## IT 240 Study Guide Winter 2013

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This is the IT 240 Official Study Guide for the IT 240 Web Design class taught by Don Colton, Winter 2013.

This study guide is focused directly on "what" and "when." It talks about the description and grading of the Portfolio projects, which are the largest component of the semester grade. It tells what is required for each one.

There is also a textbook. It tells "why" and "how." Its role is explaining things and telling how to make things work.

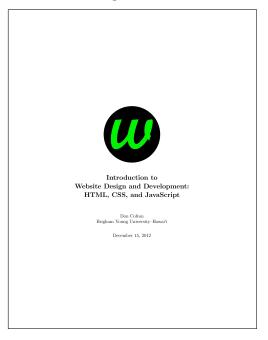
The textbook is "Introduction to Web Design and Development," by Don Colton. It is available in PDF form, free.

Free textbook:

http://iwdd.tk/

Alternate URL for textbook: http://iwdd.doncolton.com/

The textbook is still being written. New material will be added to it from time to time and chapter numbering may change during this semester. The index is good.



This study guide has appendices that include BYUH-specific information on things like Web Hosting (Appendix A, page 80), Grading (Appendix B, page 81), and a summary of what the syllabus says about Portfolios (Appendix C, page 89).

#### Learning Objectives

This study guide (with the accompanying textbook) provides support for the following learning objectives. By the conclusion of this course, students should be able to do these things. I will express them using this format:

• Learning objective. (How we achieve it.)

Following are the major objectives for this course. They are well-accepted as the most important things we should do.

- Properly use HTML markup. (We cover h1, p, links, div, span, head, body, tables, lists, and forms.)
- Properly use CSS to style a webpage. (We cover box model, font families, positioning, inline style, internal and external stylesheets based on tag, ID, class, and pseudo-class.)
- Properly separate HTML (content) and CSS (style, presentation).
- Create valid HTML and CSS. (We validate our HTML and CSS using industry-accepted W3C standards.)
- Integrate your knowledge. (Complete a Capstone Activity where you design and create a website that demonstrates your skills.)

Following are my "supporting" objectives. These things are important in enabling you to do great work.

- Understand copyright. (I tell about it and give you alternatives.)
- Edit images. (We use Gimp to crop, resize, use transparency, and create icons. Gimp is powerful and free.)
- Understand JavaScript. (We use it to alter the appearance of a webpage, and to insert externally-generated text into a webpage.)
- Understand Webhosting and DNS. (We establish a domain name and subdomains and populate them with content.)
- Understand Apache. (We use public\_html and index.html and .htaccess to create websites.)
- Understand CMS. (We install, operate, and customize WordPress, a popular Content Management Systems, including having you run a blog.)

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## General Information

This chapter has some general information about things like grading.

#### 1.1 Grading

Because this is a web design class, most of the assignments require you to make a webpage or update your website in some way.

**Due Dates:** Each task will be discussed in class on the day it is introduced. Normally it will be due the night before the next class meeting, nominally at 23:59 (11:59 PM). Often I grade things just after midnight, but sometimes not until later in the morning, just before class.

**Essentially Correct:** Each task has essential elements. When you have completed the essential elements, your task is considered to be essentially correct, and I will grade it. Before that, it will only receive a minor number of courtesy points if any.

Once it has the essential elements I will check for the gotcha elements. These are the important things that I want you to have, but they are not strictly essential to the task. Problems here can result in lost points. For example:

- **Title:** Provide a helpful and accurate title and primary (h1) heading.
- Name: Show your name somewhere obvious and near the top of the page.

- **Intro:** Write a sentence or two introducing the task and describing its purpose.
- **Portfolio:** Provide a link to your Portfolio Homepage.
- Backlink: Update your Portfolio Homepage to link back to your new page. The link should be helpful, not cryptic.
- **HTML:** Link to the HTML Validator for easy checking of your code. Make sure it validates cleanly.
- **CSS:** Link to the CSS Validator for easy checking of your code. Make sure it validates cleanly.

Bonus Points: Voting often happens in class. Student work that is essentially correct is included in the vote, and all students have a chance to rate the work on a five-point scale of nice to incredible. This is a chance for other students to see your work and learn from it. Students scoring high in the voting get extra credit points (and bragging rights).

**Deadlines:** Sometimes it is difficult or impossible to complete a task by the due date. Maybe you are part of an athletic team that is traveling, or maybe you are sick. Or maybe you lost a few points for gotcha items, and you have fixed them now.

We generally allow a little extra time to get the work done, maybe a couple of days, maybe a week. If you complete the work, or substantially improve the work, after the due date, you can request a re-grade. See section B.6 (page 83) for details.

Unless there is another deadline specified, all work is due by 23:59 the last day of class (Tuesday, April 9).

#### 1.2 Sending Email About This Class

Email is a really handy way for me to hear from you, and it lets me respond to you even when I am not in my office. I have worked out a system to make sure I handle your emails efficiently and without losing them. This section tells what I expect (or require) of you.

**IMPORTANT:** If you are writing about two or more assignments, put each one it its own email. If I get a message that covers several things, I will

send it back to you and ask you to split it up. Having one topic per email makes it easier to respond to one without the need to respond to everything else at the same time.

If you are writing to me in relation to this class, your subject line should be as follows:

Email Subject Line: it240 xxxxx lastname firstname

it240: The it240 keeps your email out of my spam filter and lets me group it with other emails relating to this class.

**xxxx:** Replace the xxxxx with the grading label of the thing you are writing about, if it is an assignment. Otherwise, just put a brief word or two that summarizes your issue.

Having the grading label is really helpful when I am batching together emails from lots of students. It makes it easier for me to handle all of the XYZ assignment at the same time.

lastname firstname: Replace lastname and firstname with the names you are using in this class. You can put a comma between them if you want. Use the lastname and firstname that I have on my roll sheet, which is based on what you asked me to call you in class. This is especially important if you have a common lastname.

**Lost Email?** I will reply to your email within a day, and often within an hour or two. If you do not hear back from me within a day, send your email again. Here are some typical replies that I use:

- Done: This means I did whatever you asked.
- **Noted:** This means I received your request and I will process it. Often this is in response to you telling me your study time.
- Received: This means I received your request and I will process it, but I have not yet spent time considering it. Probably I am waiting to work on it with a bunch of similar messages from other students.

# Unit I Projects Assigned

This part of the study guide lists the projects that have actually been assigned, or soon will be.

The words "project," "task," and "assignment" are used to mean pretty much the same thing as each other in this document. Each thing I ask you to do will be a "portfolio project" (or "portfolio task" or "portfolio assignment").

The phrase "due date" means the date by which you should have the assignment done so that you can consider yourself to be caught up with your classwork.

The word "deadline" means the date beyond which you cannot receive credit for your work unless you beg and grovel and have a really good excuse. And maybe not even then. A lot of work might never get done if it weren't for "the last minute." Accordingly we have a last minute, and it is called the deadline.

The period of time between the due date and the deadline is sometimes called the "grace period."

The "grading label" is a short code that is used both in this study guide and in the gradebook to identify and track grades for activities.

## Task 0p1 First Web Page

• Status: Officially Assigned.

• Discussed: Tue, Jan 8.

Due Date: Wed, Jan 9, 24:00.Deadline: Wed, Jan 16, 23:59.

• Grading Label: **0p1** 

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 Op1 regrade lastname firstname

Summary: Create a simple HTML web page that has a heading (h1), bold text (b), italic text (i), and an image (img).

Required: Create a web page.

Required: Your page must: (a) Be properly linked to your **0p1** link on the student projects page. (b) Display your name and IT 240 as part of an h1 heading. (c) Have some (but not all) text in plain (not bold, not italic). (d) Have some (but not all) text in bold. (e) Have **other** (but not all) text in italic. (f) Display a picture of you and the GCB sign, width=500. (z) Be "hand-coded" as demonstrated in the textbook.

More about the picture: The original should be used for your webpage. The original must be at least 1000px wide, but 2500px or more is better. Small-format cameras, such as some cell phones and some iPads, which create

images smaller than 1000px wide, are not acceptable for this activity. The rubric is explained in Appendix B.9 (page 85).

Grading Rubric (Rules for Grading)

- 20 Create a hand-coded web page.
- -4 (a) When I follow my link do I immediately see your page? Is it named index.html? Is it in your public\_html folder?
- -4 (b) Do you have your name and IT 240 in the <h1> line?
- -4 (c) Is some of your text plain (not bold, not italic)?
- -4 (d) Is some of your text bold (and not italic)?
- -4 (e) Is some of your text italic (and not bold)?
- -4 (f) Is your picture 500px wide, with you and the GCB sign?

Bonus Points: Extra credit will be awarded based on a vote taken among the students. Students will rate each other's work for overall appeal (WOW factor). The top few vote-getters will receive extra credit, up to 4 points.

An example of doing this task is provided in the textbook.

The key things you will demonstrate are:

- You can cope with cPanel.
- You can create a web page in the proper directory.
- You can use h1, b, and i tags.
- You can upload and display a picture.
- You can control the displayed size of the picture.

The initial location is only temporary. Once you have your own domain, we will move your webpage there.

