

# Week of 12 August: Recitation

## Instructions

For this week, we would like to give you some first-hand experience with more “advanced” HTML elements and simple CSS. Consider writing a “resume,” which is a structured document that provides readers with a brief description of your objectives (career goals, etc.), education, work-related experiences, and references.

Your resume will likely not contain true information, but you might imagine what you would like to envision as your resume. For example: what do you want your resume to look like upon graduation from this University?

Here’s a (greatly condensed) version of my resume:

Resume of T. Reinhardt

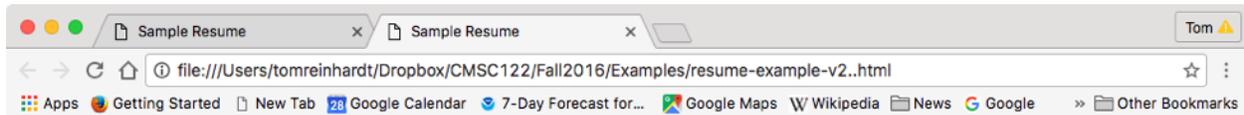
**Objective(s)**

To obtain an entry-level position in a growing and dynamic Web-Development company with the intent of using my experiences in both academic and applied computing to assist them in growing their business.

Category	Dates	Description
<b>Education</b>	1979-	Graduate work in Computer Science at Boston University. Studies focused on Artificial Intelligence, computational linguistics,
	1983	computational complexity and distributed computing problems.
<b>Additional Education</b>	2001-	Graduate work in Education at the George Washington University in Washington, DC. Focus on secondary education in mathematics
	2003	and computer science.
<b>Employment History (Highlights)</b>	1983-	MIT Artificial Intelligence Laboratory: Worked in the Message-Passing Semantics Group to develop the second generation of Actors
	1989-	languages for advanced problem-solving in Artificial Intelligence.
	1989-	Worked at Bolt, Beranek & Newman, in Cambridge, MA in a variety of settings: in the Artificial Intelligence arena where I
	2007	developed languages and systems for real-time planning and simulation; developed meta-languages and protocols for knowledge-representation and inferencing systems; also devoted time and effort in technology transfer.

This document was created with NO CSS, nor did it require any “nested” tables, instead I used the “rowspan” attribution to associate more than one set of dates and descriptions with a particular Category. (The boldface fonts are provided by my use of `<th>` elements.)

I think that we agree that it’s somewhat difficult to associate all of these various “categories” of information, such as work experiences, with topics that appear in bold along the first row of this table. Compare that with the enhanced version, below, that uses CSS:



**Resume: T. Reinhardt**

<b>Objective</b>		To obtain a position in a small company where my background in both academic computer science and commercial software engineering will contribute to the success of the team.
<b>Education</b>	1979-1983	Boston University: completed graduate work in Computer Science. Thesis area focused on the design and development of message-passing languages for Artificial Intelligence applications. Published numerous papers on the underlying computational linguistics of Actors-based languages and theoretical AI (results) in Actors systems.
	1999-2001	George Washington University: completed graduate work in Education. Specific focus on secondary education in mathematics and computer science.
<b>Experience</b>	1983-2001	Worked as a Scientist in a variety of settings at the MIT AI Lab (during the 1980's) where I developed second generation Actors languages, attended academic conferences, published a variety of technical papers and mentored junior staff. At BBN (1990-1996) contributed to a variety of task orders and some basic research--Applied Intelligence, intelligent-agent design, computational linguistics for advanced object/patterns based languages and systems. Principal CS Investigator on joint task order with NASA AMES to test and develop human-in-the-loop simulation as part of their on-going research into commercial air safety. Commercial work: Networking Imaging (1996-1999) where I developed COM (Microsoft Component ware) for the company's flagship product, and mentored staff. (1999-2001) Corporation for National Research Initiatives: applied rules-based systems to developing MEMS fabrication software.
	2001-2011	Taught in the Montgomery County Public schools; spearheaded CS curriculum development.
	2011-2016	Lecturer/Instructor: University of Maryland Computer Science Department where I design and teach a variety of courses including the introductory programming sections

Doubtless, you can still find areas of improvement. But, for classwork see if you can create two documents: (1) a “raw” version of your resume; then (2) an “enhanced” version of that document that uses CSS to “organize” and add some visual interest.

## Specific Instructions & Ideas

Begin by creating the “raw” document:

1. I suggest creating the HTML (“raw”) version first. Although not strictly required for classwork, this document should validate to HTML 5.0 (it should also contain NO style attributes).
2. To do this, you should need only the <table>, and its usual components, headings, rows, and cells. If you have any difficulties here, consult the on HTML tutorials (look under Tables).
3. Don’t stress about “how it looks.” Make sure that the information appears somewhat organized and rational.

Add the CSS class and id information:

Determine which elements will be “classes,” which “ids.” Remember that a class names a collection, an id names a unique entity. For example, consider an excerpt from my HTML:

```
<tr class="education">
  <td class="label" rowspan="2">Education<td>
  <td class="dates">1979-2001</td>
  <td Boston University ... </td>
</tr>
...
```

Here I’ve defined to “classes” which I use in constructing my CSS rules that apply to how I envision “education” (as a category of information that takes up two rows) will format.

Then, create some “rules” and see how these rules change the appearance of the selected elements.

Do this by creating your style in the “head” of your document so that you can see the names that you chose for classes and where you’ve attached them to HTML elements. To do this, your head should look something like:

```
<head>
  <meta charset="utf-8">
  <title>...</title>
  <style>
  ... /* lots of style rules here: consider these two */
  [Here’s the CSS “rule” for education:]

    table .education { background-color: #99cdaa; }
```

[And, here’s the rule for all elements that are used as “labels”]

```
    .label { font-weight: bold; padding: 15px; }
  ...
</style>
<body>
  <table>
  ...
  </table>
</body>
```

Later, when everything works, if you'd like you can copy the rules, create a new file, something like myCSS.css, paste those rules into myCSS.css, replace the <script> with a <link> element, but this is not necessary.

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## Where to get help

Please use both the HTML the CSS Tutorials, found in Helpful Resources (first module), if you want good information about elements and examples of CSS is used in some realistic settings. Naturally, we will review some of these rules in later classes.

The point of any class exercise is to give you a chance to work in small groups and to ask questions. Rather than asking me, however, I suggest that you use these lab sessions to develop a relationship with the textbook as well as the online tutorials, which are really quite good.

These assignments are NOT graded. They have NO deadlines. You should proceed at your own pace, and have fun!