### IT 240 Web Design Study Guide Summer B, 2013

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

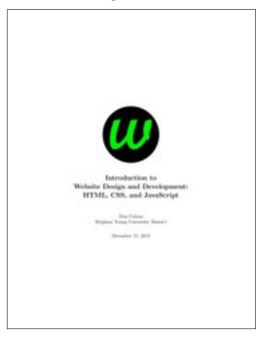
The textbook is "Introduction to Web Design and Development," by Don Colton. It is available in PDF form, free.

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 B, page 60).

### 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 the public\_html folder and index.html and .htaccess files 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

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This chapter has some general information about things like grading.

#### 1.1 Your IS2 Account

We provide you with a website account in connection with this class. The same account is used for other classes in the CIS department.

(netid) means your CES Network ID. This is your normal BYUH login name.

(netid)@go.byuh.edu is your BYUH email address.

(netid) will be used as your IS2 account name (username). Your initial password will be your seven-digit BYUH ID number, which you should change. The IS2 machine does not use your BYUH password, but you can probably make them the same if you wish.

(netid).is2.byuh.edu will be your IS2 domain name.

http://(netid).is2.byuh.edu/ will be your IS2 homepage.

/home/(netid) is your home directory on the IS2 machine.

/home/(netid)/public\_html is your web space on the IS2 machine.

/home/(netid)/public\_html/240 will be your web space for this class. If this is a problem for you, see me and we will try to work out an alternative for you.

If you have difficulty seeing webpages in the is 2.byuh.edu domain, you may be suffering from a DNS problem. See appendix  ${\bf A}$  (page 59) for guidance and a possible solution.

#### 1.2 Your TK Account

You will have a personal domain name. We will use .tk as our domain registrar, mostly because it is free. Start thinking of what you might want to select as your domain name.

If for some reason you do not want to use .tk we may be able to work something else out. See me.

### 1.3 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.

Gotcha Elements: 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 C.5 (page 63) for details.

No work will be accepted after 23:59 on the last day of class (Friday, August 30, 2013).

### 1.4 Sending Email About This Class

If you cannot see me face to face, the second best way of getting in touch is by email.

Email 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.

When you email me, you will always immediately receive an automatic response from my email account to let you know that it received your email. If you do not receive this immediate response, you can know that something is wrong, either with the email address you are using, or your subject line, or maybe the email system as a whole.

doncolton2@gmail.com is the best email address to use.

When 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. It also gets you the immediate response.

**xxxxx:** 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.

Try For Single Topic: Single-topic emails get answered first. Multi-topic emails can take longer.

When I read your email, if I can answer the whole email, I will. If the email is complicated, like a multi-part question, or like several questions all at once, I may not be able to answer it immediately, and I may need to wait and do more research. If you can divide your email into separate topics, that can speed up getting answers.

### Standard Rules

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There are some standard rules that apply to most of the assignments. This chapter has a quick run-down of the rules with some explanation as appropriate. Each assignment may have additional or different rules, but these are the typical rules.

### 2.1 Voting

You may see a requirements paragraph like this:

**Voting / Bonus Points:** Extra credit up to twenty percent will be awarded based on a vote in class among your peers. Students will rate each other's work for overall appeal. To be in the vote your webpage must be essentially complete by the due date.

This is typically done during the first few minutes of class on the day that the assignment was due.

#### 2.2 Validation

You may see a requirements paragraph like this:

Validation: Clearly provide a working link to do HTML validation of your page. Make sure your page validates clean. Clearly provide a working link to do CSS validation of your page. Make sure your page validates cleanly.

This is judged by me clicking on your HTML validation link, and on your CSS validation link.

### 2.3 Attribution

You may see a requirements paragraph like this:

Attribution: Clearly and properly credit all professional-looking content (images and wordings), either where they appear or at the end of your webpage. (a) If you own the copyright, say so. (b) If someone else owns the copyright, say who and where you got it. If possible provide a link to the webpage where you found the content. (c) If appropriate, end with wording like "All other images and text were created and are owned by me." (d) Make your attributions easy to find and read.

If you are skilled enough to create content that looks professional, make sure you explicitly say that the content is something you created. If you leave me guessing, I may decide that it looks stolen. Do not take offense. This is actually a compliment to your abilities. But it is better to explicitly claim credit for your work.

### 2.4 Style

You may see a requirements paragraph like this:

**Style Sheet:** All styling must be in a style section in the head of the document. No style= attributes are allowed in-line. You may use id= or class= to apply styling as needed.

This is judged by me looking at your page source and searching for the word "style" wherever it might appear on your page.

#### 2.5 SEO

You may see a requirements paragraph like this:

**Search Engine Optimization:** Provide a well-written title (up to 50 char), meta description (up to 150 char), heading, and introductory paragraph. Well-written means helpful, user-friendly, and crisp (succinct). Also identify yourself as the author and explain the purpose of the task.

This is judged by reviewing your page source.

### 2.6 Regrade

I want everyone to get full credit on every assignment.

If you do not get full credit for your work on any assignment, I will give you one or more reasons for your grade. You can correct those problems and ask for a regrade.

If you do not understand my reasons, ask someone what I mean. You can ask me, in person or by email. If by email, please provide my exact wording and I will interpret it for you.

When I do a regrade, I will check your stated deficiencies first.

If your new work does not correct the deficiencies that I previously reported, I will probably reply with "still broken" or similar wording.

If your new work corrects the deficiencies that I previously reported, then I will complete a thorough regrading of your work. This can result in new errors being discovered and reported (and another chance for regrade), or it can result in a finding of full credit.

Before asking for a regrade, it is best to make **absolutely sure** that you have read the requirements for the assignment, and that you have verified you are meeting those requirements.

### 2.7 Research vs Copying

We learn by watching others and then doing something similar.

Sometimes it is said that plagiarism is copying from one person, and research is copying from lots of people.

The following is assumed to be understood, and will not be repeated for each assignment.

When you are having trouble with an assignment, I encourage you to look at not just one, but half a dozen or more of the pages done by your fellow students. Study them. See what you can learn from them. Do not automatically trust that they are right. They may be wrong.

Do not just copy. Do your own work. When I review page source code, sometimes I see quirky ways of doing things. They appear to work even though they are wrong. And then I see someone else that has done it exactly the same way. This does not feel like "doing your own work." Cut and paste is pretty much an honor code violation. Read and learn is totally okay. Copying other ideas is okay. I don't want to see any cut and paste.

