

# Dumela Service Project

## PHP, ADD

### Wyatt McAllister

The website created during this project can be found at:  
[http://khabele.info/wyattmc/project/add\\_statistics/](http://khabele.info/wyattmc/project/add_statistics/)



Name: Wyatt McAllister  
Project Name: Dumela Service Project  
Advisor: David Heroy  
Date: 12/2/2010

# Project Week Preliminary Proposal

**Project Name:** Dumela Service Project

**Project Collaborators (if applicable):** Me, Myself and I

**One sentence description of your project.**

I am going to do a service and learning project week where I intern with the Dumela guys and both improve Dumela by giving them information about my experience and learn about basic programing and application writing.

**One paragraph explanation of why this project is important to you and/or the community.**

Computers are the future. The world is run by them. More and more things are moving to technological applications. This project will give me skills that I can use in my life whether I am interested in computers or not. Also, I grew up with computers and I am fascinated by them. Programing skills are necessary for almost any computer career. My current dream is to create my own computer manufacturing company, which will be so good that it puts Apple, Microsoft, Dell and Asus out of business. This project will put me on the way to MIT which will help me accomplish this. It will also be fun and interesting, helping me improve my school community by giving the Dumela guys useful feed back.

**What do you anticipate will be the biggest challenge in executing your project?**

I will need to be **patient** because the people at Dumela are very busy and they will probably not have as much time as I would like. They will try their best and I will have a good project week. I will just have to be passed from person to person and I will not get to talk to a single person for an extended period. This will be fine but challenging.

**What traits or characteristics will you need to have to be successful during this project?**

I will need to be **aware** because I will get interested in this project and I might push the people at Dumela too hard. I will need to be **thoughtful** because I will have complicated problems that I need to think about to solve. I will need to be **perseverant** because I will have to work on hard things for a long period of time and I can't give up.

Name: Wyatt McAllister  
Project Name: Dumela Service Project  
Advisor: David Heroy  
Date: 12/2/2010

## Project Planning Timeline

**What will I need to have done to be ready for my Project Week?**

Action	By When	Results Produced	Date of Completion
Get in touch with mentor.	11/23/2010	Find out about project.	11/23/2010
Meet with mentor and discuss schedule.	12/1/2010	Finalize project schedule.	12/1/2010

Name: Wyatt McAllister  
Project Name: Dumela Service Project  
Advisor: David Heroy  
Date: 12/2/2010

## Materials Needed

Material Needed	Where to get it	Cost
Computer and Charger	Backpack.	N/A
Clothes.	Wardrobe.	N/A
Paper and Pen	Backpack.	N/A

Name: Wyatt McAllister  
Project Name: Dumela Service Project  
Advisor: David Heroy  
Date: 12/2/2010

## Tentative Project Schedule

\*My mom, Eloise McAllister will be driving me everywhere I need to go\*  
I will be at this address:  
925 S Capitol of TX  
STE B245  
Austin, TX 78746

	<b>Day 1</b>	<b>Day 2</b>	<b>Day 3</b>	<b>Day 4</b>
8-9 am	<b>Breakfast and travel to Dumela</b>			
9-10 am	<b>Work at Dumela</b>	<b>Work at Dumela</b>	<b>Work at Dumela</b>	<b>Work at Dumela</b>
10-11 am	↓	↓	↓	↓
11-12 pm	<b>Lunch</b>	<b>Lunch</b>	<b>Lunch</b>	<b>Lunch</b>
12-1 pm	<b>Work at Dumela</b>	<b>Work at Dumela</b>	<b>Work at Dumela</b>	<b>Work at Dumela</b>
1-2 pm	↓	↓	↓	↓
2-3 pm	↓	↓	↓	↓
3-4 pm	↓	↓	↓	↓
4-5 pm	<b>Travel home and work on journals.</b>	<b>Travel home and work on journals.</b>	<b>Travel home and work on journals.</b>	<b>Travel home and work on journals. Do final essay.</b>

Results Produced	<b>Get work done at Dumela and have journal for that day completed.</b>	<b>Get work done at Dumela and have journal for that day completed.</b>	<b>Get work done at Dumela and have journal for that day completed.</b>	<b>Get work done at Dumela and have journal for that day completed.</b>
------------------	---	---	---	---

Project Name: Dumela Service Project  
 Name: Wyatt McAllister  
 Advisor: David Heroy  
 Date: 12/2/2010

## Final Project Schedule

	<b>Day 1</b>	<b>Day 2</b>	<b>Day 3</b>	<b>Day 4</b>
8-9 am	Breakfast and travel to Dumela	Breakfast and travel to Dumela	Breakfast and travel to Dumela	Breakfast and travel to Dumela
9-10 am	9:00-9:10 Met everyone and got set up in my workspace. 9:10-11:30 Worked through introduction and first chapter of book.	9:00-9:20 Get my computer set up for reading PHP files and get a text editor. 9:20-12:00: Work through part of chapter 7.	9:00-10:00 Edit template to create home page of my web project.	9:00-9:10 Started to play with graph templates. 9:10-9:20 Talk to Colby about graphs. 9:20-11:20 Edit Graph Templates.
10-11 am	↓	↓	10:00-10:20 Take a break and get some pictures. 10:20-11:50 Transfer data from wolfram alpha into excel files.	↓
11-12 pm	11:30-11:45 Ate the first half of my sandwich. 11:45-12:30 Finished chapter 1 of book.	↓	11:50-12:00 Talk to Eder about what to do with the data and what to do next.	11:20-2:20 Do graphs and edit templates along the way.
12-1 pm	12:30-1:00 Ate the second half of my sandwich and took a break.	12:00-12:15 Eat the first half of my sandwich and got a small tutorial from Eder. 12:15-2:20 Work through chapter 5.	12:00-12:30 Get tutorial from Eder about HTML. 12:30-1:20 Chose data representation for data and find what data is more important.	↓

1-2 pm	1:00-1:20 Met with Colby and Eder to discuss ideas for project. 1:20-2:20 Researched ideas and databases.	↓	1:20-1:30 Eat first half of my sandwich. 1:30-3:45 Edit data into graphs on google and save links.	↓
2-3 pm	2:20-2:30 Chose website template. 2:30-3:00 Played around with website template.	2:20-2:30 Took a break and ate the second half of my sandwich. 2:30-3:20: Finished chapter 5.	↓	2:20-2:30: Debug graphs. 2:30-2:45: Finalize index webpage.
3-4 pm	3:00-4:10 Went over chapter 2.	3:20-4:10 Finished chapter 7.	3:45-4:10 Tutorial with Eder on PChart and finalize plane for tomorrow.	2:45-4:45 Input data into webpages.
4-5 pm	Travel home and work on journals.	4:10-4:20 Left office and got picked up by my mom. 4:20-5:30 Drove home.	4:10-5:10 Travel home.	4:45-5:00 Finalize.
After 5	↓	5:30-6:00 Took a break. 6:00-9:00 Finished chapter 7, and went over an introduction to XHTML/HTML and the syntax involved. 9:00-10:00 wrote journal. 10:00— CRASH AND BURN!	After 5:00 Create and edit all my text, do my journal, play with PChart templates, eat, sleep.	5:00-5:20 Pictures, get browser to show errors. 5:20-5:45 Posted site on Dumela, found how I can continue using PHP. Said good by to people in the office. After 7:00 Wrote up my Journal and final essay.

