Building a Web Page with HTML

Lists and Tables

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HTML Review

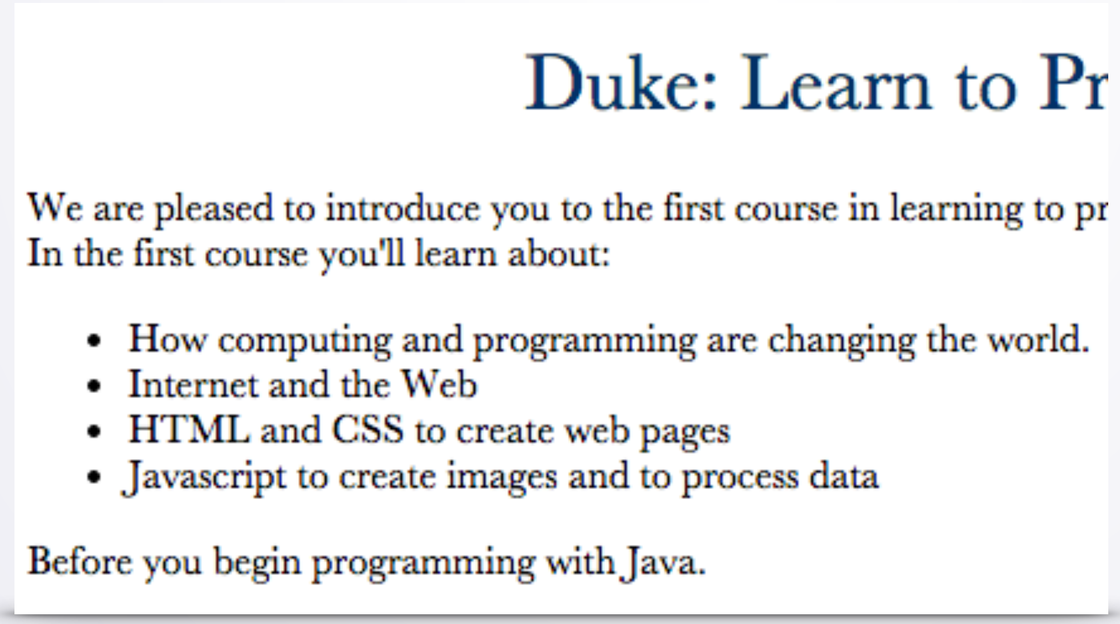
- HTML specifies webpage *content*
- HTML metadata tags
  - <head> <title>
- HTML content sectioning
  - <body> <h1> <h2>
- HTML text content
  - More than the <p> paragraph we've seen
  - Lists and tables

} seen these previously

} will explore now

Simple Lists

- Some lists use circles or bullets
  - These are unordered lists, tag: <ul>
  - Content viewed in order, list labels all the same



Simple Lists

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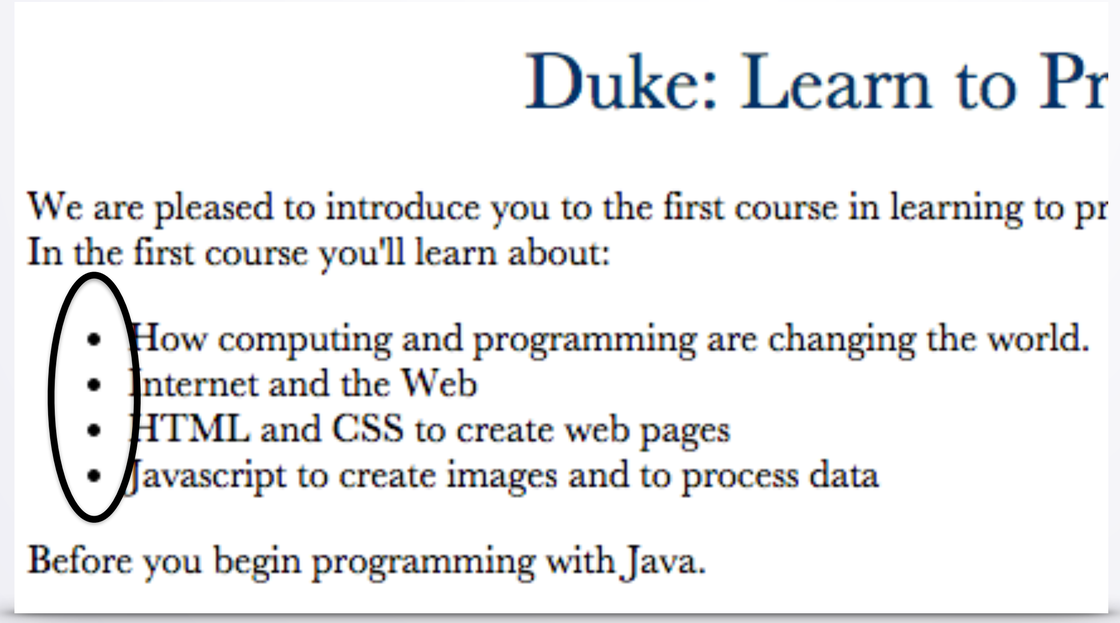
  - These are unordered lists, tag: <ul>
  - Content viewed in order, list labels all the same
    - For later: labels can be changed with CSS