## Task 1dn Domain Name Preparation

Status: Officially Assigned.
Discussed: Thu, Jan 17.

Due Date: Mon, Jan 21, 23:59.Deadline: Wed, Jan 23, 23:59.

• Grading Label: 1dn

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This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 1dn regrade lastname firstname

Summary: Prepare to set up a personal domain name.

#### 3.1 Create Three Document Roots

In the Apache webserver, webpages and media are stored in folders. These folders can have subfolders. The main folder for each website is called the document root.

In a future assignment, we will create three websites. For now, we need to create the document root for each website and create an index.html page for each one.

1. ~/public\_html/ is your original IS2 document root. I require the creation of three subfolders, as listed below. Aside from that, I leave you in control of this folder.

Each website has a document root. For the websites I assign, I require that the document roots be different from each other.

- 2. ~/public\_html/tk/ will be your mydomain document root. I require the creation of an index.html file in it, as specified below. Aside from that, I leave you in control of this folder.
- 3. ~/public\_html/wp/ will be your wp.mydomain document root. I will retain control over this folder for the whole semester. I will tell you what to put there.
- 4. ~/public\_html/240/ will be your 240.mydomain document root. I will retain control over this folder for the whole semester. I will tell you what to put there.

#### 3.2 Have Four Homepages

The index page in each document root is called the homepage.

In each of your three new document roots, create an index.html page.

The page needs two lines. The first line should be an h1 that tells the domain name. The second line should tell your name.

This will result in the three new webpages all being different from each other.

Please keep these webpages very simple for now.

For now, do not include any other lines or styling. Keep things simple.

#### 3.3 Grading Rubric

Grading Rubric
20 Set up your document roots.

- -10 /tk/ does not exist; -5 does not have the required index.html.
- -10 /wp/ does not exist; -5 does not have the required index.html.
- -10 /240/ does not exist; -5 does not have the required index.html.

Bonus Points: There are no bonus points on this assignment. Keep things simple.

# Task 2dn Domain Name Creation: (mydomain)

•	Status: Officially Assigned.
•	Discussed: Thu, Jan 17.
•	Due Date: Mon, Jan 21, 23:59
•	Deadline: Wed, Jan 23, 23:59.
•	Grading Label: <b>2dn</b>

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This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 2dn regrade lastname firstname

Summary: Create a personal domain name. We will call it (mydomain).

#### 4.1 dot.tk

#### 4.1.1 Register Your Domain Name

Do this carefully. It is is hard to fix later, if you happen to mess up. You could lose your domain name. Be extra careful.

A detailed example of doing this task is provided in the textbook.

Required: Establish a .tk domain name and point it to your web hosting space in the IS2 machine.

Definition: Throughout this study guide, we will refer to the domain you establish as (mydomain). Whenever we use that label, you will know that it means the domain you created for this assignment.

For example, if the domain you set up is fred.tk, then (mydomain) will mean fred.tk.

Important: As you register, you will need to create an account with the registrar. Do it. You will need the account so you can later update the settings on your domain name. Anonymous registration leaves you with no way to fix things.

Recommended: Pick something dignified that you would be comfortable using with a potential employer when showing them your portfolio. Others will see the domain name you select, and it will be used to access your work in this class. Short names are usually better.

#### 4.1.2 Set Up Domain Name Services

DNS is a service that converts domain names into IP addresses.

Browsers will use your domain name to ask your registrar for your IP address. Your registrar will need some way to direct traffic.

At http://www.dot.tk/ there are currently three choices.

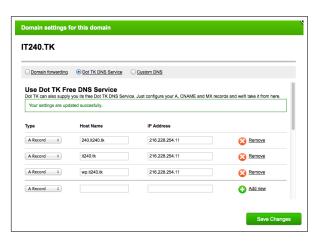
(a) Redirect to another domain name, such as yourname.is2.byuh.edu. Avoid this option. THIS WILL NOT WORK FOR US.

(b) Use the dot.tk registrar's DNS server. This is acceptable. They will need your IP address. It is 216.228.254.11.

In this example, I am directing my .tk domain and two subdomains to point to the same IP address (216.228.254.11).

(c) Use another DNS server. This is acceptable. Our DNS server is is 2. by uh. edu.

In this example, I am directing .tk to use my DNS (is2.byuh.edu) to handle everything.





When you have done this, you are done with dot.tk (unless you need to make changes later).

#### 4.2 Tell Me Your Domain Name

At any point after your domain name is registered, whether the cPanel part is done or not, you can notify me of your new domain name.

Follow the directions for sending me email. Your subject line should be as follows:

Email Subject Line: it240 2dn lastname firstname

Replace lastname and firstname with the names you are using in this class. You can put a comma between them if you want.

In the body of the email, put a statement such as:

My domain name is it240.tk.

Of course, instead of saying it240.tk, put whatever it actually is.

#### 4.3 cPanel

#### 4.3.1 Addon Your Domain To Your IS2 Account

Using cPanel, do the Addon Domains activity. Tell it your new domain.

You will need to assign the addon domain a document root. Use this:

```
~/public_html/tk
```

You will need to assign it an FTP user name. The default is fine. You will need a password. You can let cPanel generate a password. We will never use it, and you can always change it later if you need it.

At this point, your new domain should start working.

#### 4.3.2 Add Two Subdomains

Again in cPanel, from the main menu, select Subdomains. Enter there and create two subdomains.

We will refer to your addon domain mydomain.

Create wp.mydomain and 240.mydomain.

For the wp subdomain, assign this document root:

~/public\_html/wp

For the 240 subdomain, assign this document root:

~/public\_html/240

#### 4.4 Grading Rubric

Grading Rubric

- 20 Set up your domain and subdomains
- -10 Your mydomain matches your /tk/
- -10 Your wp.mydomain matches your /wp/
- -10 Your 240.mydomain matches your /240/
- -10 Your webpages are not clearly distinct (different).

#### CHAPTER 4. 2DN: DOMAIN NAME CREATION: (MYDOMAIN) 20

Bonus Points: There are no bonus points on this assignment.

## Task 240 240 Portfolio Homepage

Status: Officially Assigned.Discussed: Tue, Jan 22.

Due Date: Wed, Jan 23, 23:59.Deadline: Mon, Jan 28, 23:59.

• Grading Label: 240

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 240 regrade lastname firstname

Summary: Create a homepage (an index.html page) for your IT 240 portfolio. Follow the example provided by the instructor. Also, move or copy your original webpage to /p1/ in the 240 document tree.

This is largely a cut-and-paste activity, however without the cut and paste. You are to copy what the instructor provides, and to customize it to match your own situation.

In the process, we introduce the HTML5 document structure (doctype, head, meta, title, body). We also introduce lists (ul, li). We also introduce links (a href). We also introduce scripts. And we introduce the validators (html and css). That is quite a lot of introductions. We will get better acquainted with these friends later.

Required: Follow the example provided by the instructor. This specifically

includes the doctype, head, meta, title, and body tags.

Required: Although you must follow the example provided by the instructor, you are specifically required to NOT USE COPY-PASTE or anything like it. You must type in all the words yourself. This is to maximize your learning. Sadly, there is no way I can verify you did this. You are on your honor.

Required: http://240.(mydomain) presents your Portfolio Homepage.

Because a few people still do not have their (mydomain) working, I am also accepting this one:

Alternative: http://netid.is2.byuh.edu/240/ presents your Portfolio Homepage.

Required: The homepage has an h1 heading stating your name and that this is your IT 240 Portfolio.

**Portfolio Homepage:** In the future, we will generally refer to this page as your Portfolio Homepage. Future assignments will require you to update this page throughout the semester.

**H2 Headings:** Required: The homepage has three h2 headings. The first must introduce a list of your portfolio projects. The second must introduce a list of your other websites. The third must introduce a list of IT 240 class resources.

Within The Headings: Required: Within each of the three lists, begin the list with a ul tag (and end the list with a /ul tag). Provide each link as a separate li tag. Each link is created by using an a tag.

**First List:** Required: The first list must mention your p1 webpage. (As new projects are assigned, they will be added to this list.)

**Second List:** The second list may be empty or may have items at your discretion. The heading must be present even if there are no items on the list. This is an excellent place to link all the other wonderful webpages you may be creating. Or create your own subdomain and organize it any way you would like.

**Third List:** Required: The third list must mention the course homepage, the course syllabus, and the course textbook. Other mentions are at your discretion.

Page Footer: Required: At the bottom of the page, provide links to the

HTML and CSS validators, as done in the instructor's example.

The required validator links are as follows:

```
<a href="http://validator.w3.org/check?uri=referer">HTML</a>
<a href="http://jigsaw.w3.org/css-validator/check/referer">CSS</a>
```

When the HTML validator link is followed, the report should say that you passed with 1 warning(s). The warning is due to HTML5 currently being experimental. You should correct all other warnings and errors.

For fun, if you wish, you can include a page visit counter. See E (page 94) for details, but the short version is to include this code in your page:

```
You are visitor number
<script src="http://dc.is2.byuh.edu/counter/"></script>.
```

At this stage, keep your page very simple. Later you will have the opportunity to dress it up. But at this point, do not do any styling.