Results Produced	Learned basic PHP programing. Finalized idea for program to write. Found database to support program and media to represent it.	Learned more about PHP and HTML. Got my computer set up to work with PHP. Got some one to one help with PHP.	Finalized my plan for how my web site would look. Made a homepage. Got almost all of my data made including text. Finished journal.	Finalized graphs and text and entered them into website. Finalized website. Finished journal and final essay.
------------------	---	---	--	---

Project Name: Dumela Service Project  
Name: Wyatt McAllister  
Advisor: David Heroy  
Date: 12/2/2010

# Project Week Final Proposal

**Project Name:** Dumela Service Project

**Project Collaborators (if applicable):** Me, Myself and I

**One sentence description of your project:**

I am going to do a service and learning project week where I intern with the people who run the Khabele Dumela Program and both learn about basic programing and web application writing and create a web based application of some sort which will be relevant to Khabele and which I will post on Dumela.

**One paragraph explanation of why this project is important to you and/or the community:**

Computers are the future. The world is run by them. More and more things are moving to technological applications. This project will give me skills that I can use in my life whether I am interested in computers or not. Also, I grew up with computers and I am fascinated by them. Programing skills are necessary for almost any computer career. My current dream is to create my own computer manufacturing company, which will be so good that it puts Apple, Microsoft, Dell and Asus out of business. This project will put me on the way to MIT which will help me accomplish this. It will also be fun and interesting, helping me improve my school community by contributing my application to Dumela.

**What traits or characteristics will you need to have to be successful during this project?**

I will need to be **patient** because the people at Dumela are very busy and they will probably not have as much time as I would like. I will need to be **aware** because I will get interested in this project and I might push the people at Dumela too hard. I will need to be **thoughtful** because I will have complicated problems that I need to think about to solve. I will need to be **perseverant** because I will have to work on hard things for a long period of time and I can't give up.

**Mentor Contact Information:**

Colby:  
Phone: 347-0777  
Email: colby@disruptdev.com

Eder:  
Phone: (512) 904-9021  
Email: ederweber@gmail.com

Project Name: Dumela Service Project  
Name: Wyatt McAllister  
Advisor: David Heroy  
Date: 12/2/2010

## Journal-Day 1

Today I learned a lot. I learned basic PHP programing and I found an application for those skills that I can develop over the course of this week. Early this morning I had breakfast and drove to the offices of Drane Associates, the company that runs the Khabele Dumela Program. I met the people I would be working with. Their names are:  
Colby: Eder:



and the person working next to me was Sara:

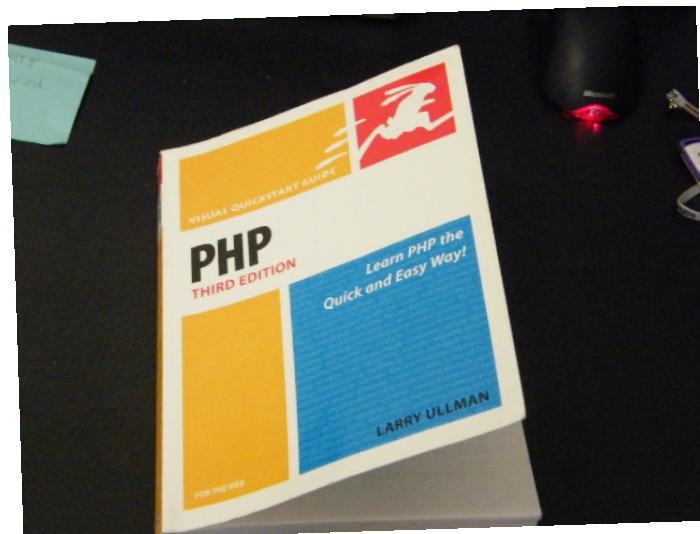


They had kindly dedicated a computer to me so that I could work, even if I ended up using my computer anyway:



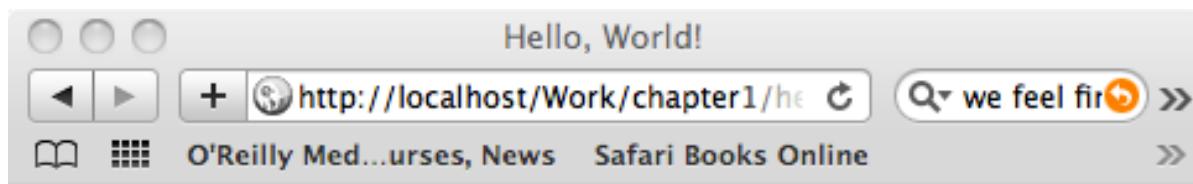
The point of my project was to learn PHP, a web based computing language that creates applications through HTML code. In English, this means that I write groups of letters and numbers into a computer program. The computer program then takes the letters and numbers and plugs them into a language called PHP. PHP interprets the letters and numbers based on predefined information. Then I can send this information to a big computer over the internet and it takes the information and creates another language called HTML, which creates a website that you see on your browser. This is all very complicated and hard to understand. So, what I was really trying to do with this was create a computer program of some sort. This is so I could apply the skills I had learned and not just learn meaningless information.

To create this computer program, I had to learn to make the numbers and letters that would tell PHP what I wanted it. I used this book to do that:



Colby and Eder gave me the PHP manual and told me to work through the first two chapters. I spent the first half of the day working through the book. This wasn't very fun, but it was what I needed to learn to write my program and it was also interesting. The weird part is that I expected PHP to be intuitive. Languages are not intuitive. PHP is just like English, or any other language for that matter. It just assigns meaning to numbers and letters in a creative way. Thus, learning PHP was difficult for me. I kept asking myself: "Why is this so?" I ended up figuring out that PHP is just a language and there is not always a "why" answer.

The book consisted of explanations and scripts. It would explain how something was done. Then, it would say: "Write this in this program." Then it would say, "This is what your PHP and HTML code should look like." Then it would say, "This is what your browser should look like." I wrote my first script that did this in the browser:



The following was created by PHP: Hello, world!

I continued on from there. I worked through all of chapter one plus the introductions that told me what PHP is (which I just told you up there). I won't go into vivid detail on how PHP works because I don't think the average person reading this would be interested, but I will tell you some of the bare bones.