Structure of Lists as Text Content

```
We are pleased to introduce you to the first …
In the first course you'll learn
    <ul>
      <li>How computing and programming are
          changing the world.
      </li>
      <li>Internet and the Web
      </li>
      <li>HTML and CSS to create web pages
      </li>
      <li>Javascript to create images and
          to process data
      </li>
    </ul>
    Before you
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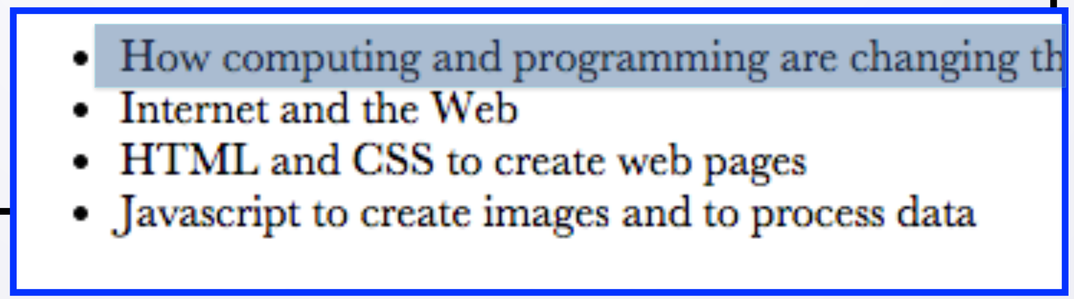

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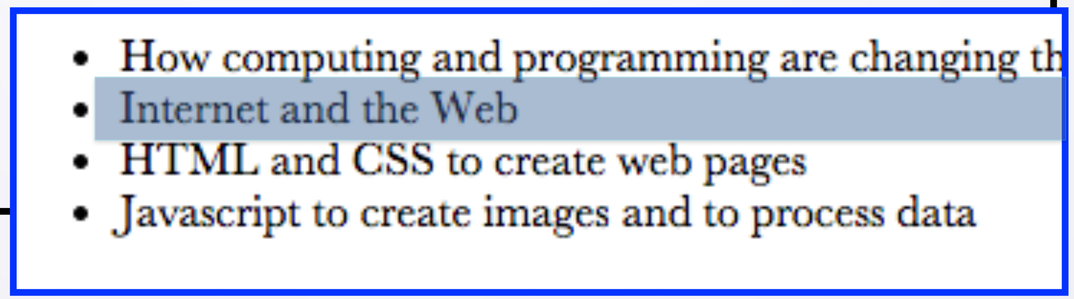

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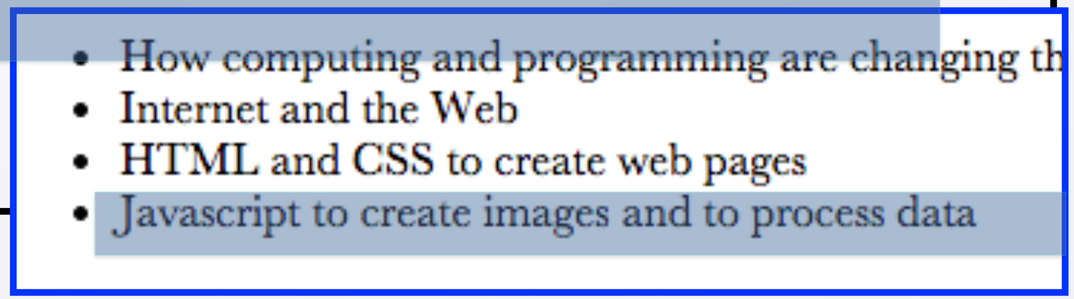

Constructing an HTML List

- Inside <ul> must have sequence of elements

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Constructing an HTML List

- Inside <ul> must have sequence of elements
  - Anything between elements, not just text: <img>, <a href>, <ul>, …