#### Grading Rubric

- 20 240 Portfolio Homepage
- -20 http://240.(mydomain) brings up this page.
- or http://netid.is2.byuh.edu/240/ brings up this page.
- -20 HTML and CSS validator links must work as mine do.
- -1 for each error reported by the HTML5 validator.
- -10 doctype, head, meta, title, body must be properly done
- -10 no styling allowed (yet). (centering, colors)
- -6 h1 includes your name, IT 240, and the word Portfolio.
- -4 first h2 introduces a ul list of portfolio projects.
- -2 your p1 webpage must be listed with a working link.
- -2 second h2 introduces a ul list of your other websites.
- -4 third h2 introduces a ul list of class resources.
- -6 the list must link to course homepage, syllabus, and textbook.

Bonus Points: There are no bonus points on this assignment.

## Task g1 Gimp: Crop and Scale

Status: Officially Assigned.Discussed: Thu, Jan 24

Due Date: Mon, Jan 28, 23:59.Deadline: Mon, Feb 4, 23:59.

• Grading Label: **g1** 

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 g1 regrade lastname firstname

Summary: Take a photograph. Use Gimp to crop and rescale it.

Use The Gimp (free image editing software) to crop and resize an image provided by you. The textbook tells how, and we will show you how in class.

Exception: If you have other image-editing software that has adequate capabilities, you can use it instead. However, I will not be able to help you with any other software than Gimp.

Create a webpage that shows your work. Link it at:

Required: Webpage URL: http://240.(mydomain)/g1/

Required: On your Portfolio Homepage add a link to this project, with a suitable description of your choice.

The key things to demonstrate here are:

(a) You can provide your own full-sized image that is 2000px wide or larger. The photo must be taken by you. To borrow a camera see Appendix D (page 91).

The photo must be taken in landscape mode. Ideally it will have an aspect ratio of 4:3. That is the normal aspect ratio for most cameras.

The photo must be either taken by you, or taken of you.

Your picture taken for the 0p1 assignment may be usable.

Images retrieved from FaceBook are specifically forbidden. However, if you have the original pre-FaceBook image, you can use it.

- (b) You can resize the whole image to be 500px wide (and probably 375px high).
- (c) You can crop the original image to extract a portion that is 500px wide and 375px high.

#### Grading Rubric

- 20 Gimp 1 Webpage
- -20 When I follow my link, your webpage looks basically right.
- -20 You have working HTML and CSS validator links. Your page passes HTML validation with no errors and 1 warning.
- -4 You have a working link back to your Portfolio Homepage.
- -4 Your Portfolio Homepage has a working link to your g1 webpage.
- -4 You have an h1 with a suitable heading of your own choice.
- -4 You have an introductory p with at least your name and IT 240. Optionally say more about the photo or the page.
- -8 Your photograph must be in the landscape orientation.
- -8 You have an h2 heading to introduce the first image.

  Then show your full-sized original image using width=500.

  Your full-sized original must be at least 2000px wide.
- -8 You have an h2 heading to introduce the second image. Then show your full original image resized to be exactly 500px wide with the original aspect ratio.
- -8 You have an h2 heading to introduce the third image. Then show a portion of your full image, cropped and resized to be exactly 500px wide and 375px high.

When I grade your work, I check the easiest thing to check first. I keep

going until I run into problems.

The first thing I will check is whether my link brings up a page that basically looks right, including three pictures taken in landscape, link to homepage, and links to validators. If not, I will probably not grade it further, but will mark it as "0, incomplete."

The next thing I will do is validate the HTML. If it fails validation, I will not grade it further, but will mark it as "0, validation." If you pass those two tests, I will check the other aspects.

**Bonus Points:** Extra credit will be awarded based on a vote taken among the students. Students will rate each other's work for overall appeal. Top vote-getters will receive extra credit.

To be included in the vote, when I grade your work that morning before class, it must have received full credit.

## Task adr Addressing: Relative and Absolute

- Status: Officially Assigned.
- Discussed: Tue, Jan 29
- Due Date: Wed, Jan 30, 23:59.Deadline: Mon, Feb 4, 23:59.
- Grading Label: adr

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This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 adr regrade lastname firstname

Summary: Use absolute and relative addressing.

Required: Create an index.html page in the /adr/ directory. There should be nothing else in that directory.

Suggestion: Make a copy of another webpage you created, and then gut it and replace the guts with the material required here.

- (1) Have a reasonable title. Inside your page, have a reasonable h1 heading, and an introductory paragraph that describes the activity. Have a link to your portfolio homepage, and from that a backlink to this page.
- (2) Follow that with the three pictures and three links. The recommended order is link, picture, link, picture, link, picture, with each pair introduced by an h2 heading.
- (3) At the bottom of the page, have links for html validator and css validator. Optionally have the page view counter.

#### 7.1 Relative, Absolute, Docroot, Domain Name

There is a new chapter in the textbook that talks about Relative and Absolute URLs. I encourage you to read it. Currently it is Chapter 24, but if it moves you can look up "relative URL" in the index.

Relative links will look like ../g1/ and tell where the resource is in comparison to the page that has the link.

Relative links are the best kind to have if your website design might ever change in the future. They save you lots of trouble.

There are two kinds of absolute links. I call them docroot links and domain name links.

Docroot links are absolute links within the currently active domain name. They will look like /g1/ and tell where the resource is in comparison to the docroot of the page that has the link.

Note that docroot links will work for either your tk domain or for your is 2 domain, but not both. That is to be expected, and is one reason relative URLs are better.

Domain Name links are absolute links. They will look like /http://abc.tk/g1/and tell where the resource is in comparison to the whole Internet.

#### 7.2 img src="..."

Required: Use img src tags to include your g1 webpage "resized" image three ways, as follows:

- Relative.
- Docroot.
- Domain Name (Full URL).

#### 7.3 a href="..."

Required: Use a href tags to link to your g1 webpage three ways, as follows:

- Relative.
- Docroot.
- Domain Name (Full URL).

Make sure the pictures and links are obvious and well-labeled.

#### 7.4 Other Things

If you copied another one of your webpages, remember to update the title with something reasonable. Do not keep the title you had before unless it is a good fit for this activity. The same goes for any headings (h1, etc.) that you might have carried over.

You should use h1, h2, and other things you have learned to make your webpage informative and easy to understand.

Include a paragraph of description telling about this task. Remember to include your name.

Also include HTML and CSS validation links, and include a link to your Portfolio Homepage. Add a link to your Portfolio Homepage that leads to this page.

You can create the rest of the page in any way that seems reasonable to you.

Grading Rubric for ADR Webpage

- =0 404 error
- =1 incomplete
- =20 Essentially Correct (3 links, 3 img)
- -2 <title> is not appropriate
- -2 <h1> is not appropriate
- -4 descriptive paragraph missing, -2 name missing
- -4 missing portfolio link, -2 missing backlink
- -1..4 html validation missing or fails
- -1..4 css validation missing or fails

Bonus Points: Extra credit will be awarded based on a vote taken among the students. Students will rate each other's work for overall appeal. Top vote-getters will receive extra credit.

To be included in the vote, when I grade your work that morning before class, it must have received full credit.

## Task ff Font Families

• Status: Officially Assigned.

• Discussed: Tue, Feb 5

Due Date: Wed, Feb 6, 23:59.Deadline: Mon, Feb 11, 23:59.

• Grading Label: ff

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 ff regrade lastname firstname

Start by giving a helpful h1> and a p> paragraph that describes the assignment. Your name must appear in the h1 or in the paragraph.

Present the fonts in this order: serif, sans-serif, cursive, fantasy, and monospace. (It makes grading easier.)

For each font family give an <h2> heading that fully identifies all the fonts used in the font stack followed by a paragraph with about five lines of lorem ipsum text, with that font stack styling applied.

Each font stack must have at least two entries, with the last one being one of the five major families. Each font in the stack must belong to the same generic family. (Don't put Arial in the serif list, for example.) Be careful to spell your fonts accurately, and to put quote marks (single or double) around any font name that has spaces in it.

Do not use the same font name in more than one category. Make each font unique.

You must use the same lorem ipsum text for each of your paragraphs. (See lorem ipsum in the textbook index.)

End by giving links to your portfolio homepage, the html validator, and the css validator. Your portfolio homepage must link back to this page. Make sure both validators return clean results. You can include a page visitor counter if you like.

You are welcome to do other kinds of interesting styling, but please limit your content to the items mentioned above.

You are encouraged to pick interesting fonts, possibly even web fonts.

All styling must be controlled by your style sheet in the head of the document. (No style= attributes are allowed anywhere in the body of your document. No center tag. Use CSS.) You can use id or class to apply the styling into each paragraph.

Include the following line in your style sheet. Margin auto will center your webpage body on the page, and width 1000px will set it to be 1000 pixels wide.

```
body { width: 1000px; margin: auto; }
```

**Bonus Points:** Extra credit will be awarded based on a vote taken among the students. Students will rate each other's work for overall appeal. Top vote-getters will receive extra credit.

To be included in the vote, when I grade your work that morning before class, it must have received full credit.

## Task g2 Gimp 2: Transparency and JavaScript

• Status: Officially Assigned.