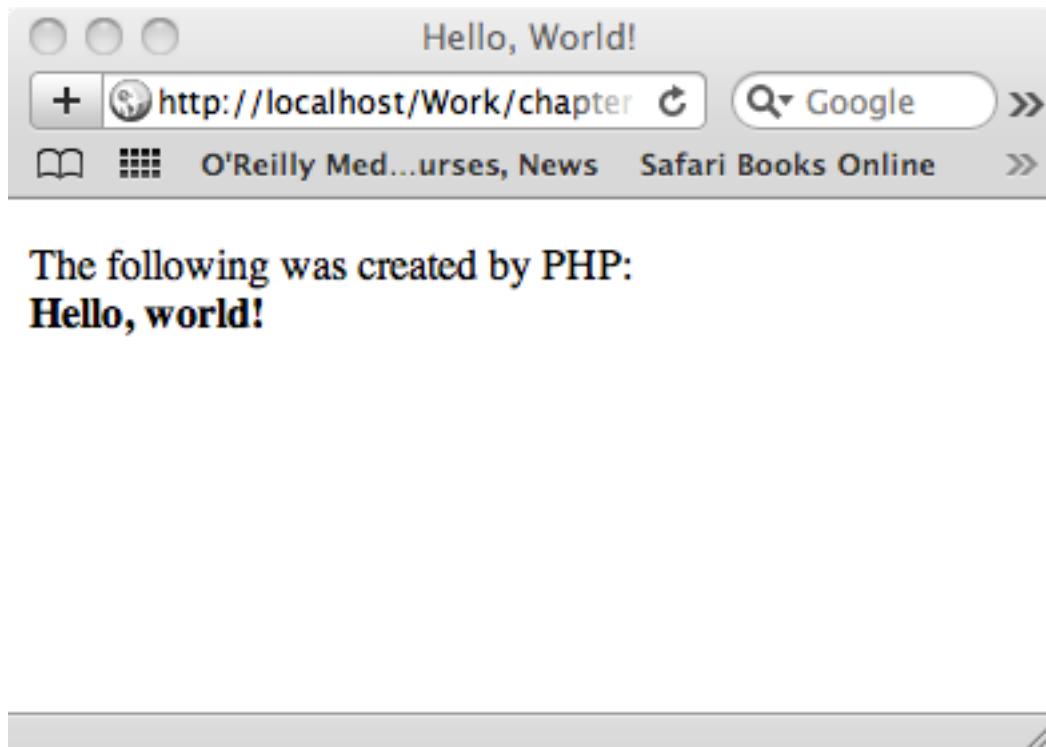
You create PHP in a text editor, just a common word document. Some applications will tell you what line you are on, or make certain letter strings a different color, or suggest common letter strings. Yet, they are all just text editors. The text is what matters. Also, PHP is not really designed to ever touch a web page. It simply tells the server (the big computer running the webpage) what to create to make the webpage. HTML, another language, is the language that PHP creates and the server makes into the webpage. If you look at the source code for a webpage, you will see HTML. PHP is completely behind the scenes. Yet, PHP is really important because it

gives you some more control over the webpage than HTML does not. HTML might use a PHP file in its webpage by linking to it on the server, but it does not write the code.

After I finished the first chapter which covered basic script (code files that make things work) writing, I had written that following things, which you will see below:

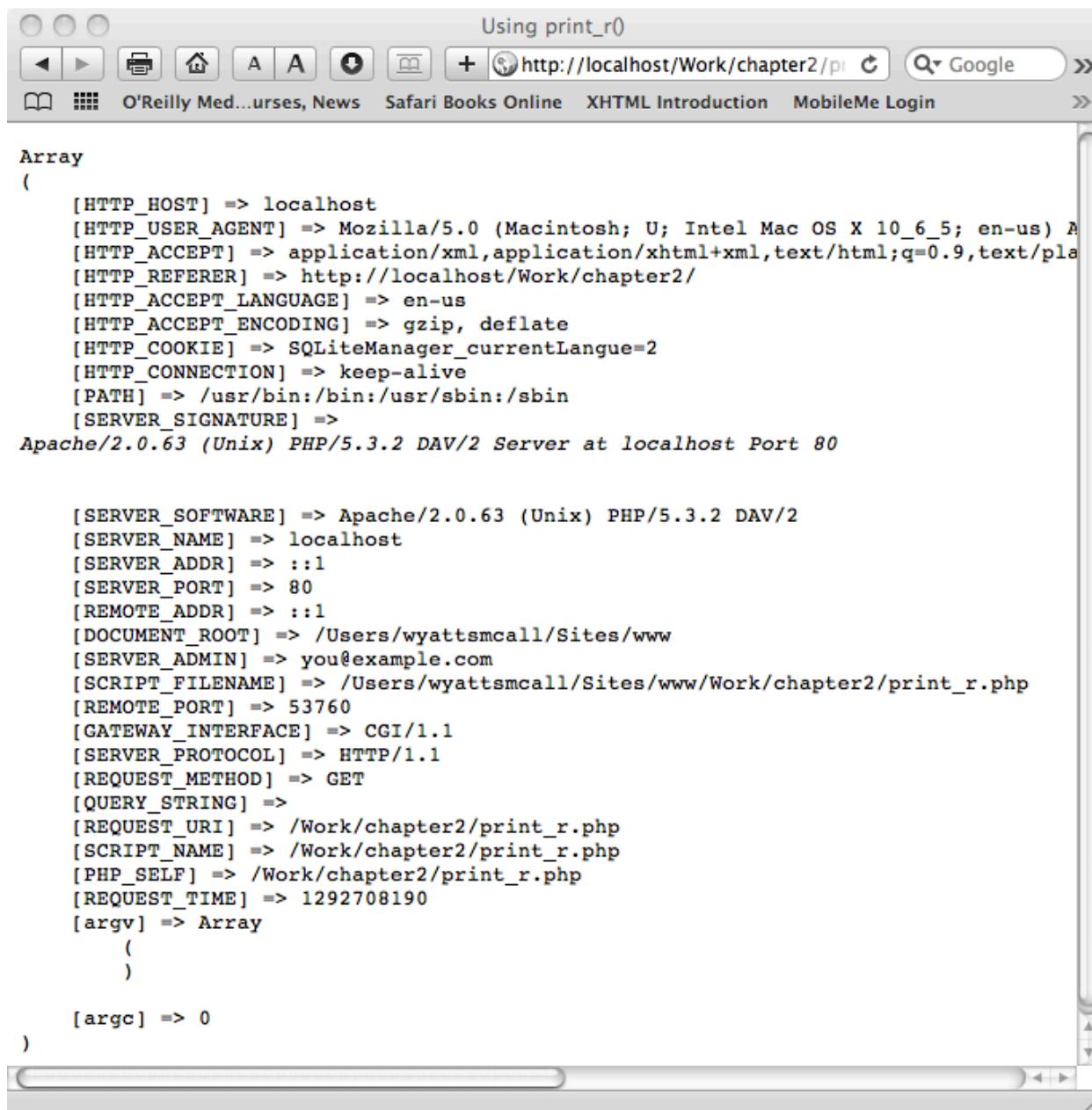


I developed the above example until it looked like this.



PHP works with functions where you input a string of numbers and letters, or code, into a variable, where you assign something a name and it contains values, and you do something to it using a preset function. Examples of functions are: order this, make this **bolded**, make this *italicized* or cut pieces out of this variable that begin with commas (,), and put them here in this variable. There are thousands of functions in PHP and the book was meant to help teach them to me by having me write scripts see how they behaved in the browser. Later in the day I learned about different types of variables and how they worked and applied that knowledge. I will just tell you what happened in this part of the day so I can get on to the fun stuff.