```
<ul>
    <li>How computing and programming are
        changing the world.
    </li>
    <li>Internet and the Web
    </li>
    <li>HTML and CSS to create web pages
    </li>
      <li>Javascript to create images and to
    </li>
</ul>
```

Creating Order in HTML Lists

- May want ordered list
  - Numbers can be important
  - Also possible: letters
- is ordered list
  - required
  - Automatic numbering
    - Add, remove
    - Numbers change

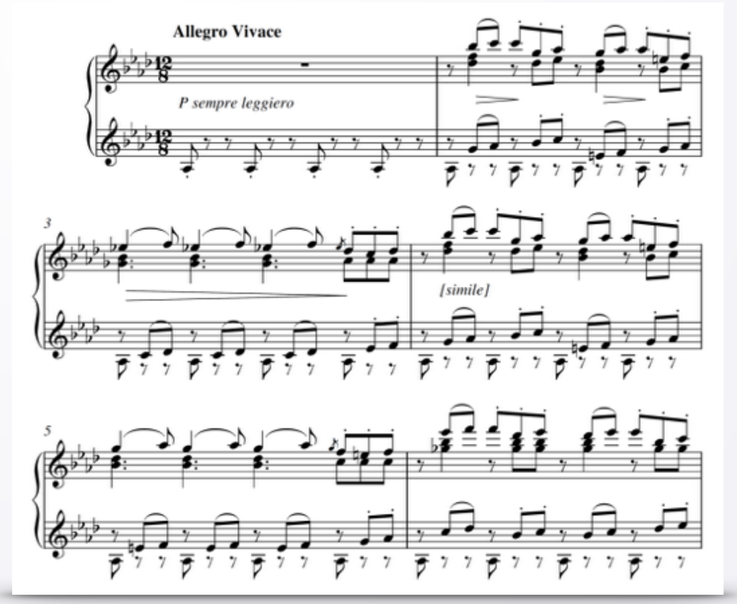
1. Apple
2. Watermelon
3. Guava
4. Raspberry
5. Fig

HTML

```
<ol>
  <li>Apple</li>
  <li>Watermelon</li>
  <li>Guava</li>
  <li>Raspberry</li>
  <li>Fig</li>
</ol>
```

List Elements of ...

- We can compose HTML elements
  - Composition important concept in Computer Science and other disciplines
  - Construct web pages with elements that can contain other elements
  - lists of images ☑
  - list of lists ☑



Nested Lists

- in
  - bullets “change”
  - Indentation helps

- Capital Cities
  - Beijing
  - Moscow
  - Madrid
  - Bogota
- Large Cities
  - Sao Paulo
    Neighborhoods
    - Centro
    - Higienópolis
    - Jardins
  - Karachi
  - Mumbai

Nested Lists

- in
  - bullets “change”
  - Indentation helps
    - Reading HTML

```
<ul>
  <li>Capital Cities
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      <li>Beijing</li>
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      <li>Madrid</li>
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    </ul>
  </li>
  <li>Large Cities
    <ul>
      <li>Sao Paulo
        <br> Neighborhoods
        <ul>
          <li> Centro </li>
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        </ul>
      </li>
      <li>Karachi</li>
      <li>Mumbai</li>
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```

Nested Lists

- in
  - bullets “change”
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    - Reading HTML
- Composing
  - Between

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  <li>Capital Cities
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http://codepen.io/duketeam/full/JdadJg

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```

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HTML Tables

- Tables information in rows and columns
  - General organization? CSS preferred
- Tables constructed from HTML elements that correspond to visible table

Sweet	Sour	Salty
Milk	Yogurt	Sardines
Pineapple	Kimchi	Salami
Grape	Vinegar	Pickles

HTML Tables

- HTML table elements

Sweet	Sour	Salty
Milk	Yogurt	Sardines
Pineapple	Kimchi	Salami
Grape	Vinegar	Pickles

```
<table>
  <tr>
    <th>Sweet</th>
    <th>Sour</th>
    <th>Salty</th>
  </tr>
  <tr>
    <td> Milk </td>
    <td> Yogurt </td>
    <td> Sardines </td>
  </tr>
  <tr>
    <td> Pineapple </td>
    <td> Kimchi </td>
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    <td> Vinegar </td>
    <td> Pickles </td>
  </tr>
</table>
```