• Discussed: Tue, Feb 12.

Due Date: Wed, Feb 13, 23:59.Deadline: Mon, Mar 4, 23:59.

• Grading Label: **g2** 

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 g2 regrade lastname firstname

Summary: Use Gimp to create an image that is partly transparent. Use JavaScript to change the background color of the screen.

To be essentially correct, your page must do the following:

- (a) Show an original image of yourself. The recommended size is about 200 px wide.
- (b) Show a cut-out of yourself from that image. The recommended file type is png.
- (c) The cut-out must use alpha channel to let the webpage background show through.

(d) Have at least three buttons that use JavaScript to change the body's background color. You can use something like the following buttons, but feel free to pick any colors you want.

Here is the rest of the rubric.

```
Grading Rubric for Gimp 2 Transparency
=0 404 error, =1 incomplete
=20 Essentially Correct (2 pictures, 3+ buttons)
-2 <title> is not appropriate
-2 <h1> is not appropriate
-4 descriptive paragraph missing, -2 name missing
-4 missing portfolio link, -2 missing backlink
-1..4 html validation missing or fails
-1..4 css validation missing or fails
-4 image file size is excessive
```

**Bonus Points:** Extra credit will be awarded based on a vote taken among the students. Students will rate each other's work for overall appeal. Top vote-getters will receive extra credit.

To be included in the vote, when I grade your work that morning before class, it must have received full credit.

## Task b1 Box Model

• Status: Officially Assigned.

• Discussed: Thu, Feb 14.

Due Date: Tue, Feb 26, 23:59.Deadline: Mon, Mar 4, 23:59.

• Grading Label: **b1** 

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 b1 regrade lastname firstname

Summary: Apply padding, borders, margins, and outlines to objects on a webpage. Use JavaScript to dynamically change the box model parameters on one of those objects.

To be essentially correct, your page must do the following:

- (a) Show an original paragraph or image.
- (b) Show two or more buttons that trigger restyling of your item.
- (c) The restyling must involve box model parameters (margin, border, and padding) in an obvious way.

You can use this <head> code to create a JavaScript function called "reclass" that changes the class of an element.

```
<script>
function reclass(e,c){
  document.getElementById(e).setAttribute("class",c) }
</script>
```

Here is a style sheet that defines two classes to be used. You can use it as an example, but you must create your own class definitions and box model parameter values.

```
<style type="text/css">
body { width: 1000px; margin: auto; }
.x { padding: 10px; border: red solid 5px;
    margin: 5px; background-color: yellow; }
.y { padding: 20px; border: blue double 20px;
    margin: 10px; background-color: pink; }
</style>
```

Here is some <body> code to change the class of an item. We click on a <button> to call our JavaScript function "reclass" to find the item whose ID is "abc" and change its class to something new.

```
<button onmousedown="reclass('abc','x')">Red</button>
<button onmousedown="reclass('abc','y')">Blue</button>
<button onmousedown="reclass('abc','z')">None</button>
```

Here is an example of how to mark the paragraphs or images. Establish an ID for the item that will be changed. We recommend that you provide other items, already styled, for comparison.

```
This paragraph is Red style.
This paragraph changes style.
This paragraph is Blue style.
```

Here is the rest of the rubric. As usual, you must identify yourself by name and provide an appropriate <title> and <h1> heading, a descriptive paragraph, a portfolio link and backlink, and validator links.

Grading Rubric for Box Model

- =0 404 error, =1 incomplete
- =20 Essentially Correct
- -2 <title> is not appropriate
- -2 <h1> is not appropriate
- -4 descriptive paragraph missing, -2 name missing
- -4 missing portfolio link, -2 missing backlink
- -1..4 html validation missing or fails
- -1..4 css validation missing or fails
- -4 image file size is excessive

Bonus Points: Extra credit will be awarded based on a vote taken among the students. Students will rate each other's work for overall appeal. Top vote-getters will receive extra credit.

To be included in the vote, when I grade your work that morning before class, it must have received full credit.

# Task g3

# Gimp: Tiled Backgrounds

Status: Officially Assigned.Discussed: Tue, Feb 19

Due Date: Wed, Feb 20, 23:59.Deadline: Wed, Mar 6, 23:59.

• Grading Label: **g3** 

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 g3 regrade lastname firstname

This task is somewhat more artistic and less mechanical than some of the other tasks. Still, non-artistic students should be able to get full credit.

Summary: Use Gimp and one or more photos you have taken to create three tiled backgrounds.

**New:** We do not want to simply reproduce a piece of art. Do not use a picture of artwork or a picture of a drawing or a picture of artistic fabric. If you drew it or somebody drew it, it's probably not appropriate for this activity (even though it might really make a great background).

Mundane: The subject of your photo should be something natural or common or mundane. Grass, trees, flowers, cement, asphalt, walls, floors, ceilings, water, sky, beach sand. We want it to fade into the background.

Continuous: Your subject should have continuity, and not be an isolated

item. Stars would just be isolated dots of light, and would probably not qualify. A mess of coins or shells or toys would be okay, but not individual coins or shells or toys.

Avoid Obvious Repetition: Repetition can be distracting. The emphasis should be on making a smoothly continuous wallpaper rather than an obviously repeating pattern. We want this wallpaper to fade into the background, give a sense of context, and look pretty.

**Small Tiles:** Do not simply create small tiles like the original big tile. Your tiles should all be the same size and scale.

You must have three backgrounds, as follows.

Start with one original photo that will be the basis for your three backgrounds. Select a portion of the image that you like. Then crop to that portion. Finally, scale it to be about 200 px wide.

bg1.jpg: Call your cropped and scaled original this.

bg2.jpg: Starting with bg1.jpg, follow the Example 1 steps in the textbook to make the image tile-able. Keep it simple. Save the result as bg2.jpg.

bg3.jpg: Start over with bg1.jpg, follow the Example 2 steps in the textbook to make the image tile-able. You can be more elaborate with this one. Save the result as bg3.jpg.

Upload your three images to the folder where your webpage is.

Put the following lines in your style sheet (in your head), or lines that will have the same effect.

```
.bg1 { background-image: url('bg1.jpg'); }
.bg2 { background-image: url('bg2.jpg'); }
.bg3 { background-image: url('bg3.jpg'); }
```

Put the following script lines into your head.

```
<script>
function reclass(e,c){
  document.getElementById(e).setAttribute("class",c) }
</script>
```

In the body of your webpage, have an h1 heading and possibly a short paragraph that identifies you by name and tells the purpose of this assignment.

Follow that by these buttons or something similar.

```
<button onmousedown="reclass('abc','bg1')">bg1</button>
<button onmousedown="reclass('abc','bg2')">bg2</button>
<button onmousedown="reclass('abc','bg3')">bg3</button>
<button onmousedown="reclass('abc','bg4')">none</button>
```

Follow that by a link to your portfolio homepage, and links to the HTML and CSS validators. You can include the page visit counter if you like. Update your portfolio page to have a link (the "backlink") back to this, your **g3** page.

Keep the rest of your page empty so we can clearly see the effects of the background image.

```
Grading Rubric for Tiled Background

=0 404 error, =1 incomplete

=20 Essentially Correct

-2 <title> is not appropriate

-2 <h1> is not appropriate

-4 descriptive h1 or p missing, -2 name missing

-4 missing portfolio link, -2 missing backlink

-1..4 html validation missing or fails

-1..4 css validation missing or fails
```

**Bonus Points:** Extra credit will be awarded based on a vote taken among the students. Students will rate each other's work for overall appeal. Top vote-getters will receive extra credit.

To be included in the vote, when I grade your work that morning before class, it must have received full credit.

# Task wp WordPress Installation

• Status: Officially Assigned.

• Discussed: Thu, Feb 21

Due Date: Mon, Feb 25, 23:59.Deadline: Wed, Mar 13, 23:59.

• Grading Label: wp

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 wp regrade lastname firstname

Summary: Install WordPress at wp.(mydomain) and make a blog entry.

#### This part is done in cPanel:

You should have previously created the subdomain wp.(mydomain) but if you did not, now is the time to do it.

Install WordPress at wp. (mydomain)

Sample steps to install WordPress and get it working are shown in the textbook.

#### This part is done in WordPress:

Required: Make sure it240 and your name are part of the page headers.

Required: Create a blog entry.

Grading Rubric for WordPress Install

- =0 404 error, =1 incomplete
- =20 Essentially Correct (WP installed)
- -5 First blog entry not found.
- -2 Your Name not obvious on WP homepage
- -2 IT 240 not obvious on WP homepage

**Bonus Points:** Extra credit will be awarded based on a vote taken among the students. Students will rate each other's work for overall appeal. Top vote-getters will receive extra credit.

To be included in the vote, when I grade your work that morning before class, it must have been essentially correct.

## Task w2 WordPress Phase 2

• Status: Officially Assigned.

• Discussed: Tue, Feb 26

Due Date: Wed, Feb 27, 23:59.Deadline: Wed, Mar 13, 23:59.

• Grading Label: w2

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 w2 regrade lastname firstname

Summary: Modify your WordPress installation.