This was what I made it chapter 2, variables:

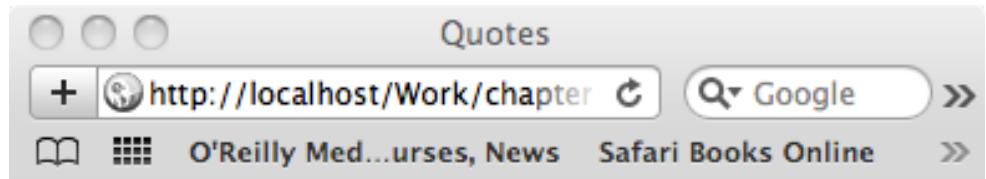


The screenshot shows a web browser window titled "Using print\_r()". The address bar displays "http://localhost/Work/chapter2/print\_r.php". The page content is the output of the PHP print\_r() function, which prints the current state of all global variables. The output is a large array structure with many entries, including server information like [HTTP\_HOST] and [PATH], and request information like [REQUEST\_METHOD]. The browser interface includes standard navigation buttons (back, forward, search) and a toolbar with various icons.

```
Using print_r()
HTTP://localhost/Work/chapter2/print_r.php Google
O'Reilly Med...urses, News Safari Books Online XHTML Introduction MobileMe Login

Array
(
    [HTTP_HOST] => localhost
    [HTTP_USER_AGENT] => Mozilla/5.0 (Macintosh; U; Intel Mac OS X 10_6_5; en-us) AppleWebKit/533.16 (KHTML, like Gecko) Version/5.0.1 Safari/533.16
    [HTTP_ACCEPT] => application/xml,application/xhtml+xml,text/html;q=0.9,text/plain;q=0.8,image/png,*/*;q=0.5
    [HTTP_REFERER] => http://localhost/Work/chapter2/
    [HTTP_ACCEPT_LANGUAGE] => en-us
    [HTTP_ACCEPT_ENCODING] => gzip, deflate
    [HTTP_COOKIE] => SQLiteManager_currentLanguage=2
    [HTTP_CONNECTION] => keep-alive
    [PATH] => /usr/bin:/bin:/usr/sbin:/sbin
    [SERVER_SIGNATURE] =>
Apache/2.0.63 (Unix) PHP/5.3.2 DAV/2 Server at localhost Port 80

    [SERVER_SOFTWARE] => Apache/2.0.63 (Unix) PHP/5.3.2 DAV/2
    [SERVER_NAME] => localhost
    [SERVER_ADDR] => ::1
    [SERVER_PORT] => 80
    [REMOTE_ADDR] => ::1
    [DOCUMENT_ROOT] => /Users/wyattsmcall/Sites/www
    [SERVER_ADMIN] => you@example.com
    [SCRIPT_FILENAME] => /Users/wyattsmcall/Sites/www/Work/chapter2/print_r.php
    [REMOTE_PORT] => 53760
    [GATEWAY_INTERFACE] => CGI/1.1
    [SERVER_PROTOCOL] => HTTP/1.1
    [REQUEST_METHOD] => GET
    [QUERY_STRING] =>
    [REQUEST_URI] => /Work/chapter2/print_r.php
    [SCRIPT_NAME] => /Work/chapter2/print_r.php
    [PHP_SELF] => /Work/chapter2/print_r.php
    [REQUEST_TIME] => 1292708190
    [argv] => Array
        (
        )
    [argc] => 0
)
```