When I see these quirky ways of doing thing, I am strongly tempted to give someone a failing grade, maybe even for the semester. Luckily it can be hard to tell who copied and who was the source. But maybe I will give Fs to both students and see who complains. Please do not force me to make such a decision.

# 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 1hp Homepage v1

• Status: Officially Assigned.

• Discussed: Mon, Jul 15.

Due Date: Tue, Jul 16, 23:59.Deadline: Sun, Jul 21, 23:59.

• Grading Label: 1hp

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.

The picture must be of you, standing by the GCB sign, doing the shaka hand gesture.

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.

### 3.1 Grading Rubric

Required Essentials (zero if missing):

- \* Properly linked to student projects page.
- \* h1 includes your name.
- \* Some text is plain, some bold, some italic.
- \* Picture has you at GCB sign doing Shaka.

Full Credit (minus if missing):

- \* h1 shows your name and IT 240.
- \* Some (but not all) text is plain (not bold, not italic).
- \* Some (but not all) text is bold (and not italic).
- \* Some (but not all) text is italic (and not bold).
- \* Picture width=500.

**Regrade:** This assignment is subject to the late work / regrade policy stated in section C.5 (page 63). The required email subject line is:

Regrade Subject Line: | it240 1hp regrade lastname, firstname

### Task 2hp Homepage v2

• Status: Officially Assigned.

• Discussed: Wed, Jul 17.

Due Date: Thu, Jul 18, 23:59.Deadline: Tue, Jul 23, 23:59.

• Grading Label: 2hp

Summary: Modify your IT240 homepage by adding a head, including language, charset, and title.

Have a width=500 image. You can use the image be of you, standing by the GCB sign, doing the shaka hand gesture, or replace it.

At the top of your page, put in this header information. Feel free to cut and paste. The elements are explained in the textbook.

```
<!DOCTYPE html><head lang=en><meta charset=utf-8 />
<title>50 char or less</title>
<meta name=description content="150 char or less" />
</head><body>
```

At the bottom of your page, add validation links for html and css, and a visit counter, as follows or similar.

#### Validate:

```
<a href="http://validator.w3.org/check?uri=referer">HTML</a>
<a href=http://jigsaw.w3.org/css-validator/check/referer>CSS</a> &nbsp;
You are visitor <script src=http://dc.is2.byuh.edu/counter/></script>. Welcome!
</body>
```

Load up your webpage. Click on the Validate HTML link. You should get a clean bill of health. If not, see what the problems are and fix them.

The key things you will demonstrate are:

• You can write html5 code that validates cleanly.

### 4.1 Grading Rubric

Required Essentials (zero if missing):

- \* Head exists and is valid.
- \* Title exists and is valid.
- \* Body exists and is valid.
- \* Image appears and is width=500.

Full Credit (minus if missing):

- \* <h1> shows your name and IT 240.
- \* html validation link exists and works.
- \* css validation link exists and works.
- \* Visit counter exists and works.

**Search Engine Optimization:** Provide a well-written title (up to 50 char), meta description (up to 150 char), heading, and introductory paragraph. Well-written means helpful, user-friendly, and crisp (succinct). Also identify yourself as the author and explain the purpose of the task.

Validation: Clearly provide a working link to do HTML validation of your page. Make sure your page validates clean. Clearly provide a working link to do CSS validation of your page. Make sure your page validates cleanly.

Attribution: Clearly and properly credit all professional-looking content (images and wordings), either where they appear or at the end of your webpage. (a) If you own the copyright, say so. (b) If someone else owns the copyright, say who and where you got it. If possible provide a link to the webpage where you found the content. (c) If appropriate, end with wording

like "All other images and text were created and are owned by me." (d) Make your attributions easy to find and read.

**Regrade:** This assignment is subject to the late work / regrade policy stated in section C.5 (page 63). The required email subject line is:

Regrade Subject Line: it240 2hp regrade lastname, firstname

## Task days Twelve Days

• Status: Officially Assigned.

• Discussed: Fri, Jul 19.

Due Date: Sun, Jul 21, 23:59.Deadline: Thu, Jul 25, 23:59.

• Grading Label: days

Summary: Use an internal style sheet. Create twelve classes that are different from each other. Assign one class to each of twelve paragraphs in your document.

There is a traditional holiday song in the USA called Twelve Days of Christmas. You can use it as a starting point, or not.

Create twelve or more paragraphs in the body of your webpage. Start each with and end each with . Each paragraph must use a different class. The exact wording inside each paragraph is up to you, but please make it entertaining and unique.

You must create twelve or more classes in the style section of the head of your webpage, each defining a different style. You must use all eight border styles: solid, double, dotted, dashed, inset, outset, ridge, groove. You may also vary border thickness, border color, text color, background color, margin size, padding size, text size, font, and other things you might think of.

Beyond the requirements, you can do anything you like to enhance the appeal of your webpage.

#### General Grading Rubric

- \* title is informative, h1 is informative. p is informative.
- \* you are identified as the author (in h1 or p).
- \* html and css validate properly.
- \* Visit counter exists and works.
- \* All styling is in the document head.
- \* Professional-looking content is properly attributed.

#### Specific Grading Rubric

- \* There are 12 or more paragraphs.
- \* Each paragraph is styled differently.
- \* All eight border styles are used.

**Voting / Bonus Points:** Extra credit up to twenty percent will be awarded based on a vote in class among your peers. Students will rate each other's work for overall appeal. To be in the vote your webpage must be essentially complete by the due date.

**Search Engine Optimization:** Provide a well-written title (up to 50 char), meta description (up to 150 char), heading, and introductory paragraph. Well-written means helpful, user-friendly, and crisp (succinct). Also identify yourself as the author and explain the purpose of the task.

Validation: Clearly provide a working link to do HTML validation of your page. Make sure your page validates clean. Clearly provide a working link to do CSS validation of your page. Make sure your page validates cleanly.

Attribution: Clearly and properly credit all professional-looking content (images and wordings), either where they appear or at the end of your webpage. (a) If you own the copyright, say so. (b) If someone else owns the copyright, say who and where you got it. If possible provide a link to the webpage where you found the content. (c) If appropriate, end with wording like "All other images and text were created and are owned by me." (d) Make your attributions easy to find and read.