You must take control of your WordPress homepage. All themes come with pre-installed content and/or advertising. You must root it out and replace it with your own content.

- \* Delete the "Hello world!" automatic blog entry.
- \* Delete the Sample Page.
- \* Make sure your name is clearly visible at the top of the main page.
- \* Make sure "IT 240" is clearly visible at the top of the main page.
- \* Create a page entitled "About Me" and put some content into it.
- \* Have at least two non-trivial blog entries with different dates. Non-trivial

means a couple of paragraphs of meaningful content.

\* Add a personally-created background to all your pages. Ideally it should be a small, repeating pattern based on a photo taken by you, or based on artwork created by you.

```
Grading Rubric for WordPress Phase 2
=0 404 error, =1 incomplete
=0 raw (too much pre-installed content)
=20 Essentially Correct
```

Bonus Points: Extra credit will be awarded based on a vote taken among the students. Students will rate each other's work for overall appeal. Top vote-getters will receive extra credit.

To be included in the vote, when I grade your work that morning before class, it must have been essentially correct.

## Task w3 WordPress Phase 3

Status: Officially Assigned.Discussed: Thu, Feb 28

Due Date: Mon, Mar 4, 23:59.Deadline: Tue, Apr 9, 23:59.

• Grading Label: w3

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 w3 regrade lastname firstname

Tell me what interesting modifications you have done to your WordPress website. Report this by sending me an email with this subject line:

Email Subject Line: it240 w3 lastname firstname

Summary: Continue taking control of your WordPress website. Make additional customizations or modifications.

Grading will be a bit subjective since this is an open-ended kind of assignment. My main goal is to see that you have taken control of your website and have tried a few things.

Perhaps the best approach is to copy-paste the following questions, and then respond to each of them in-line. But you can use a different approach if you like.

- 46
- 1. Have you installed (tried out) two or more themes? List them and comment briefly on each.
- 2. Have you installed a personally-created background?
- 3. Have you written a total of at least three blog posts, done on different days?
- 4. Have you written one or more substantial blog posts? I mean several paragraphs.
- 5. Have you written a blog post that includes one or more images created by you?
- 6. Have you written a blog post that includes an embedded video? Comment briefly.
- 7. Have you written a blog post that includes an embedded video created by you? Comment briefly.
- 8. Have you installed any widgets? List them and comment briefly on each.
- 9. Have you installed any plug-ins? List them and comment briefly on each.
- 10. Have you made other interesting customizations to your chosen theme? List the important ones and comment on them.

Grading Rubric for WordPress Phase 3 Score based on the number of things mentioned in your email.

Bonus Points: Not this time.

# Task s1 Style 1

• Status: Officially Assigned.

• Discussed: Tue, Mar 5

Due Date: Wed, Mar 6, 17:00.Deadline: Tue, Apr 9, 23:59.

• Grading Label: s1

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 s1 regrade lastname firstname

We talked in class about what style sheets are capable of. Look at some websites including those of classmates and make a list of things you wish you could do.

Email Subject Line: it240 s1 lastname firstname

For each thing, give a sentence or two describing it, and maybe include the URL of a website that has that feature.

It is easy to get full credit on this task. Just tell me what you find interesting or enticing to learn about.

# Task a1 About Me

• Status: Officially Assigned.

• Discussed: Thu, Mar 7

Due Date: Mon, Mar 11, 23:59.Deadline: Wed, Mar 13, 23:59.

• Grading Label: a1

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 a1 regrade lastname firstname

Summary: Create an "About Me" webpage. Link it to your portfolio homepage. Create an external style sheet. Use it to do all the styling for both your portfolio homepage and your about me webpage.

**IMPORTANT:** The About Me link on your Portfolio Homepage must be the first link in the first list. The other links in that list can be in any order you want.

Look at your other assignments to get style sheet ideas. You can copy freely from your own work.

While you are at it, this is your opportunity to improve the styling on your portfolio homepage, and to clean up the content.

I do not specifically require that your About Me page has much of anything in it. It just has to exist, have some content (maybe lorem ipsum), and be

styled with the same external style sheet as your portfolio homepage.

You are welcome and encouraged to copy content from your WordPress About Me page, and to include images and links as appropriate.

```
Grading Rubric for About Me
=0 404 error, =1 incomplete
=20 Essentially Correct (shared style, no other style)
-5 About Me is not first link on Portfolio Homepage
```

Bonus Points: Extra credit will be awarded based on a vote taken among the students. Students will rate each other's work for overall appeal. Top vote-getters will receive extra credit.

To be included in the vote, when I grade your work that morning before class, it must have been essentially correct.

# Task p3 Pseudo Classes

• Status: Officially Assigned.

• Discussed: Tue, Mar 12

Due Date: Wed, Mar 13, 23:59.Deadline: Mon, Mar 18, 23:59.

• Grading Label: p3

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 p3 regrade lastname firstname

Create a webpage that demonstrates and explains at least three of the pseudo-classes or pseudo-selectors.

- (a) Write a sentence or two identifying the pseudo thing you are using, and telling about it.
- (b) Demonstrate its use.
- (c) Repeat three times.

For this task, you are encouraged to do your own research. You can also collect ideas from your classmates or other people. Google search "pseudo-classes" to find things that interest you to see how they are done. Then demonstrate them on your webpage.

Examples:

**:hover** - change the background color of a list item when the mouse moves across it.

:first-line - style the first line of a paragraph differently than the other lines.

:first-letter - style the first letter of a paragraph differently than the other letters. Make it twice as big, for example. You can do a "drop capital" if you look hard enough.

:nth-child(2n) - style alternating list items or table rows to have somewhat different colors

```
Grading Rubric for Pseudo
    =0 404 error, =1 incomplete
    =20 Essentially Correct (three pseudos, explained and demonstrated)
```

Bonus Points: Extra credit will be awarded based on a vote taken among the students. Students will rate each other's work for overall appeal. Top vote-getters will receive extra credit.

To be included in the vote, when I grade your work that morning before class, it must have been essentially correct.

# Task f1 Forms

Status: Officially Assigned.Discussed: Tue, Mar 19.

Due Date: Wed, Mar 20, 23:59.Deadline: Tue, Apr 9, 23:59.

• Grading Label: f1

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 f1 regrade lastname firstname

Summary: Create a forms page that features the typical input fields.

Create a webpage that reflects your own personality and provides input fields that might be found on, perhaps, an order entry screen, or on an account profile screen, or something else. But make it your own. Do not simply mimic what the teacher did, or what another student did.

Sample Business Case (just to get you thinking): The user wants to order an item of clothing (or something else that is similarly complex). Provide appropriate options to handle (for example) fabric, color, measurements, style, quantity, monogram, etc.

Use as many different kinds of fields, in as many different ways as you can.

type=submit: Have at least two. Demonstrate different names and values.

**type=text**: Have at least two. Demonstrate different sizes. Demonstrate placeholder. Vary the names that you use.

type=password: Have at least one. Demonstrate placeholder.

type=hidden: Have at least one. Put something into it.

**type=checkbox**: Have several. At least one should be pre-checked. At least one should not be pre-checked.

type=radio: Have at least two sets, each including at least three buttons.

select/option: Have at least three options.

textarea: Have at least one.

**action=** : When the form is submitted, we want to see what was actually submitted. Your form must specify the following action:

action=http://dc.is2.byuh.edu/echo/

Consider also using "default" and "disable" on one or more of your fields, as appropriate.

Grading Rubric for Forms
=0 404 error, =1 incomplete
=20 Essentially Correct (various fields, action works)

# Task t1 Tables

• Status: planned

• Discussed: Thu, Mar 28.

Due Date: Mon, Apr 1, 23:59.Deadline: Tue, Apr 9, 23:59.

• Grading Label: t1

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 t1 regrade lastname firstname

Build several tables. Demonstrate rowspan and colspan.

Summary: Create several tables that demonstrate the use of th, tr, td, rowspan, and colspan.

Required: On your Portfolio Homepage add a link to this project, with a suitable description of your choice.

Required: Use to create a visible border between cells.

Required: Table 1 must be 3x3 or larger, and use th headings on each column.

a	b	c
d	е	f
g	h	i

Required: Table 2 must be 3x3 or larger. The top row of the table must be a single colspan and must contain text content. The first column, except for the top row, must be a single rowspan, and must contain text content.

аьс			
d	e	f	
g	h	i	

Required: Table 3 must be 3x3 and use colspan and rowspan to create a camera shutter quilt block as follows:

a	b c	
d	е	f
gh		i

# Task proj Final Project

Status: Officially Assigned. Discussed: Several times.

Due Date: Tue, Apr 9, 23:59.
Deadline: Wed, Apr 10, 23:59.
Presentation: Thu, Apr 11, 13:00.

• Grading Label: **proj** 

Most projects are worth 20 points. This project is worth 140 points. I hope the points will be easy to get, but you must pay attention to the requirements listed here.

Of the 140 points, 100 will be based on the merit of your website itself, and 40 will be based on your oral presentation of your work during the final exam period on April 11. Additional points may be awarded as extra credit based on your fellow students' evaluation of your presentation.

If you need help, show up to class or during a study hall and get help. Do not just freeze up and hold your breath. That will probably not end well.