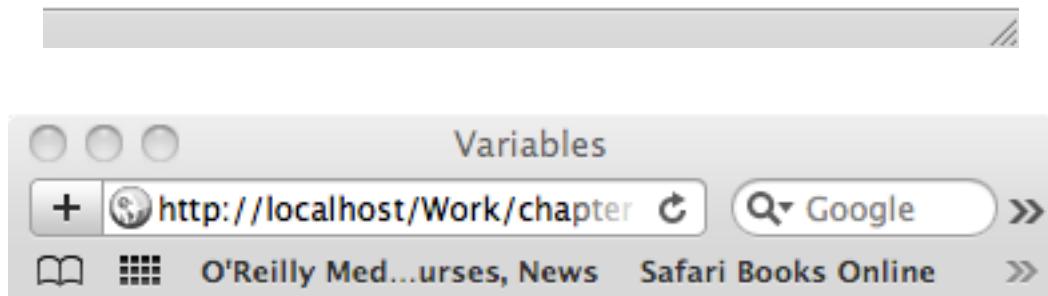


## Double Quotes

```
name1 is first_name $last_name  
name2 is Larry Ullman
```

## Single Quotes

```
name1 is $name1  
name 2 is $name2
```

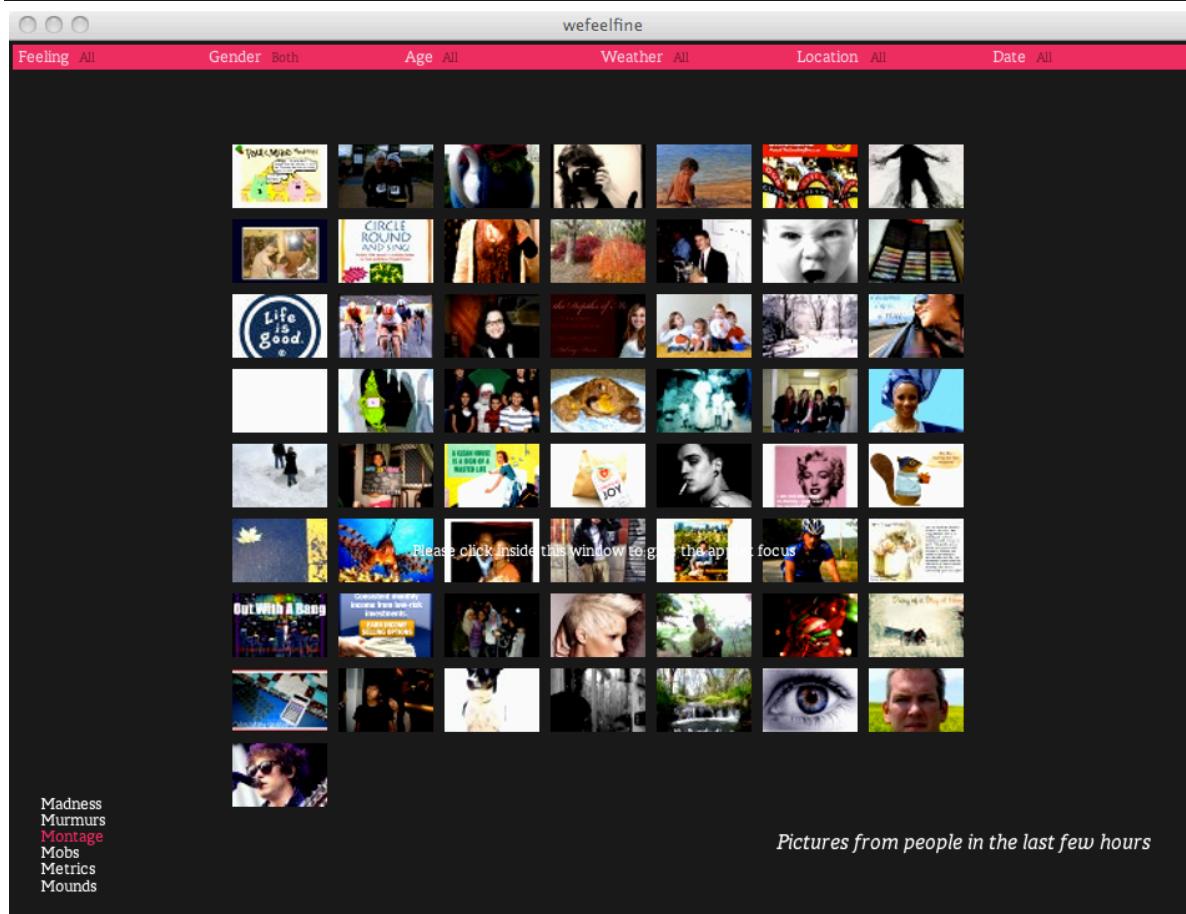
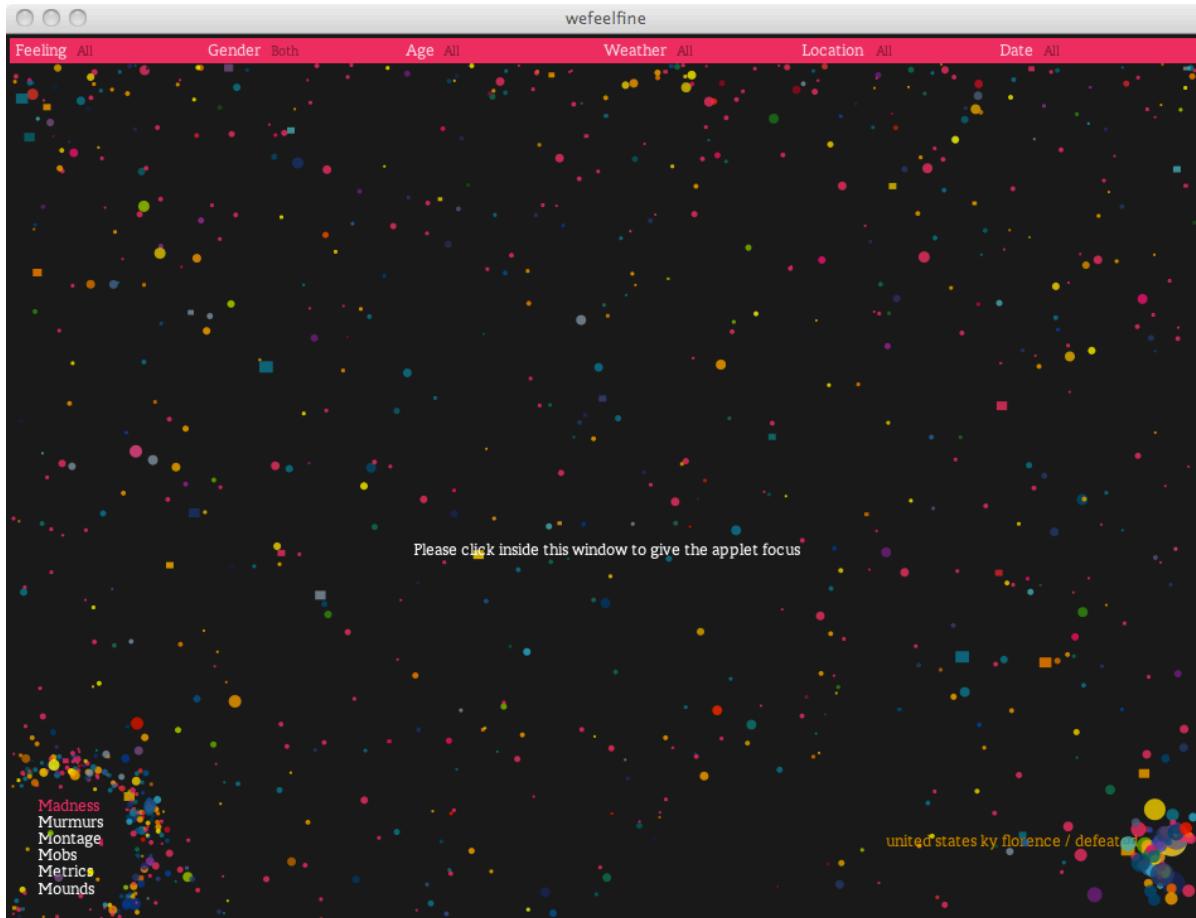


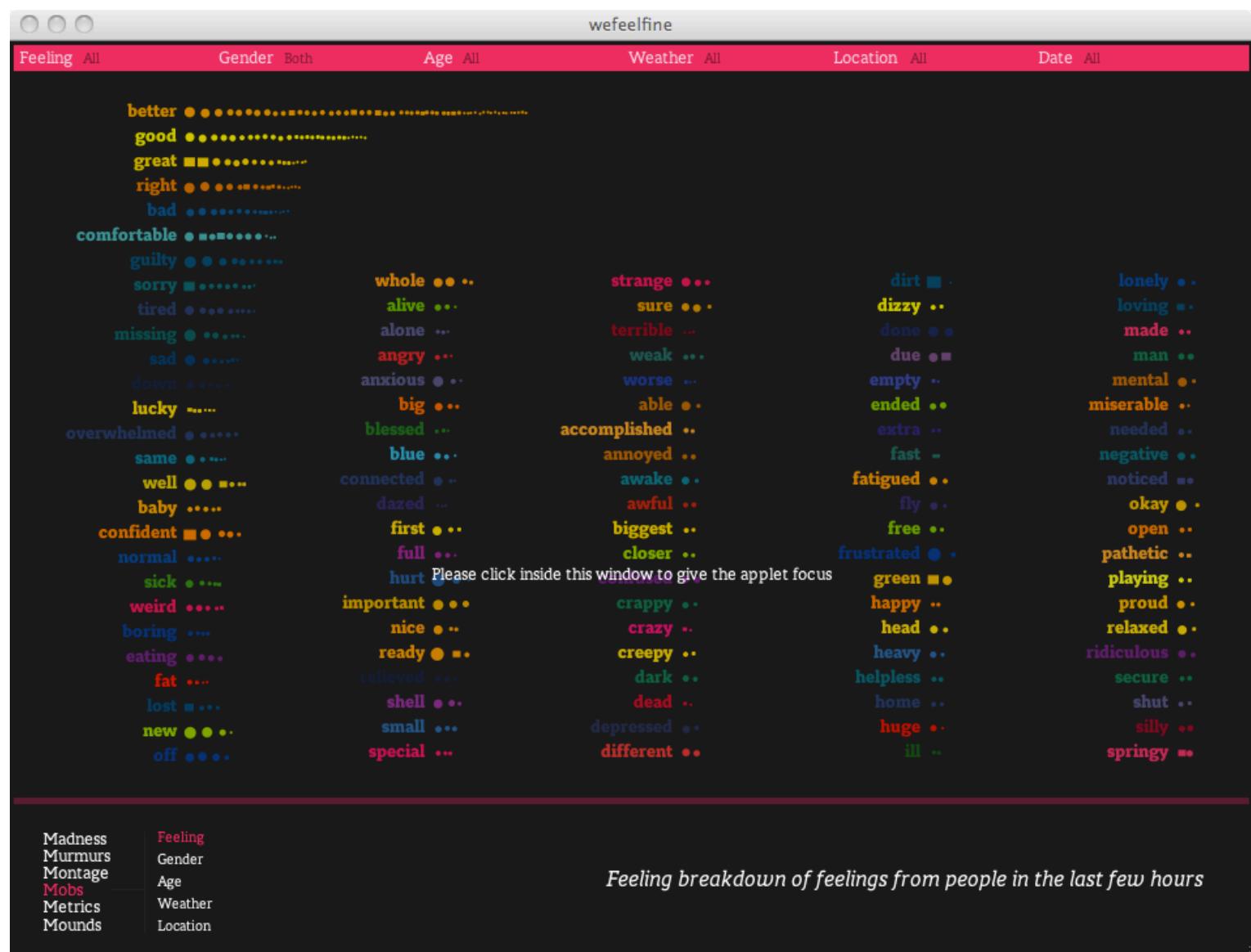
The address is:  
100 Main Street  
State College PA 16801

