em>breadth-first</em> trees are a favorite for
      nearby neighbors.
    </div>
    <p>You can view other products in the
      <a href="menu.html">Main Menu</a>.</p>
  </body>
</html>
```



# Another Bit of HTML

```
<html>
  <head>
    <title>Webville Tree Farm</title>
  </head>
  <body>
    <h1>Webville Tree Farm</h1>
    <p>Welcome to the Webville Tree Farm. We're still learning
      about CSS, so pardon our plain site. We just bought
      <a href="http://www.headfirstlabs.com/books/hfhtml/">Head
      First HTML with CSS & XHTML</a>, though, so expect
      great things soon.</p>
    <p>You can visit us at the corner of Binary Blvd. and
      DOM Drive. Come check us out today!</p>
  </body>
</html>
```

You draw the tree

# DOM Scripting

- Treats the tree as a data structure
- Nodes
  - Name
  - Value
  - Type

# Well-formed XML

- One root element
- All elements are nested
  - Nodes never span other nodes
- Legal element names

# Summary

- If we take care with our HTML
  - It is a decent data structure
  - Can use tools built for processing XML
  - The DOM applies to well-formed documents.