This project is not eligible for regrade. It is due at the end of the day on the last day of class. There are no extensions.

This is a major project and may take up our attention during the last few meetings of class.

Summary: Design a complete website. Show off your skills.

On the day of the final exam, each student will give a stand-up presentation of their website to the other students in the room. You will have about five minutes to walk us through your creation and point out its interesting features. The students will evaluate your work for how well they think you did. Their evaluations will be worth extra credit.

The order of presentation will be determined by randomly drawing numbers from a container. As each number is drawn, the corresponding person will be invited to present their website. Then the next name will be drawn, and so forth. You should plan to attend the entire final exam period, from 1:00 PM to 3:50 PM. Some people may be absent, so I think there is a good chance we will finish early, but I cannot guarantee it. (If you miss your slot, you forfeit the 40 points for presentation.) I do not accept requests for specific presentation times. It creates too many problems.

Project Ideas (just to get you thinking):

- Photo Business. Show off and sell photos for a friend.
- Travel Agency. Promote destination travel.
- Real Estate. Feature homes for sale or rent.
- Catalog Sales. Show and sell physical items.
- Department Website. For your major department.
- Family History. Talk about your dead ancestors.
- Hobby. Talk about it. Illustrate it.

#### Requirements:

- Create a domain name or a subdoman exclusively for this project. It cannot be a subdomain of a subdomain. You can have at most three pieces in the URL. project.it240.tk has three pieces and would be okay. project.it240.dcolton.is2.byuh.edu has six pieces and would not be okay.
- Do not use redirection. (This would be at the .tk level.)
- On your Portfolio Homepage, in section 1 (Portfolio), add a link to this project. You must call it "IT 240 Final Project". The link must be an absolute link to the homepage of the project.
- This must be a hand-coded website, created from scratch. This cannot be a WordPress website or use any other CMS. It cannot be anything you install. Do not use, for example, Fantastico.
- All content on the website must be your own work. This includes text and images.

- The website homepage must show your name and state that this is your final project for the IT 240 class.
- There must be at least three additional pages in the website.
- You may link to other websites, but you may not include content from other websites.

#### Recommendations and Suggestions:

- For your docroot, use public\_html/fp
- Use a common style sheet across all the pages of your website.
- Create a favicon for the website.
- If you need dummy content, use lorem ipsum.

You should start working on it now so you can have it ready by the due date. For this project, there are no deadline extensions, since we are at the end of the semester.

Include typical content. Some use of lorem ipsum is okay, but headings should be realistic if possible. If pictures are involved, use pictures taken by yourself.

Note: Due to our licensing arrangement with cPanel, you are not allowed to actually transact business through your website hosted on the IS2 machine. If you are hosting somewhere else, transacting actual business may be possible.

# Task h2 Homepage Revisited

• Status: Officially Assigned.

• Discussed: Tue, Apr 9.

Due Date: Tue, Apr 9, 13:40.Deadline: Tue, Apr 9, 13:40.

• Grading Label: h2

This is pretty much a re-run of the portfolio homepage assignment from Jan 22. But this time it is pure extra credit.

Your portfolio homepage will be the front door into your portfolio from this class. As such, we want it to look nice and be helpful. When you say to yourself, how did I do such-and-such, we want you to be able to come here and quickly find what you did. We also want other visitors to be impressed at your skills.

You have until the end of class to make it happen.

I am looking for the following things:

- Is it easy on my eyes? (Most are. I admit this is subjective, but this is extra credit.)
- \* Text has good contrast compared to its background.
- \* Text is compact to (mostly) fit in the viewport of the browser.
- \* Entries are neatly lined up and easy to understand.
- title: Does it have a reasonable page title?

- h1: Does it clearly identify itself as your IT 240 portfolio homepage?
- 1.0: Does the first section list your projects done for this class?
- 1.1: Does the first project link say "About Me"?
- 1.2: Does the second project link say "IT 240 Final Project"?
- \* Does each project have a helpful description telling what is learned or demonstrated?
- 2.0: Does the second section list your WordPress blog first (not "coming soon")?
- 3.0: Does the third section list the three class links first?
- You can have other sections after these three. That is okay.
- Does it validate (html and css, by referral, not by input) cleanly?

I will grade these right after class. If you have it done in class and want me to grade yours early, I will be happy to do so.

# Unit II Future Projects

This part of the study guide lists projects that have been used in the past, or are being newly developed. These might never be assigned, or that might change substantially before I actually assign them. Working ahead, while useful, may not be reliable. Until I give the actual assignment in class, I may change my mind. Projects in this part of the study guide are not eligible for typo correction credit.

# Task x fv Favicon

• Status: planned

• Discussed: Tue, Apr 2.

Due Date: Wed, Apr 3, 23:59.Deadline: Tue, Apr 9, 23:59.

• Grading Label: x fv

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 x fv regrade lastname firstname

Create a favicon and attach it to your portfolio homepage.

# Task x ad Advertisement

- Status: not this semester.
- Discussed:
- Due Date:
- Deadline:
- Grading Label: x ad

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 x ad regrade lastname firstname

Summary: Invent a fake product. Make a webpage that advertises it. Also make it clear that this product is not real.

Provide the normal links at the bottom of the page: HTML validator, CSS validator, Portfolio homepage.

# Task x wb WordPress Blog

- Status: not this semester.
- Discussed:
- Due Date:
- Deadline:
- Grading Label: x wb

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: | it240 x wb regrade lastname firstname

Summary: Make blog entries on your WordPress site.

Recommended: Pick a title from the list below.

Required: Make a WordPress blog entry to match it.

Required: Over the course of the semester, you must make ten blog entries on different topics and on separate days.

Required: Respect copyrights. Do not post copyrighted photographs or text. If you use art or literature by someone else, make sure it is in the public domain and properly credited. (Look up copyright in the textbook for more details.)

Required: Email me when you have completed your tenth blog entry.

Here are some suggested topics. They are meant to get you thinking. You

are welcome to use other topics if you prefer. Be creative! Use at least ten different topics.

- A Favorite Holiday.
- A Favorite Poem. (something out of copyright)
- A Favorite Quote. (something out of copyright)
- A Favorite Recipe for something delicious.
- A Favorite Scripture.
- A Favorite Sports Team.
- A Favorite Tourist Destination.
- A Favorite Work of Art. (something out of copyright)
- A Fictional Story (Tell a Tall Tale).
- A Funny Story. (Maybe true. Maybe a joke you heard.)
- A Gift You Would Like.
- Some Photos taken by you.
- A Tribute/Praise to someone that is dead.
- An Inspiring Story.
- Lorem Ipsum (but only once).
- Something Nice About A Place You Live or Lived.
- Your Major. (Why it is great.)

# Task x wc WordPress Customize

- Status: not this semester.
- Discussed:
- Due Date:
- Deadline:
- Grading Label: x wc

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 x wc regrade lastname firstname

Summary: Customize your WordPress installation.

Make five (simple) modifications to your WordPress installation. Then send me an email telling what you changed.

Here are some suggested modifications.

- Change to a different theme.
- Install a widget (or several).
- Change the pictures used by the theme.

Grading Rubric

- 5 WordPress Modification
- -5 No email received

- -1 For each modification less than five. Each must be clearly explained. What did you do? Why?
- +1 For the sixth modification.

# Task x ln Webpage Links

- Status: planned
- Discussed:
- Due Date:
- Deadline:
- Grading Label: x ln

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 x ln regrade lastname firstname

Summary: Use various kinds of links to navagate between webpages in your website.

Required: Clearly label a fragment link with the words "fragment link". Place it near the top of your page. Distant: Link it to something near the bottom of your webpage. Fill the intervening space with enough paragraphs of lorem ipsum content that the link target is not within the viewport when the page first loads.

I will do a "view page source" to verify that the links are of the proper type.

# Task x li Lists

- Status: planned
- Discussed:
- Due Date:
- Deadline:
- $\bullet$  Grading Label: x li

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 x li regrade lastname firstname

- (c) You can create nested lists.
- (e) +1 customize the bullets

# Task x pc Pseudo Classes

- Status: planned
- Discussed:
- Due Date:
- Deadline:
- Grading Label: x pc

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 x pc regrade lastname firstname

Summary: Use pseudo classes to style lists or other content.

Required: On your Portfolio Homepage add a link to this project, with a suitable description of your choice.

:hover is like onmouseover.

:link, :visited, :hover, :active, :focus, :first-letter, :first-line, :first-child, :nth-child(), :checked

Use first-line and first-letter to modify the font of several paragraphs.

## Task x j1 JavaScript Background Changer

- Status: planned
- Discussed:
- Due Date:
- Deadline:
- Grading Label: x j1

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 x j1 regrade lastname firstname

Summary: Use JavaScript to alter the appearance of a webpage.

Required: On your Portfolio Homepage add a link to this project, with a suitable description of your choice.

The textbook shows how to use JavaScript to change the text color and background color of a webpage. Study the example in the textbook. Then create something that proves you understand.

## Task x j2 JavaScript Hide/Reveal

- Status: planned
- Discussed:
- Due Date:
- Deadline:
- Grading Label: x j2

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: | it240 x j2 regrade lastname firstname

Summary: Use JavaScript to add and remove visible content on a webpage.