Now, back to the fun stuff I did after chapter 1 and before chapter 2. After I had eaten lunch, Colby, Eder and I sat down at the table:



We discussed things that I could do to program. I did not know what to do so I started thinking of web programs that I had seen before and that looked cool. I immediately thought of something that I saw in Justin Fallen's English class in ninth grade. It was called "We Feel Fine!" It was a site that parsed, searched through web pages and found information, through webpages and found statements of how people were feeling and represented it. It displayed them in a variety of ways. I looks like this:





Feeling bad

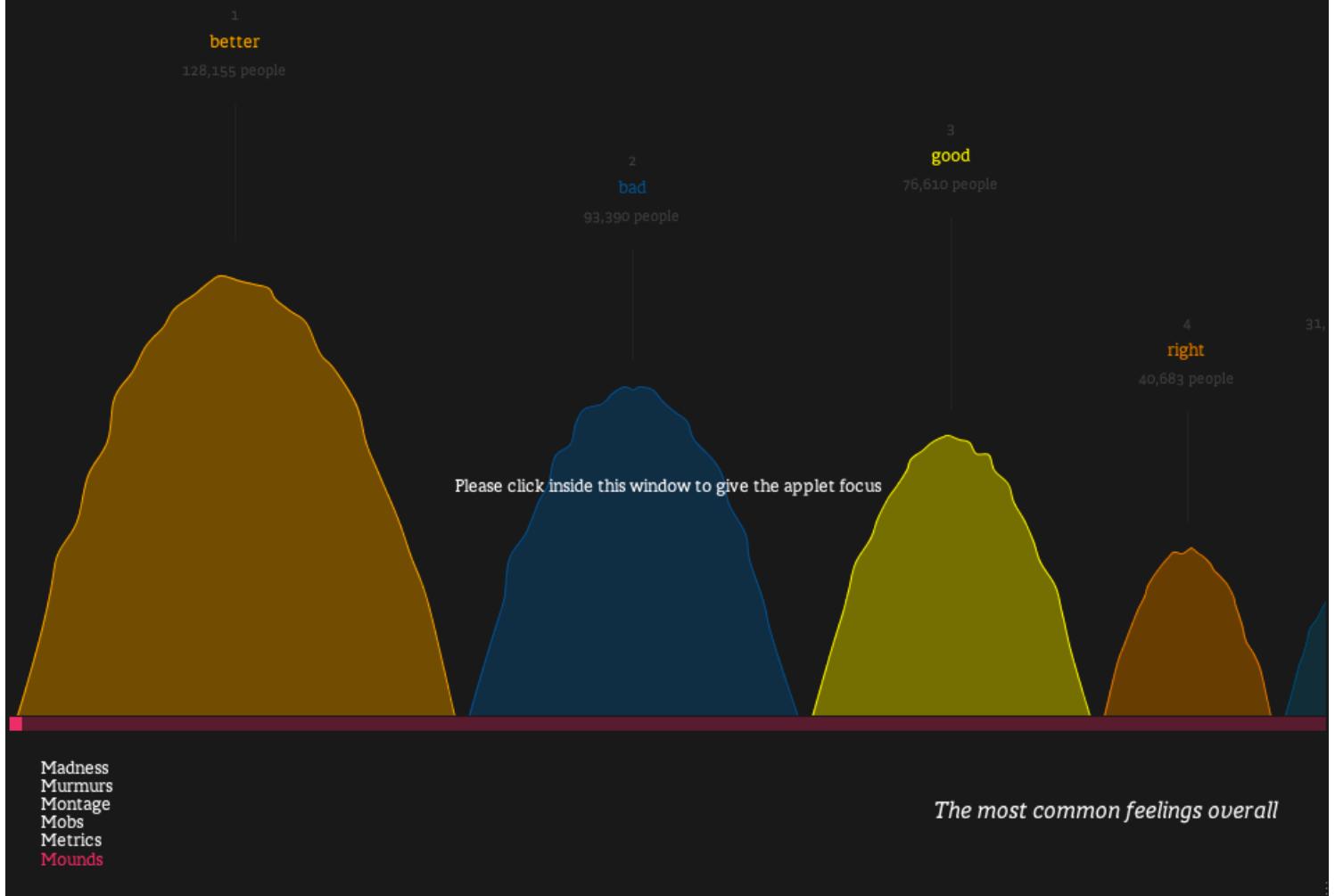
Gender Both

Age All

Weather All

Location All

Date All



This type of thing is very useful because of the way the internet is today. The internet is so vast and complex that people have a hard time understanding and rapping their mind around the facts it presents. Graphical representation of facts is a great way to make the internet more accessible to people and show them your viewpoint. I wanted to find a way to do this with a topic that would be relevant to my life and to people at khabele so I could put whatever I created on Dumela. I needed something that would be easy to create so I could do it in the limited amount of time I had. I spent the next hour finding a topic. I called a few people and brainstormed with them about what I should do.

I finally came up with the idea of representing ADD, which is a neural disorder. I have this disease and so do many people at Khabele. I thought that if I graphically represented data from ADD, I could make a great website and post it on Dumela. That way, people at Khabele who have ADD could learn about their disease. I cleared the idea with Eder and Colby, they thought it was a great idea and we discussed how to implement it.