**Style Sheet:** All styling must be in a style section in the head of the document. No style= attributes are allowed in-line. You may use id= or class= to apply styling as needed.

**Regrade:** This assignment is subject to the late work / regrade policy stated in section C.5 (page 63). The required email subject line is:

Regrade Subject Line: it240 days regrade lastname, firstname

### Task copy Copyright

• Status: Officially Assigned.

• Discussed: Mon, Jul 22.

Due Date: Tue, Jul 23, 23:59.
Old Deadline: Sun, Jul 28, 23:59.
New Deadline: Thu, Aug 1, 23:59.

• Grading Label: copy

Summary: Post an image and some text that you found on the Internet. Properly cite them.

Discussion: Copyright is an important concept. Avoiding copyright infringement is important.

Read the copyright section in the textbook.

Attribution: Clearly and properly credit all professional-looking content (images and wordings), either where they appear or at the end of your webpage. (a) If you own the copyright, say so. (b) If someone else owns the copyright, say who and where you got it. If possible provide a link to the webpage where you found the content. (c) If appropriate, end with wording like "All other images and text were created and are owned by me." (d) Make your attributions easy to find and read.

#### General Grading Rubric

\* title is informative, h1 is informative. p is informative.

- \* you are identified as the author (in h1 or p).
- \* html and css validate properly.
- \* Visit counter exists and works.
- \* Professional-looking content is properly attributed.

#### Specific Grading Rubric

- \* Include a borrowed image, properly cited.
- \* Include some borrowed text, properly cited.

**Voting / Bonus Points:** Extra credit up to twenty percent will be awarded based on a vote in class among your peers. Students will rate each other's work for overall appeal. To be in the vote your webpage must be essentially complete by the due date.

**Search Engine Optimization:** Provide a well-written title (up to 50 char), meta description (up to 150 char), heading, and introductory paragraph. Well-written means helpful, user-friendly, and crisp (succinct). Also identify yourself as the author and explain the purpose of the task.

Validation: Clearly provide a working link to do HTML validation of your page. Make sure your page validates clean. Clearly provide a working link to do CSS validation of your page. Make sure your page validates cleanly.

Attribution: Clearly and properly credit all professional-looking content (images and wordings), either where they appear or at the end of your webpage. (a) If you own the copyright, say so. (b) If someone else owns the copyright, say who and where you got it. If possible provide a link to the webpage where you found the content. (c) If appropriate, end with wording like "All other images and text were created and are owned by me." (d) Make your attributions easy to find and read.

**Regrade:** This assignment is subject to the late work / regrade policy stated in section C.5 (page 63). The required email subject line is:

Regrade Subject Line: it240 copy regrade lastname, firstname

### Task dn Domain Name Creation

Status: Officially Assigned.
Discussed: Wed, Jul 24.
Due Date: Wed, Jul 24, 23:59.
Deadline: Tue, Jul 30, 23:59.

ullet Grading Label: dn

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Summary: Create a personal domain name for continued use throughout the semester.

#### 7.1 dot.tk

#### 7.1.1 Create a Dot TK Account

Go to http://dot.tk/ and create an account. Dot TK is the domain name registrar for the TK domain. TK is the country code for Tokelau. Tokelau is a territory of New Zealand.

Click on "Login to My Dot TK."

One option uses an email address and password. I strongly recommend this option. Provide your email address. Invent a password, up to 15 characters in length. Create your account. Log in.

Go to the Profile tab. Type in your name.

#### 7.1.2 Select and Register Your Domain Name

Go to the Domain Panel. Click on "Add a domain."

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.

#### 7.1.3 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.

I recommend option (c).

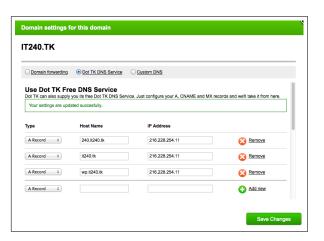
(a) Redirect to another domain name, such as yourname.is2.byuh.edu. Avoid this option. THIS WILL NOT WORK FOR US.

(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).

#### 7.2 cPanel

#### 7.2.1 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/it240

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.

#### 7.3 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 dn 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.

#### 7.4 Late Work

**Regrade:** This assignment is subject to the late work / regrade policy stated in section C.5 (page 63). The required email subject line is:

Regrade Subject Line: it240 dn regrade lastname, firstname

If for any reason you change your domain name, let me know.

### Task js1 JavaScript OnClick

• Status: Officially Assigned.

• Discussed: Fri, Jul 26.

• Due Date: Sun, Jul 28, 23:59.

• Voting: Mon, Jul 29, in class.

• Deadline: Thu, Aug 1, 23:59.

• Grading Label: js1

Summary: Use JavaScript to actively modify a webpage.

- (a) Create a webpage in /js1/ of your TK domain docroot.
- (b) Include one paragraph of Lorem Ipsum. (See the textbook for an explanation.)
- (c) Have three buttons each of which runs JavaScript to change the background color of the Lorem Ipsum paragraph (and nothing else).
- (d) You can go beyond this minimum if you want.

= 'blue'; ">Make the Background Blue</button>

#### General Grading Rubric

- \* title is informative, h1 is informative. p is informative.
- \* you are identified as the author (in h1 or p).
- \* html and css validate properly.
- \* Visit counter exists and works.
- \* Professional-looking content is properly attributed.

#### Specific Grading Rubric

- \* Has a Lorem Ipsum paragraph.
- \* Has Three clearly-labeled buttons each for a different color.
- \* Each button changes background color of Lorem Ipsum text.

**Voting / Bonus Points:** Extra credit up to twenty percent will be awarded based on a vote in class among your peers. Students will rate each other's work for overall appeal. To be in the vote your webpage must be essentially complete by the due date.

**Search Engine Optimization:** Provide a well-written title (up to 50 char), meta description (up to 150 char), heading, and introductory paragraph. Well-written means helpful, user-friendly, and crisp (succinct). Also identify yourself as the author and explain the purpose of the task.

**Validation:** Clearly provide a working link to do HTML validation of your page. Make sure your page validates clean. Clearly provide a working link to do CSS validation of your page. Make sure your page validates cleanly.