Required: On your Portfolio Homepage add a link to this project, with a suitable description of your choice.

The textbook shows how to use JavaScript to do this project. Study the example in the textbook. Then create something that proves you understand.

Required: You must have at least three pieces of hidden content that can be revealed and rehidden independently of each other.

Suggestion: Make a page of jokes, where the punchline is hidden until the user requests it.

Suggestion: Make a page of blog entries or stories, where the first few lines of each story are shown, and the rest is available by pressing ... See More.

When the rest is shown, it can be reversed by pressing show less.

Suggestion: Make a page of test questions related to another class you are taking or tutoring, where the answer is hidden until the user requests it.

## Task x g4 Gimp: Icons and Transparency

- Status: planned
- Discussed:
- Due Date:
- Deadline:
- Grading Label: x g4

This assignment is subject to the late work / regrade policy stated in section B.6 (page 83). The required email subject line is:

Regrade Subject Line: it240 x g4 regrade lastname firstname

Summary: Use Gimp to create icons and other images that are partly transparent.

Required: On your Portfolio Homepage add a link to this project, with a suitable description of your choice.

(a) Create an image with transparency (alpha channel). (b) Create a favicon that uses transparency.

## Task x po Positioning

positioning, effects of resizing viewport

## Task x zg CSS Zen Garden

Summary: Create an external stylesheet that will work with the CSS Zen Garden webpage.

Required: On your Portfolio Homepage add a link to this project, with a suitable description of your choice.

http://csszengarden.com/

(a) You can restyle CSS Zen Garden without changing it.

# Task x tba To Be Added

Ideas for possible assignments:

#### CSS

- \* box model
- \* http://www.ehow.com/info\_12184041\_definition-css3-document.html
- \*\* drop shadows, gradients, (selectors, transitions)
  JavaScript
- \* vault-style image rollover
- \* hover zoom, hover alt image, sliding door?

## Unit III

## Appendices

### Appendix A

## Web Hosting for IT 240

The Computer and Information Sciences (CIS) department at Brigham Young University–Hawai'i (BYUH) provides web hosting for the students in the IT 240 class.

Our web hosting machine is called the IS2 machine.

If you do not already have an IS2 account, we will automatically set one up for you. If your account is not working, contact Micah Uyehara. His office is in GCB 106, near our classroom. Stop by and visit him.

Your IS2 username will be your CES NetID. If your NetID was Fred, your login would be "fred" and your domain name would be "fred.is2.byuh.edu".

Your initial password will probably be your seven-digit BYUH student ID number. The textbook tells you how to change it.

The IS2 machine uses cPanel as its control panel. There is more on cPanel in the textbook.

The IS2 machine uses Apache as the web server. There is more on Apache in the textbook.

## Appendix B

## Grading for IT 240

The typical portfolio project is worth 20 points and consumes one day of class time.

Some assignments may consume more days, and would be worth more points.

#### B.1 Seeing Your Grade

https://dcquiz.byuh.edu/ is where I maintain my online gradebooks.

There will be several gradebooks. One will have your overall grade. Another will have your portfolio points. In connection with your points, there may be comments. They may tell you how your grade was calculated.

Each grade is identified by a short label.

#### B.2 Submitting Work

http://dc.is2.byuh.edu/it240.2131/ is the place to link your portfolio projects. It is the Student Projects page for this class.

Each project will have its own link. They will normally be based off of the domain name you provide to me as one of the projects.

#### B.3 Timeline

Assignments made on any given day will normally be due the night before our next class meeting. If a peer bonus is involved, students will evaluate them at the start of that next class.

That means if I am awake at 12:01 AM, I will feel free to grade them. But more likely it will be closer to 8:00 AM.

Example: Assignments made on Tuesday will normally be due Wednesday night, and will be graded on Thursday morning. If a peer bonus is involved, students will evaluate them on Thursday at the start of class.

Example: Assignments made on Thursday will normally be due Monday night, and will be graded on Tuesday morning. If a peer bonus is involved, students will evaluate them on Tuesday at the start of class.

Late work and do-overs are accepted subject to the two-week late work policy.

#### B.4 Late Work and Do-Overs

Each task has a deadline. It is stated explicitly where the task is explained. If it is blank, it means I have not yet assigned a deadline.

Late work and do-overs will sometimes be accepted as much as to two weeks late, or until midnight of the last day of class (not counting the final), which ever comes first.

For Winter 2013, the last day of class is Tuesday, April 9, 2013.

Example: An assignment that was due on Wednesday night may have a late-work deadline two weeks later, also on Wednesday night (unless it is the end of the semester).

A do-over is where a grade is already in place but you want to improve it. You are invited to redo any assignment to improve your grade. Do-overs cannot receive extra credit. Their maximum score is 100%.

At the deadline, I may automatically regrade all work that did not yet receive full credit. But you can also mention to me that your work is ready to be graded again. See section B.6 (page 83) for details.

To be safe, for any late work or do-over, you should notify me by email that

your project is ready to be graded again. See the rules for emailing me.

I may grade your work right away, or I may wait until the deadline before regrading it. It mostly depends on how busy I am.

#### B.5 Emailing Me

Sometimes I say you should notify me by email. For example, you might be telling me to grade or regrade an assignment.

I will reply to your email, often when I receive it, letting you know (a) that I got your email, or (b) I have done whatever was requested. If you do not hear from me, maybe I did not get your email.

In all cases, your email to me must have a subject line that starts with it240 and is followed by some task information. Finally, the subject line must include your lastname and firstname.

The reason for this subject line is that it helps me keep things organized and not lost.

#### B.6 Regrades

Typically an assignment will have a due date, and I will grade all student work for that assignment soon after that time.

Sometimes after the due date, a student will complete work that did not receive full credit at first, or will make substantial improvements to their work. In most cases I am happy to regrade the work.

To receive a regrade, you must request it by sending me an email message. I have found that this is the most reliable way to manage my workload.

The subject line of your message is important because I sometimes receive messages faster than I can handle them. Your request may get delayed until I have enough time to work on it. The subject line keeps it from getting lost.

The first element of the subject line must be the class: **it240**. Do it exactly like that. It allows me to search my mail folder without missing your message.

The second element of the subject line must be the grading label. Please

do not leave it out. Please do not write about several things in the same message. Instead, break it up into several messages, one per assignment.

If it is a regrade request, the third element of the subject line must be the word "regrade" (without the quotes).

The rest of the subject line must be your lastname and firstname, in that order. You can put a comma between them if you like.

Example: When requesting a regrade on task "abc," and your name is John Doe, use the following subject line:

it240 abc regrade Doe John

Regrades Before the Due Date: Just wait until I grade everybody, or ask me to take a look at it during class.

Regrades Before the Deadline: If an assignment does not have a published deadline, or if the deadline has not yet passed, just request the regrade and I will do it.

Regrades After the Deadline: If an assignment has a published deadline, and that deadline has passed, you must first start keeping up with current work. Then, if you are actively keeping up with the current assignments, but somehow missed things earlier in the semester, you can ask me to do a regrade after the deadline. If you have **not** been actively keeping up, work on that first.

#### B.7 Working Together

On portfolio work, you are encouraged to work with (but not just copy) your fellow students. We want everyone to get full credit on every assignment.

Every assignment will have ample opportunities for individual creativity. Duplicate work will not be accepted.

#### B.8 Full Credit

Each project is described in this study guide, together with the "deliverables" on which it will be graded.

Sometimes the project description may change before the project is assigned. Try to work from a fresh copy of this study guide.

Deliverables are things you must deliver. They are the essence of the assignment.

#### B.9 The Rubric

For each assignment, I will provide a rubric that shows how the points are earned. Because I cannot perfectly predict the kinds of errors I and my students might make, the rubric might actually change between the time the assignment is issued and the deadline. If the change is major enough, I will also extend the deadline.

#### Points, Cooked and Raw

Raw: Each project is graded using its own private point scale, which I call "raw" points. A raw point on one project may be worth a much different amount than a raw point on another project.

**Cooked:** The portfolio part of your overall grade is based on "cooked" points you earn from these projects.

I convert raw points into cooked points as follows. If a project is worth 20 (cooked) points, and is graded on the basis of 100 (raw) points, I will multiply the raw points by 20/100 to get the cooked points. This is also called "scaling" or "rescaling" your grade.

Raw Grading: The rubric will mention deliverables and how they affect the raw points.

**Plus Points:** Some projects have plus points. Generally an extra credit feature is awarded plus points for a job well done. Plus points only apply if there are no significant minus points. Late work and do-overs generally cannot receive plus points.

Minus Points: Most project grading is based in starting with all the points, and then losing points for things that are not right. If nothing is wrong, you get full credit. Minus points can be recovered through submitting a do-over before the deadline.

It is possible for the minus points (the penalties) to add up to more than the project is worth. When subtracting, I stop at zero, so your final score can never be negative.

For example, let's say a 20-point project (meaning 20 cooked points) was described like this.

Grading Rubric

- 100 Create a web page.
- -100 page exists and is properly linked.
- -25 student name is missing.
- -25 bold font is required.
- -25 italic font is missing.
- +25 picture is included.