I would have to find a reliable source for the data and stick to it, for two reasons: One, I did not have the time or the skills to write code that would parse different sites all the time. I could not find many sites with the data I wanted anyway because there are not a ton of studies on ADD that had good data. Two, since ADD is not like feelings, I would need a single reliable source to represent it so that people would not get conflicting information.

I spent the next hour looking for a data source. Surprisingly, no website I would had the data I wanted. There were very few good studies on ADD available. This is because ADD is not completely understood and because very few people are proven to have it. ADD must be proven by a brain scan, which is very expensive, or else you are just guessing about what is wrong with your brain. Statistics would be largely based on assumptions and each different set of assumptions would create different statistics. I finally had the idea of looking on WolframAlpha, and I found this:

The screenshot shows a web browser window with the address bar containing 'attention deficit disorder - Wolfram|Alpha' and the URL 'http://www.wolframalpha.com/input/?i=attention+deficit+disorder'. The page itself is titled 'attention deficit disorder' and features the WolframAlpha logo. Below the title is a search bar with the query 'attention deficit disorder'. To the right of the search bar is a 'More' button. The main content area displays several sections of information:

- Input Interpretation:** 'attention deficit disorders'
- Medical codes:** ICD-9 code 314.0
- Patients with diagnosis in a given year:** A table showing data for males, females, and all genders.

	male	female	all
fraction of US population	1 in 83 ≈ 1.2%	1 in 214 ≈ 0.47%	1 in 129 ≈ 0.78%
number of US patients	2.152 million per year	1.156 million per year	3.309 million per year

To the right of the main content, there is a 'New to Wolfram|Alpha?' sidebar with a list of things to try, such as entering a date, city, stocks, calculation, or formula. It also includes links to 'Examples by Topic', 'Visual Gallery of Examples', and 'Watch Overview Video'. At the bottom right of the sidebar is a 'Bookmark & Share' section with social media sharing icons.

attention deficit disorder - Wolfram|Alpha

<http://www.wolframalpha.com/input/?i=attention+deficit+disorder>

patients	million per year	million per year	million per year
average patient age	15 years	22 years	17 years
diagnosis sample size	1242 visits	601 visits	1843 visits

Visit by month:

(estimates based on 131,748 patient visits to healthcare providers from NAMCS and NHAMCS, weighted for USA demographics, 2006 to 2007)

Reasons for patient visit: More | Any diagnosis at visit ▾

Reported symptoms:

	male	female	all
nonspecific psychological disturbances	8.1%	9.8%	8.7%
depression	3.8%	8.1%	5.3%
anxiety and nervousness	2.3%	7.5%	4.1%
nonspecific behavioral disturbances	5.6%	≈ 1%	4%
restlessness	≈ 1.1%	≈ 1.9%	1.4%

Other conditions:

	male	female	all
mental disorders (miscellaneous types)	28%	19%	25%

attention deficit disorder - Wolfram|Alpha

<http://www.wolframalpha.com/input/?i=attention+deficit+disorder>

mental disorders (miscellaneous types)	28%	19%	25%
unidentified symptom	12%	7.8%	11%
asthma	4.3%	4.4%	4.3%
functional psychoses	3.5%	≈ 1.2%	2.7%
high blood pressure	2.2%	≈ 1.2%	1.8%

Preventive procedures:

	male	female	all
general medical exam	11%	≈ 14%	12%
general psychiatric or psychological exam	4.7%	≈ 6.6%	5.4%

(patients reported up to 3 reasons; each value represents the percentage of patients that reported a given reason for visiting a health care provider)

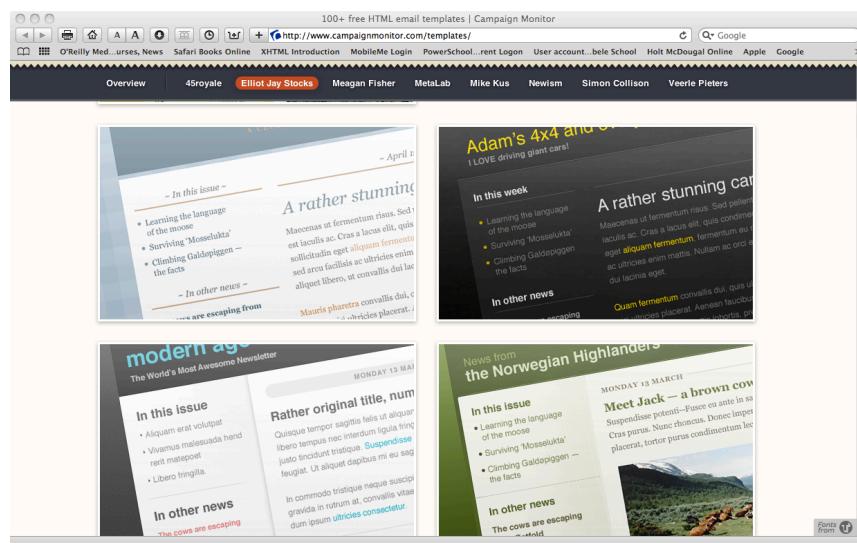
Drugs prescribed at visit: Fewer classes | More classes | Show drugs | Any diagnosis at visit ▾

	male	female	all
CNS stimulants	71%	69%	70%
SSRI antidepressants	6.9%	11%	8.5%
atypical antipsychotics	8.2%	5%	7.1%
benzodiazepines	2.7%	11%	5.4%
viral vaccines	5.7%	1.2%	4.1%
smoking cessation agents	4.1%	3.9%	4%

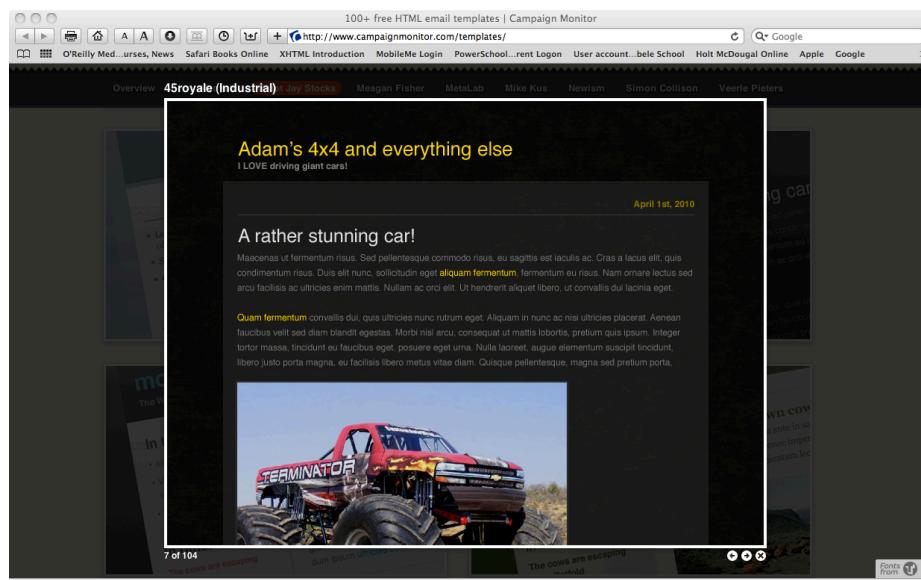
WolframAlpha is a project run by a man named Steven Wolfram. Its goal is to enter all the factual knowledge known to man into a website and make it easy for people to see things that they search for. Steven Wolfram has thousands of scientists working on the project, entering in data in their respective fields. This was perfect for my project. When I entered "Attention Deficit Disorder" into WolframAlpha, I got seven pages of data.