Attribution: Clearly and properly credit all professional-looking content (images and wordings), either where they appear or at the end of your webpage. (a) If you own the copyright, say so. (b) If someone else owns the copyright, say who and where you got it. If possible provide a link to the webpage where you found the content. (c) If appropriate, end with wording like "All other images and text were created and are owned by me." (d) Make your attributions easy to find and read.

**Regrade:** This assignment is subject to the late work / regrade policy stated in section C.5 (page 63). The required email subject line is:

Regrade Subject Line: | it240 js1 regrade lastname, firstname

### Task wp1 WordPress One

• Status: Officially Assigned.

• Discussed: Mon, Jul 29.

• Due Date: Tue, Jul 30, 23:59.

• Voting: Wed, Jul 31, in class.

• Deadline: Sun, Aug 4, 23:59.

• Grading Label: wp1

Summary: Install WordPress. Start a Blog. Do some customizations.

- (a) Create folder public\_html/blog/ and subdomain blog.(mydomain).tk.
- (b) Install WordPress. See Chapter 17 in the textbook for guidance.
- (c) Make **it240** and your name part of the homepage headers.
- (d) Delete the sample blog entry and add your own.
- (e) Delete the sample static page and add an "About Me" static page.

### 9.1 Grading Rubric

#### Minimum Required:

- \* Course and your name appears in page headers.
- \* Has a blog entry.
- \* Has an about-me page.

**Voting / Bonus Points:** Extra credit up to twenty percent will be awarded based on a vote in class among your peers. Students will rate each other's work for overall appeal. To be in the vote your webpage must be essentially complete by the due date.

**Regrade:** This assignment is subject to the late work / regrade policy stated in section C.5 (page 63). The required email subject line is:

Regrade Subject Line: it240 wp1 regrade lastname, firstname

### Task lbr Laie Beach Resort

 $\bullet$  Status: Officially Assigned.

• Discussed: Wed, Jul 31.

Due Date: Mon, Aug 5, 06:00.Voting: Mon, Aug 5, in class.

• Deadline: Thu, Aug 8, 23:59.

• Grading Label: lbr

This is a two-day assignment, worth double points.

Summary: Install WordPress. Create a "Business Website".

- (a) Create subdomain lbr.(mydomain).tk using docroot public\_html/lbr/.
- (b) Install WordPress. Use any theme you want.
- (c) Title must be Laie Beach Resort. Subtitle must be "IT 240 Class Project by (yourname)."
- (d) All content (text and photos) must by your own personal work. No content can be from outside sources. Using outside content may get you a zero on this assignment.
- (e) Delete the sample static page. Add a static page labeled "About" (not "about me") that tells about the website, and identifies you as the web designer and author, and attests that all content is your original work. Add whatever other static pages you think such a business should have.

- (f) Delete the sample blog entry and add several "newsy" blog entries. Add pages that would entice tourists to use your business. The content can be fictional or real or lorem ipsum. The blog entries must be easy for me to find. Blog entries are not the same as static pages. If in doubt, ask about it.
- (g) Include at least five photographs. They should be easy for me to find. They can be in blog entries or static pages.

### 10.1 Grading Rubric

Minimum Required:

- \* Title and subtitle (10p) are as required.
- \* Looks like a business.
- \* (10p) Includes About page as required.
- \* (20p) Several Newsy Blog Entries.
- \* (20p) Includes at least five photographs.

**Voting / Bonus Points:** Extra credit up to twenty percent will be awarded based on a vote in class among your peers. Students will rate each other's work for overall appeal. To be in the vote your webpage must be essentially complete by the due date.

**Regrade:** This assignment is subject to the late work / regrade policy stated in section C.5 (page 63). The required email subject line is:

Regrade Subject Line: it240 lbr regrade lastname, firstname

### Task g1 Gimp One: Crop, Rescale

Status: Officially Assigned.Discussed: Mon, Aug 5.

• Due Date: Wed, Aug 7, 06:00.

Voting: Wed, Aug 7, in class.Deadline: Mon, Aug 12, 06:00.

• Grading Label: g1

Summary: Take a photograph. Rescale it. Crop it.

The photograph must be your own original work, but it can be of anything. To borrow a camera see Appendix D (page 69).

We will 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. If you have other image-editing software, for example Photoshop, 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. Link it at: http://(mydomain).tk/g1/

Include an appropriate page title, h1 heading, and explanatory paragraph at the top to describe the assignment and maybe the photograph. Include your name in the h1 or the paragraph. State that you are the photographer.

(a) Your original image must be 2000px wide or larger. The photo must be right from the camera, taken in landscape mode (wider than tall). Images

retrieved from FaceBook are specifically forbidden.

- (b) Resize the whole original image to be 500px wide.
- (c) Crop from the original image. Extract a portion that is exactly 500px wide and 375px high.

Caption each as "Size xx KB. Width xx px. Height xx px."

#### General Grading Rubric

- \* title is informative, h1 is informative. p is informative.
- \* you are identified as the author (in h1 or p).
- \* html and css validate properly.
- \* Visit counter exists and works.
- \* Professional-looking content is properly attributed.

#### Specific Grading Rubric

- \* image 1: original at least 2000px wide, display width=500. caption: Size xx KB. Width xx px. Height xx px.
- \* image 2: resize original, 500px wide.
  - caption: Size xx KB. Width 500 px. Height xx px.
- \* image 3: crop from original, 500px wide, 375px high.

caption: Size xx KB. Width 500 px. Height 375 px.

Voting / Bonus Points: Extra credit up to twenty percent will be awarded based on a vote in class among your peers. Students will rate each other's work for overall appeal. To be in the vote your webpage must be essentially complete by the due date.

**Search Engine Optimization:** Provide a well-written title (up to 50 char), meta description (up to 150 char), heading, and introductory paragraph. Well-written means helpful, user-friendly, and crisp (succinct). Also identify yourself as the author and explain the purpose of the task.

Validation: Clearly provide a working link to do HTML validation of your page. Make sure your page validates clean. Clearly provide a working link to do CSS validation of your page. Make sure your page validates cleanly.

Attribution: Clearly and properly credit all professional-looking content (images and wordings), either where they appear or at the end of your webpage. (a) If you own the copyright, say so. (b) If someone else owns the copyright, say who and where you got it. If possible provide a link to the webpage where you found the content. (c) If appropriate, end with wording

like "All other images and text were created and are owned by me." (d) Make your attributions easy to find and read.