In this example, we start grading with 100 raw points for the assignment.

If the page does not exist, or is not properly linked, we deduct 100 points. Since we have reached zero, I stop grading.

If we are still grading and the student name is not found on the page, we deduct 25 points.

If the bold font is missing, we deduct 25 points. Notice the requirement can be phrased either in the positive sense "is required" or the negative sense "is missing" and it is assumed that people will understand. If in doubt, ask me.

If the italic font is missing, we deduct 25 points.

If a picture is included, we add 25 points.

The final score will be something between 0 and 125 out of 100 raw points.

Since this is a 20-point assignment, we rescale the score (multiply by 20/100) to get the final value, either 0, 5, 10, 15, 20, or 25 cooked points.

If this were a 40-point assignment, we would rescale the score (multiply by 40/100) to get the final value, either 0, 10, 20, 30, 40, or 50.

The cooked-point score is awarded to the student.

#### **B.10** Implicit Requirements

There are requirements that are not explicitly stated for every given task.

No cheating. That is an overall requirement. I will not list it with every task. Because it is not explicitly listed, but is still a requirement, it is an "implicit" requirement.

Meet the Deadline. That is a requirement.

Be original. That is a requirement.

Be linked to the place I request. That is a requirement.

There may be other requirements I add here later.

The penalty for failing an implicit requirement might be invented on the spot, while I am grading. It could simply be a zero for the task.

#### B.11 Subject to Change

Sometimes while grading I will discover that I was unclear in what I asked for. One or a few students may have misunderstood me and done something that (a) technically matches my stated requirements, but (b) does not match my intended requirements. Oops.

It is rare, but it has happened. I apologize here in advance.

If this happens, I may decide to reword the assignment to clarify my intentions.

- (a) I will change the grading rubric in this study guide.
- (b) I will grade according the the corrected rubric.
- (c) I will allow any students who lost points to make corrections and resubmit their work.

This is part of the reason for having a two-week late work policy.

#### B.12 Independent Work Bonus: 10%

Some tasks may have an "independent work bonus." (Many do not.) Each task that has such a bonus will clearly state that fact in the task write-up.

I intend that most projects are done with the assistance of other students in your study group, or with other people helping. That is totally expected and okay.

Some students take great pride in doing their work without getting help. This actually causes greater learning to take place, and that is a good thing.

For certain projects, if you complete the project without receiving help, and you let me know, I will give you extra credit for that. Normally the extra credit is 10%. This only applies to completed projects, and not to projects that are incomplete.

What does it mean to "work without getting help"?

By this I mean that you did not receive specific assistance from another person. You are free to search the Internet for answers that are already out there. You are free to read my book or other books. I consider that to be doing your own work. But if you post a question on a forum, and ask "how do you do this?", and someone answers, or if you ask a tutor, or if you get help from your study group, that would be getting help.

Getting help is okay. It just does not qualify for the Independent Work bonus.

If you need more clarification, ask me.

This bonus is based on the points possible for the assignment, not counting any other bonuses you may have received.

#### B.13 Peer Assessment Bonus: 20%

Some tasks may have a "peer assessment bonus." (Some do not.) Each task that has such a bonus will clearly state that fact in the task write-up.

Projects that qualify are peer-rated for bonus points.

Students in the class are asked to view and evaluate each of the projects that qualify, and to select the ones they consider to be the best.

The instructor will tell which projects qualify.

The instructor will tell how many can be selected.

The students will select projects for the bonus.

The instructor will add up the scores and calculate the bonus.

The maximum bonus is 20% of the project value.

For a 20-point project, the bonus could be as high as 4 points.

Mostly this is for personal satisfaction. It is recognition for a job well done, as judged by your peers. But enough 20% bonuses could make it possible to totally skip taking the final exam for the class.

This bonus is based on the points possible for the assignment, not counting any other bonuses you may have received.

### Appendix C

## Syllabus Statements About Portfolio

For convenience, this is a brief restatement of some of the material from the syllabus. In case the wording is different, the syllabus is the official version.

We will normally have one portfolio assignment per class. Each will normally be worth 20 points.

The due date and deadline for each activity will be published in the course study guide. The study guide will be updated as needed throughout the semester.

 $25 \text{ assignments } \times 20 \text{ points} = 500 \text{ points}.$ 

Bigger assignments may take two days and count double.

The book you are reading is the study guide for this course. It provided details for how the 20 points are awarded on each assignment.

The due date and deadline for each activity will be published in the course study guide. The study guide will be updated as needed throughout the semester.

Assignments made on Tuesday will normally be due Wednesday night, and will be graded on Thursday morning. Students will vote on Thursday for most impressive.

Assignments made on Thursday will normally be due Monday night, and will be graded on Tuesday morning. Students will vote on Tuesday for most impressive.

Work will be accepted up to two weeks late, or until midnight of the last day of class (Tuesday, April 9, 2013), which ever comes first.

On portfolio work, you are encouraged to work with (but not just copy) your fellow students. We want everyone to get full credit on every assignment.

Every assignment will have ample opportunities for individual creativity. Duplicate work will not be accepted.

**Impressive:** Students will vote for the most impressive among the web pages for that day. The top pages will receive extra credit, probably 20%.

Points are assigned as follows:

0: 0% credit, nothing found.

1-19: Partial credit for incomplete work. Each task will have deliverables as specified in the study guide. Missing deliverables result in lost credit.

20: 100% credit. Complete.

24: 120% credit. Complete and Impressive.

http://dc.is2.byuh.edu/it240.2131/ is the place to link your portfolio assignments. It is the Student Projects page for this class.

## Appendix D

## Using a BYUH Library Camera

Many students already have a digital camera (or cell phone, or iPad, or ...). If you do not have an appropriate camera, you can borrow one from the BYUH library.

On the left side of this picture, we see the SD card reader. I make this available to you. It has USB on one end and a slot for the SD card on the other end. It also has a removable cap for each end.

On the bottom of this picture, we see the camera. It is a Nikon Coolpix L3. The resolution is 2592 wide x 1944 high pixels.



On the top center of this picture, we see an SD card. This is the kind that I make available to you. It has limited capacity, 256 MB, and will hold about 200 pictures at maximum resolution, depending on lighting.

On the top right of this picture, we see two AA batteries. You will need to provide your own batteries.

The BYUH library has 18 cameras and several tripods available for checkout

to authorized students.

To authorize you, once the semester begins I will provide a list of students to the library, along with the identity of the class (IT 240). Once the library has the list, students on the list will be able to check out cameras and tripods until the date specified, which will be the last day of class (Tuesday, April 9, 2013).

The cameras can be picked up at the Media Services desk which is directly across the foyer from the main entrance of the library.

The checkout time is limited to four hours.

The tripods include a piece that screws into the bottom of the camera. In this picture, it has a red circle around it. Do not lose it. Without it, the tripod is useless.



The library does provide a cable you can use to get your images off of your SD card. I also provide you with a way.

#### Things I Provide

I do not provide batteries.

I do provide SD memory cards. You can check out a small-capacity SD memory card from me for your use this semester.

I do provide SD-to-USB adaptors. You can check out an adaptor from me that will allow you to take your pictures off the SD card and put them onto your computer.

When you receive an SD card and/or adaptor from me, I will check it out to you and make a note of it. The checkout time can be for the entire semester. You must return the checked-out items to me by the last day of

#### APPENDIX D. USING A BYUH LIBRARY CAMERA

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class (Tuesday, April 9, 2013).

### Appendix E

## Using My JavaScript Counter

I have created a simple pageview counter that you are invited to insert into your webpages for this class.

The important line is this:

```
<script src="http://dc.is2.byuh.edu/counter/"></script>
```

You might use it in a paragraph like this, somewhere on your webpage.

```
Welcome! You are visitor number
<script src="http://dc.is2.byuh.edu/counter/"></script>
to this webpage.
```

What this means: **script** is an HTML tag to identify JavaScript. **src**= says the JavaScript is coming from another source, not immediately after the script tag. **dc.is2.byuh.edu** is my domain name. **counter** is a folder in my document root, and in that folder is a program, **index.cgi**, that does the counting and returns the current count. /**script** closes it out.

So this is just a request to insert a script into your webpage. The actual JavaScript that will be inserted is simply this:

```
document.write("n");
```

The n will actually be a number. It will be the number calculated by my counter program.

It does this based on the referrer (the page in which it is included). So if you put this code on several different pages, each page will have its own count.

#### **Click Fraud**

We should talk briefly about click fraud.

My counter is not particularly intelligent. It just bumps the count up each time anyone views the page. You can beef up your count simply by hitting the reload button repeatedly. (Get a life.)

Intentionally bumping the counter to deceive someone is called "click fraud," especially if money is involved. Sometimes advertisers pay for each visitor that views their advertisement. And sadly, click fraud happens a lot. Do a Google search on "click fraud" to see some examples. A smart advertiser would want a more intelligent counter.

A more intelligent counter would only count once per IP address per day, or something like that.

But more intelligent counters are harder to create. Ultimately, this simple counter still gives a reasonable estimate of traffic, if you don't care that it may have been inflated.

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