The example web pages shown in the original assignment 1 used fixed pixel sizes for the images. That is what is shown in the Deitel book. . But there is much more to know about setting image sizes. For starters, if you set both the width and height, as above, you may change the shape of the picture. In my original examples, the people getting on the Nova bus are too thin because the image was narrowed. But, if you set only the width, the height will be determined automatically to preserve the original aspect ratio (height to width ratio).

When you create a table, the column widths will be sized to hold the widest thing in the column. However, table cells (<td>) can also have their width specified (<td width="100">).

Here's where it gets interesting. If you set the image or cell sizes with a number only, the size uses units of pixels, where a pixel is relative to the resolution of the screen. That has some advantages, because each pixel is guaranteed to have a dot on the screen. That might be important in astronomy or medical imaging where you don't want any detail to be lost. But size can also be specified in terms of distance (inches or centimeters). That might be useful if you want the picture to have a certain size, regardless of the screen. In this case, you could, for example, print a ruler on the screen. The choices are inches (2in), centimeters (4cm), points (an old typesetting unit equal to 1/72 inches, as in 12pt). The default is pixels (100px or just 100).

The disadvantage of using fixed sizes is that if you resize the browser window, part of the image may fall outside the area of the window (window too small), or leave a lot of space on the right (window too big). This is especially a problem on smart phones where you don't know how big or small the screen might be. HTML has a solution for that. You can specify the size as a percent of the available area. In this case, the size will grow or shrink as the containing window changes size. If you make a table with 4 columns and nothing on either side, you can give each column ¼ of the page width: <td width="25%">. With % you can specify table cell or image sizes relative to the size of the containing page.

So far so good, but pay attention. When you use tables to do layout, only the outermost table is relative to the size of the browser window. The size of the contents of any cell is relative to the size of that cell. So, in the table example above, if you are using a table with four columns to hold four pictures, you would size the columns to fit the window, but then you must size the any picture inside a cell to fit its column. Since the columns change size when the browser changes size, you don't know their actual size. But you can specify that the picture fills the column width with width="100%". As before, if you specify the width and not the height, the width of an image is chosen to preserve the original aspect ratio.

Here is a simple example:

```
<table>
  <tr>
    <th>Left Column</th>
    <th>Right Column</th>
  </tr>
  <tr>
    <td width="50%"><img width="100%" src="rubberduck.jpg" /></td>
    <td width="50%"><img width="100%" src="pinkflamingo.jpg" /></td>
  </tr>
</table>
```

If you use tables within tables to create divisions within a column, remember that the inner table is now relative to the size of the containing cell, and not the outer window. Perhaps an easier way of laying out contents either above or beside other contents within a column is by using <div> or <span>.

Now that you have all of this information, you must modify your original version of assignment one, and redo it so that the images fill the width of the browser, no matter how the window is resized. In order to keep the images lining up correctly in the vertical dimension as well, adjust the relative table column widths so that they accommodate pictures with different aspect ratios and they still end up being more or less the same height (do NOT edit the images to make them all the same size).

Famous Cities of the World

London   Paris   San Francisco   Davie

Famous Cities of the World

London   Paris   San Francisco   Davie