**Regrade:** This assignment is subject to the late work / regrade policy stated in section C.5 (page 63). The required email subject line is:

Regrade Subject Line: it240 g1 regrade lastname, firstname

# Task li Lists

• Status: Officially Assigned.

• Discussed: Wed, Aug 7.

Due Date: Fri, Aug 9, 06:00.Voting: Fri, Aug 9, in class.

• Deadline: Wed, Aug 14, 06:00.

• Grading Label: li

Summary: Create two "top ten" lists and one list of lists.

The lists must be your own original work. You are not allowed to get your lists from elsewhere, but you can get ideas from elsewhere.

**ul:** Put an h2 that describes the list and says it is a ul list. Then display the list. It must have exactly ten items.

**ol:** Put an h2 that describes the list and says it is a ol list. Then display the list. It must have exactly ten items.

**lol:** Put an h2 that describes your list of lists. Use any kind of lists you like. Have at least two lists each with at least two items.

Include an appropriate page title, h1 heading, and explanatory paragraph at the top to describe the assignment. Include your name in the h1 or the paragraph.

Style your lists as you wish, except for ul and ol leave the bullets as they would naturally appear.

Link your webpage at: http://(mydomain).tk/li/

#### General Grading Rubric

- \* title is informative, h1 is informative. p is informative.
- \* you are identified as the author (in h1 or p).
- \* html and css validate properly.
- \* Visit counter exists and works.
- \* Professional-looking content is properly attributed.

#### Specific Grading Rubric

- \* has ul list with ten items.
- \* has ol list with ten items.
- \* has lol list of lists.

Voting / Bonus Points: Extra credit up to twenty percent will be awarded based on a vote in class among your peers. Students will rate each other's work for overall appeal. To be in the vote your webpage must be essentially complete by the due date.

**Search Engine Optimization:** Provide a well-written title (up to 50 char), meta description (up to 150 char), heading, and introductory paragraph. Well-written means helpful, user-friendly, and crisp (succinct). Also identify yourself as the author and explain the purpose of the task.

Validation: Clearly provide a working link to do HTML validation of your page. Make sure your page validates clean. Clearly provide a working link to do CSS validation of your page. Make sure your page validates cleanly.

Attribution: Clearly and properly credit all professional-looking content (images and wordings), either where they appear or at the end of your webpage. (a) If you own the copyright, say so. (b) If someone else owns the copyright, say who and where you got it. If possible provide a link to the webpage where you found the content. (c) If appropriate, end with wording like "All other images and text were created and are owned by me." (d) Make your attributions easy to find and read.

**Regrade:** This assignment is subject to the late work / regrade policy stated in section C.5 (page 63). The required email subject line is:

Regrade Subject Line: | it240 li regrade lastname, firstname

# Task t1 Tables

• Status: Officially Assigned.

• Discussed: Fri, Aug 9.

Due Date: Wed, Aug 14, 06:00.
Voting: Wed, Aug 14, in class.
Deadline: Mon, Aug 19, 06:00.

• Grading Label: t1

Summary: Build several tables. Demonstrate rowspan and colspan.

Chapter 34 of the textbook has helpful information.

Provide an informative title, h1, and introductory paragraph. Identify yourself as the author and explain the purpose of the task.

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

Use to create a visible border between cells. Alternately, you can style the td borders, but in any case, borders must be visible.

Note: In these examples, I use the letters a, b, c, d, e, f, g, h, i. That is boring. You can use whatever content you want. You can use whatever background colors you want.

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

a	b	c
d	е	f
g	h	i

**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	

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

a	b	$\mathbf{c}$
d	е	f
gh		i

General Grading Rubric

- \* title is informative, h1 is informative. p is informative.
- \* you are identified as the author (in h1 or p).
- \* html and css validate properly.
- \* Visit counter exists and works.
- \* Professional-looking content is properly attributed.

Specific Grading Rubric

- \* table 1 meets requirements.
- \* table 2 meets requirements.
- \* table 3 meets requirements.

**Voting / Bonus Points:** Extra credit up to twenty percent will be awarded based on a vote in class among your peers. Students will rate each other's work for overall appeal. To be in the vote your webpage must be essentially complete by the due date.

**Search Engine Optimization:** Provide a well-written title (up to 50 char), meta description (up to 150 char), heading, and introductory paragraph. Well-written means helpful, user-friendly, and crisp (succinct). Also identify yourself as the author and explain the purpose of the task.

Validation: Clearly provide a working link to do HTML validation of your page. Make sure your page validates clean. Clearly provide a working link to do CSS validation of your page. Make sure your page validates cleanly.

Attribution: Clearly and properly credit all professional-looking content (images and wordings), either where they appear or at the end of your webpage. (a) If you own the copyright, say so. (b) If someone else owns the copyright, say who and where you got it. If possible provide a link to the webpage where you found the content. (c) If appropriate, end with wording like "All other images and text were created and are owned by me." (d) Make your attributions easy to find and read.

**Regrade:** This assignment is subject to the late work / regrade policy stated in section C.5 (page 63). The required email subject line is:

Regrade Subject Line: | it240 t1 regrade lastname, firstname

# Task a1 Addressing

• Status: Officially Assigned.

• Discussed: Mon, Aug 12.

Due Date: Wed, Aug 14, 06:00.Voting: Wed, Aug 14, in class.

• Deadline: Mon, Aug 19, 06:00.

• Grading Label: a1

Summary: Link to the same picture three ways.

Chapter 32 of the textbook has helpful information.

Provide an informative title, h1, and introductory paragraph. Identify yourself as the author and explain the purpose of the task.

The picture should be width=500 (resized is best).

**Relative:** use src=whatever where whatever is in the same folder as the index.html file.

**Docroot:** use src=/whatever where the path is given relative to the document root, not the current folder.

**Absolute:** use src=http://whatever/whatever where the path is a fully-qualified URL.

General Grading Rubric

- \* title is informative, h1 is informative. p is informative.
- \* you are identified as the author (in h1 or p).
- \* html and css validate properly.
- \* Visit counter exists and works.
- \* Professional-looking content is properly attributed.

#### Specific Grading Rubric

- \* relative meets requirements.
- \* docroot meets requirements.
- \* absolute meets requirements.