HTML Tables

- HTML table elements
  - <table></table>

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HTML Tables

- HTML table elements
  - <table></table>
  - contains rows <tr></tr>

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  - contains rows <tr></tr>
- Rows contain
  - header elements <th></th>

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HTML Tables

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  - <table></table>
  - contains rows <tr></tr>
- Rows contain
  - header elements <th></th>
  - table cells <td></td>

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Tables and Lists

- HTML tables and lists help organize information
  - From simple

Tables and Lists

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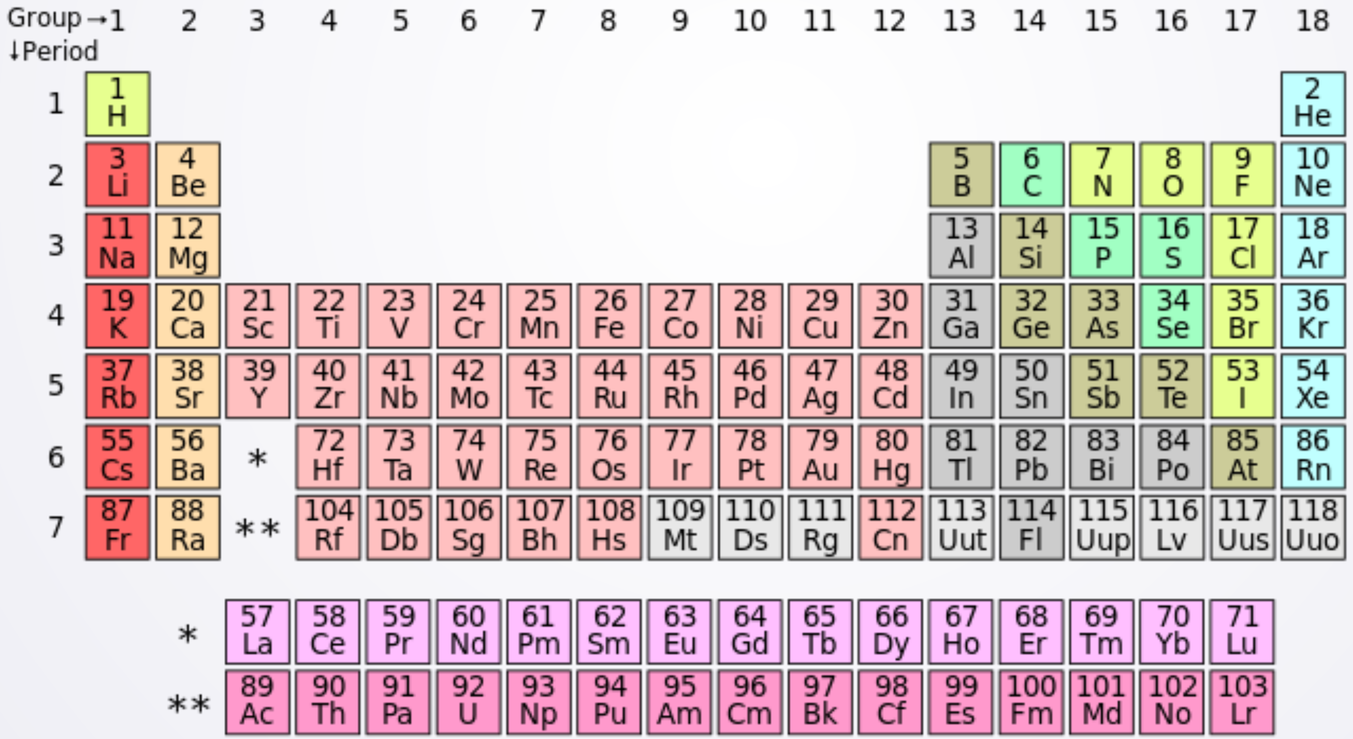
  - From simple to complex



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Tables and Lists

- HTML tables and lists help organize information
  - From simple to complex
  - elements can contain tables
  - <td> elements can contain lists

```
<table>
<td>
<ol>
<li></li>
</ol>
</td>
</table>
```

Tables and Lists

- HTML tables and lists help organize information
  - From simple to complex
  - elements can contain tables
  - <td> elements can contain lists
- Composition key principle of Computer Science from HTML to Programming
  - Create, Design, Build