**Voting / Bonus Points:** Extra credit up to twenty percent will be awarded based on a vote in class among your peers. Students will rate each other's work for overall appeal. To be in the vote your webpage must be essentially complete by the due date.

**Search Engine Optimization:** Provide a well-written title (up to 50 char), meta description (up to 150 char), heading, and introductory paragraph. Well-written means helpful, user-friendly, and crisp (succinct). Also identify yourself as the author and explain the purpose of the task.

Validation: Clearly provide a working link to do HTML validation of your page. Make sure your page validates clean. Clearly provide a working link to do CSS validation of your page. Make sure your page validates cleanly.

Attribution: Clearly and properly credit all professional-looking content (images and wordings), either where they appear or at the end of your webpage. (a) If you own the copyright, say so. (b) If someone else owns the copyright, say who and where you got it. If possible provide a link to the webpage where you found the content. (c) If appropriate, end with wording like "All other images and text were created and are owned by me." (d) Make your attributions easy to find and read.

**Regrade:** This assignment is subject to the late work / regrade policy stated in section C.5 (page 63). The required email subject line is:

Regrade Subject Line: | it240 a1 regrade lastname, firstname

# Task cf Clear, Float

• Status: Officially Assigned.

• Discussed: Wed, Aug 14.

• Due Date: Fri, Aug 16, 06:00.

• Voting: Fri, Aug 16, in class.

• Deadline: Wed, Aug 21, 06:00.

• Grading Label: cf

Summary: Float a picture left and right. Float text.

Provide an informative title, h1, and introductory paragraph. Identify yourself as the author and explain the purpose of the task.

Suggestion: The picture should be width=200 (resized is best).

Float Left: Float a picture to the left of a column of text.

**Float Right:** Float a picture to the right of a column of text.

**Sidebar:** Float a sidebar to one side or the other of a column of text. Control its width. Do something like border or background color to make it stand out.

#### General Grading Rubric

- \* title is informative, h1 is informative. p is informative.
- \* you are identified as the author (in h1 or p).
- \* html and css validate properly.

- \* Visit counter exists and works.
- \* All styling is in the document head.
- \* Professional-looking content is properly attributed.

#### Specific Grading Rubric

- \* float left meets requirements.
- \* float right meets requirements.
- \* sidebar meets requirements.

**Voting / Bonus Points:** Extra credit up to twenty percent will be awarded based on a vote in class among your peers. Students will rate each other's work for overall appeal. To be in the vote your webpage must be essentially complete by the due date.

**Search Engine Optimization:** Provide a well-written title (up to 50 char), meta description (up to 150 char), heading, and introductory paragraph. Well-written means helpful, user-friendly, and crisp (succinct). Also identify yourself as the author and explain the purpose of the task.

Validation: Clearly provide a working link to do HTML validation of your page. Make sure your page validates clean. Clearly provide a working link to do CSS validation of your page. Make sure your page validates cleanly.

Attribution: Clearly and properly credit all professional-looking content (images and wordings), either where they appear or at the end of your webpage. (a) If you own the copyright, say so. (b) If someone else owns the copyright, say who and where you got it. If possible provide a link to the webpage where you found the content. (c) If appropriate, end with wording like "All other images and text were created and are owned by me." (d) Make your attributions easy to find and read.

**Style Sheet:** All styling must be in a style section in the head of the document. No style= attributes are allowed in-line. You may use id= or class= to apply styling as needed.

**Regrade:** This assignment is subject to the late work / regrade policy stated in section C.5 (page 63). The required email subject line is:

Regrade Subject Line: | it240 cf regrade lastname, firstname

## Task f1 Forms

• Status: Officially Assigned.

• Discussed: Fri, Aug 16.

Due Date: Mon, Aug 19, 06:00.
Voting: Mon, Aug 19, in class.
Deadline: Fri, Aug 23, 06:00.

• Grading Label: f1

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

Use a variety of forms elements as listed in the rubric.

Each field needs a name. Groups of radio buttons share the same name. Besides that, every field must have its own unique name. (If you say text1 for one text field, you cannot say text1 for another text field.)

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, whatever.

Radio Buttons: This is for selecting among alternatives, like yes/no or hot/cold. Exactly one item can be selected. Each button in a group shares the same name. Make sure your items are part of a group that works that way.

Checkboxes: Each box is independent, and can be selected or not. For

ice cream topings, you might have: nuts, chocolate, sprinkles, butterscotch, whipped cream. Each needs its own unique name.

#### General Grading Rubric

- \* title is informative, h1 is informative. p is informative.
- \* you are identified as the author (in h1 or p).
- \* html and css validate properly.
- \* Visit counter exists and works.
- \* All styling is in the document head.
- \* Professional-looking content is properly attributed.

#### Specific Grading Rubric

- \* form action=http://dc.is2.byuh.edu/echo/
- \* type=submit, at least two, different names and values.
- \* type=text, at least two, different names and sizes.
- \* type=password, at least one.
- \* type=hidden, at least one, has content.
- \* type=checkbox, one pre-checked, one not pre-checked.
- \* type=radio, at least two sets, each with at least three buttons.
- \* select/option, at least three options.
- \* textarea, at least one.
- \* all field names are different (except radio)

**Voting / Bonus Points:** Extra credit up to twenty percent will be awarded based on a vote in class among your peers. Students will rate each other's work for overall appeal. To be in the vote your webpage must be essentially complete by the due date.

**Search Engine Optimization:** Provide a well-written title (up to 50 char), meta description (up to 150 char), heading, and introductory paragraph. Well-written means helpful, user-friendly, and crisp (succinct). Also identify yourself as the author and explain the purpose of the task.

Validation: Clearly provide a working link to do HTML validation of your page. Make sure your page validates clean. Clearly provide a working link to do CSS validation of your page. Make sure your page validates cleanly.

**Attribution:** Clearly and properly credit all professional-looking content (images and wordings), either where they appear or at the end of your webpage. (a) If you own the copyright, say so. (b) If someone else owns the copyright, say who and where you got it. If possible provide a link to the

webpage where you found the content. (c) If appropriate, end with wording like "All other images and text were created and are owned by me." (d) Make your attributions easy to find and read.

**Style Sheet:** All styling must be in a style section in the head of the document. No style= attributes are allowed in-line. You may use id= or class= to apply styling as needed.

**Regrade:** This assignment is subject to the late work / regrade policy stated in section C.5 (page 63). The required email subject line is:

Regrade Subject Line: it240 f1 regrade lastname, firstname

## Task g2

## Gimp 2: Transparency

• Status: Officially Assigned.

• Discussed: Mon, Aug 19.

Due Date: Wed, Aug 21, 06:00.Voting: Wed, Aug 21, in class.

Deadline: Mon, Aug 26, 06:00.

• Grading Label: **g2** 

Summary: Use Gimp (or another tool of your choice) 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 using width=200. Use the image from our first assignment, with you in front of the GCB sign.
- (b) Show a cut-out of yourself from that image, file type .png, width=200.
- (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.

<button onmousedown="document.body.style.backgroundColor</pre>

= 'yellow';">Make the Background Yellow</button>
<button onmousedown="document.body.style.backgroundColor
= '#ff0000';">Make the Background Red</button>
<button onmousedown="document.body.style.backgroundColor
= 'blue';">Make the Background Blue</button>

#### General Grading Rubric

- \* title is informative, h1 is informative. p is informative.
- \* you are identified as the author (in h1 or p).
- \* html and css validate properly.
- \* Visit counter exists and works.
- \* All styling is in the document head.
- \* Professional-looking content is properly attributed.

#### Specific Grading Rubric

- \* original picture is shown.
- \* cut-out picture is shown.
- \* JS buttons work.

**Voting / Bonus Points:** Extra credit up to twenty percent will be awarded based on a vote in class among your peers. Students will rate each other's work for overall appeal. To be in the vote your webpage must be essentially complete by the due date.

**Search Engine Optimization:** Provide a well-written title (up to 50 char), meta description (up to 150 char), heading, and introductory paragraph. Well-written means helpful, user-friendly, and crisp (succinct). Also identify yourself as the author and explain the purpose of the task.

Validation: Clearly provide a working link to do HTML validation of your page. Make sure your page validates clean. Clearly provide a working link to do CSS validation of your page. Make sure your page validates cleanly.

Attribution: Clearly and properly credit all professional-looking content (images and wordings), either where they appear or at the end of your webpage. (a) If you own the copyright, say so. (b) If someone else owns the copyright, say who and where you got it. If possible provide a link to the webpage where you found the content. (c) If appropriate, end with wording like "All other images and text were created and are owned by me." (d) Make your attributions easy to find and read.

Style Sheet: All styling must be in a style section in the head of the

document. No style= attributes are allowed in-line. You may use id= or class= to apply styling as needed.

**Regrade:** This assignment is subject to the late work / regrade policy stated in section C.5 (page 63). The required email subject line is:

Regrade Subject Line: it240 g2 regrade lastname, firstname

# Task toc Table of Contents

Status: Officially Assigned.Discussed: Wed, Aug 21.

Due Date: Fri, Aug 23, 06:00.
Voting: Fri, Aug 23, in class.
Deadline: Wed, Aug 28, 06:00.

• Grading Label: toc

Summary: Construct a Portfolio Homepage. It will replace your current homepage at whatever.tk. (You can move your old homepage elsewhere or just delete it.) It should be constructed from ul-style (bullet) lists, with at least the following three sections:

- (a) Portfolio Projects. Make this section first. In any order of your choosing, list all the portfolio pages you have created. Link to each of them using relative addressing if possible. (Those with a different domain name will require absolute addressing.) Link using the title of each webpage (up to 50 characters). Briefly describe each one (up to 150 characters).
- (b) The IT 240 Class. Make this section second. Have in it a link to the course homepage, and a link to the textbook homepage, and a link to the study guide PDF.

Do one or both of these:

(c1) Me and My Work. Have in it links to your work, or your presence on

LinkedIn or Facebook or other social media sites (if you are willing to have people link to you or friend you). Do you have a profile on Mormon.org?

(c2) My Favorites. Link to two or more webpages, websites, blogs, etc, that you find helpful or inspiring in some way.

**Voting / Bonus Points:** Extra credit up to twenty percent will be awarded based on a vote in class among your peers. Students will rate each other's work for overall appeal. To be in the vote your webpage must be essentially complete by the due date.

**Search Engine Optimization:** Provide a well-written title (up to 50 char), meta description (up to 150 char), heading, and introductory paragraph. Well-written means helpful, user-friendly, and crisp (succinct). Also identify yourself as the author and explain the purpose of the task.

Validation: Clearly provide a working link to do HTML validation of your page. Make sure your page validates clean. Clearly provide a working link to do CSS validation of your page. Make sure your page validates cleanly.

Attribution: Clearly and properly credit all professional-looking content (images and wordings), either where they appear or at the end of your webpage. (a) If you own the copyright, say so. (b) If someone else owns the copyright, say who and where you got it. If possible provide a link to the webpage where you found the content. (c) If appropriate, end with wording like "All other images and text were created and are owned by me." (d) Make your attributions easy to find and read.

**Style Sheet:** All styling must be in a style section in the head of the document. No style= attributes are allowed in-line. You may use id= or class= to apply styling as needed.

**Regrade:** This assignment is subject to the late work / regrade policy stated in section C.5 (page 63). The required email subject line is:

Regrade Subject Line: it240 toc regrade lastname, firstname

# Task fp Final Project

• Status: Officially Assigned.

• Discussed: Fri, Aug 23.

Due Date: Fri, Aug 30, 06:00.
Voting: Fri, Aug 30, in class.
Deadline: Fri, Aug 30, 23:59.

• Grading Label: fp

Summary: Create a website for a ficticious (or real) organization or can advocate for a cause. It can be your own company. It can be wildly imaginative. Whatever. Body text can be lorem ipsum, but headers should be meaningful.

- (a) **New:** This should be totally new and fresh, including the forms. Do not copy content (other than images) from your other project. You may use images that you have used elsewhere if they make sense in this context.
- (b) **URL:** Its URL must be http://fp.(whatever).tk/ where the (whatever) part is your normal .tk domain name we have used all semester. So, yes, you will be creating a new subdomain. Do this early.
- (c) **Size:** It must have four or more pages, including a homepage and three or more pages linked directly from the homepage. I will open and grade the homepage and the first three links I notice to different pages. If there are more than four pages, I will probably ignore the rest.

- (d) **Hand Coded:** It must be entirely "hand coded," not using any content management system (like WordPress).
- (e) **Style:** You must put all styling in an external style sheet named "/style.css". Inline styles are not allowed. Notice that this is a docroot address.
- (f) **Links:** All of your on-site pages and content including images (href=, src=, etc.) must be reached by docroot or relative links, not by absolute links.
- (g) **SEO:** Each page must use proper SEO techniques, including a useful title and meta description. Useful does not mean "final project." It must fit in with your business or cause.
- (h) **Attribution:** All content must be your own work. No borrowed work is allowed. Your attribution should appear on at least one of your pages, and must identify yourself (by name, not simply "owned by me") and say that all content is your own work.
- (i) **Form:** At least one page (among the four I check) must include a working form. It must link (action=) to the echo form we used in the f1 assignment. The fields must be reasonable (not duplicate names).

**Voting / Bonus Points:** Extra credit up to twenty percent will be awarded based on a vote in class among your peers. Students will rate each other's work for overall appeal. To be in the vote your webpage must be essentially complete by the due date.

**Search Engine Optimization:** Provide a well-written title (up to 50 char), meta description (up to 150 char), heading, and introductory paragraph. Well-written means helpful, user-friendly, and crisp (succinct). Also identify yourself as the author and explain the purpose of the task.

Validation: Clearly provide a working link to do HTML validation of your page. Make sure your page validates clean. Clearly provide a working link to do CSS validation of your page. Make sure your page validates cleanly.

Attribution: Clearly and properly credit all professional-looking content (images and wordings), either where they appear or at the end of your webpage. (a) If you own the copyright, say so. (b) If someone else owns the copyright, say who and where you got it. If possible provide a link to the webpage where you found the content. (c) If appropriate, end with wording like "All other images and text were created and are owned by me." (d) Make your attributions easy to find and read.

**Style Sheet:** All styling must be in a style section in the head of the document. No style= attributes are allowed in-line. You may use id= or class= to apply styling as needed.

**Regrade:** This assignment is subject to the late work / regrade policy stated in section C.5 (page 63). The required email subject line is:

Regrade Subject Line: it240 fp regrade lastname, firstname

# Unit II

# Appendices

## Appendix A

# On-Campus DNS Issues, and using 8.8.8.8

Sometimes students report that they cannot view class webpages from various places on campus.

The short answer is that this is a DNS problem. The long answer is that we are working with the powers that be to get things fixed, but sometimes things are "complicated."

This seems to affect students in on-campus housing the most, but also affects computers in offices and labs that are not part of the CIS department.

Fortunately, there is a work-around.

The work-around is to change your DNS to use **8.8.8.8** or another of the public DNS servers on the Internet. (8.8.4.4 also works, and 4.2.2.2 is reported to work but I have not tried it myself.)

https://developers.google.com/speed/public-dns/docs/using gives instructions for changing your own computer's DNS settings to avoid this problem.

If your problem is with a laptop, you can bring it to class or to the CIS Systems Administrator, Micah Uyehara, in GCB 106, for assistance.

## Appendix B

## 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 C

## 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.

## C.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.

## C.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.

#### C.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.

### C.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 Summer B, 2013, the last day of class is Friday, August 30, 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 C.5 (page 63) 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 in section 1.4 (page 7).

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.

## C.5 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.

## C.5.1 Subject Line

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 should be the word "regrade" (without the quotes).

The rest of the subject line must be your lastname, comma, firstname, in that order.

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

it240 abc regrade Doe, John

#### C.5.2 Body of Your Request

**Required:** Say "These were your comments:" (or similar words) and then show exactly the comments that I wrote about your previous attempt. Use cut-and-paste to show my exact comments.

**Required:** For each of my comments, say that you fixed it. If I made four comments, I want to see four lines, one for each comment, together with a statement that you fixed it. You can say more if you want, but that is the minimum I will accept.

**Encouraged:** The requirements, as stated in this study guide, provide the background you need to understand my comments. If possible, plese cut-and-paste those requirements. This helps me know that you have seen the requirements.

**Rejection:** If the body of your request does not have these things, then I will reject your request and have you check my comments again.

Why: I do this because some students request regrades without really understanding or fixing the problems. I want to see that you at least know what the problems are.

#### C.5.3 Timeline

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 missed things earlier in the semester, you can ask me to do a regrade after the deadline. I might do it or I might not. If you have **not** been actively keeping up, work on that first.

This also means that when you are submitting really late stuff, you must work backwards from the latest things towards the earliest things.

## C.6 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.

Speaking of creativity, there is a great temptation to borrow images (for example, photos or artwork) or wording created by someone else. (a) Avoid borrowing if possible. Invent your own content. (b) If you must borrow, provide proper attribution. (Credit your sources.)

## C.7 Copyright and Attribution

Something else, related. If you do really high-quality work, it can look like it might have been stolen. So, here is the general rule:

If any material on your website looks professional, particularly the images and the wordings, you must provide an attribution. This includes your own (professional looking) work. State who created the work, and if possible link to it. If you created it, say so.

## C.8 Plagiarism

This is a reminder to please do your own work. When I review page source code, sometimes I see quirky ways of doing things. They appear to work even though they are wrong. And then I see someone else that has done it exactly the same way. This does not feel like "doing your own work." Cut and paste is pretty much an honor code violation. Read and learn is totally okay. Copy other ideas is okay. I don't want to see any cut and paste.

Sometimes it is said that plagiarism is copying from one person, and research is copying from lots of people.

I encourage you to look at not just one, but half a dozen or more of the pages done by myself or your fellow students. Study them. See what you can learn from them. But do not just copy. That is so lame.

#### C.9 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.

### C.10 The Rubric

For each assignment, I 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 are assigned as follows:

0: 0% credit, nothing found. 404 or empty page.

1-3: 4-12% credit, incomplete work but headed in a good direction.

25: 100% credit. Essentially Complete.

**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 100% of the points, and then subtracting 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.

Here are some examples of minus points: (a) no link to the Portfolio Homepage, (b) no backlink from the Portfolio Homepage, (c) no HTML validator link, (d) HTML validator errors, (e) no CSS validator link, (f) CSS validator errors.

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.

## C.11 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.

## C.12 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.

## C.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 25-point project, the bonus could be as high as 5 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 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 (Friday, August 30, 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 class (Friday,

## APPENDIX D. USING A BYUH LIBRARY CAMERA

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August 30, 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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