WolframAlpha could do what the top hospitals in the world could not. They entered completely correct data, basing it only off of patients that had been proven to have ADD. Thus, my data is not based on assumptions, it is based on truth and will give people a good idea of what real ADD is like.

Next I got website templates from Colby and picked one:

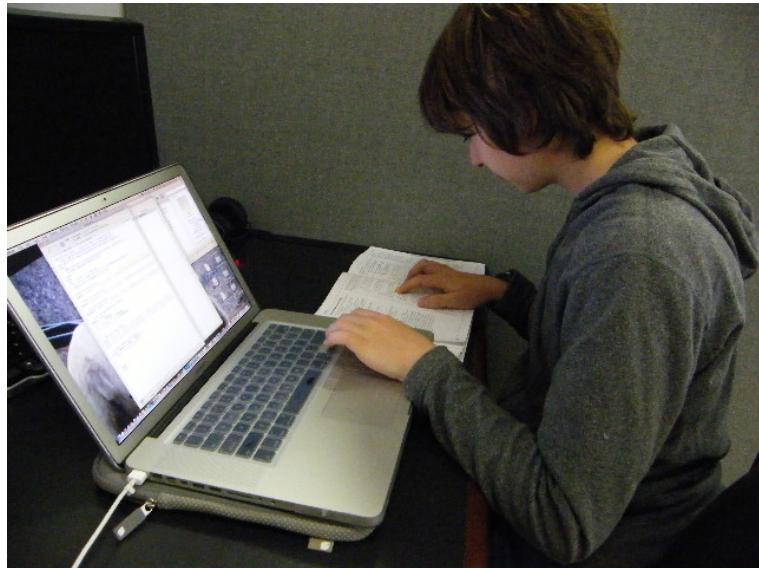


I chose this one:



I wanted my website to look sleek and technological, just like the “We Feel Fine” site. I chose the industrial one to make it look professional and sleek.

I spent the rest of the day working on chapter two. The boring part of my day went like this:



I typed things that looked like this:

```
if (isset($_POST['weekdays']) AND is_array($_POST['weekdays'])) {
```

But I still learned a lot!

The next part of my journal will detail challenges and successes:

As you will see later, this project is composed of hard challenges that lead to easy and fun successes. My first challenges was that the textbook was hard since it was not fun and I did not get to apply the knowledge in interesting ways. It was just helping me prepare for the application.

My second challenge was not getting one on one help with learning PHP. I realized that it was just a language and it was not completely intuitive. All I had to do was look in a book and it was perfectly fine for the people at Drane Associates to give me one. I had just expected more one on one teaching. The main problem was, I did not completely understand how deep of an understanding I needed from the book and what things were more important than others. I could not memorize it all. I just had to understand it and reference it later. I was able to ask the people at Drane about any questions I had, but I just did not know what questions to ask. That was my fault and not

theirs. They did fine. I just needed to be able to synthesize the information better and come up with relevant questions.

My third challenge was finding an idea for a program to write. I struggled with it for a while but after I remembered the “We Feel Fine Application,” I used it as a spring board and then came up with the idea of representing statistics on ADD. Since I have this disease and so do a lot of people at Khabele, it will be relevant. It is also a current issue. Since it is relevant to khabele, I could call my project a service project by posting my information of Dumela.

My fourth challenge was finding a database to draw from. All information on ADD was opinionated and text based. I needed a table with statistics. After I found WolframAlpha my project really took off.

Now for my successes: My successes are pretty self explanatory. This project week has complicated challenges: PHP and research and brainstorming, that lead to easy and fun successes: programs. My two main successes were that I learned the basics of PHP and I found a great idea for a program and how to implement it.

Project Name: Dumela Service Project  
Name: Wyatt McAllister  
Advisor: David Heroy  
Date: 12/2/2010

## Journal-Day 2

Today was a great day. It was also a long and tiring day. It started with me going to the office and getting my computer set up to read PHP files. Since PHP is not designed to touch the web browser, only the server, I had to install a server client, a program that provides a server that people can download a program to get access to and open their PHP files. I installed MAMP:



### **MAMP: One-click-solution for setting up your personal webserver**

MAMP stands for Mac Apache MySQL and PHP. Mac is my operating system (that is the software that my computer is built off of and uses to interact with me so I can tell it what to do). Apache is just a fancy name for a server that you can send files to. MySQL has to do with databasing, which is storing large amounts of information that can be accessed through an interactive program. For example, YellowPages keeps a database of businesses and their phone numbers and allows you to access them online. That is a rough definition of MySQL. Yet, it does not matter since I did not use it because it was too complicated for the purposes of this project. Finally, PHP is the language I was using. I got to stop working on the Ubuntu computer (Ubuntu is an open

source operating system. Open source means that it is open to the public and people can edit it) and start using my glorious MacBook Pro:



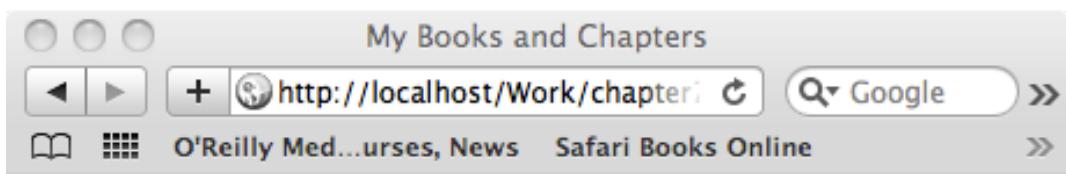
I had tried the previous night to get PHP supported on my computer but it did not work. Colby just had to go into terminal (the application on my Mac operating system that can modify the operating system and do technical tasks that normal users don't do) and fix up my computer:

```
Last login: Sat Dec 18 19:23:45 on ttys000
Wyatt-McAllisters-MacBook-Pro:~ wyattsmacll$ sudo
usage: sudo [-n] -h | -K | -k | -L | -V | -v
usage: sudo -l[!] [-AnS] [-g groupname|#gid] [-U username] [-u username|#uid]
        [-g groupname|#gid] [command]
usage: sudo [-AbEHnPS] [-C fd] [-g groupname|#gid] [-p prompt] [-u
        username|#uid] [-g groupname|#gid] [VAR=value] [-i|-s] [<command>]
usage: sudo -e [-AnS] [-C fd] [-g groupname|#gid] [-p prompt] [-u
        username|#uid] file ...
Wyatt-McAllisters-MacBook-Pro:~ wyattsmacll$
```



Afterwards all I had to do was open my web browser and type in the file and I got to look at what my PHP code was doing on the web.

After I did that I started working on chapter seven, which was on a type of variable called arrays. Arrays are just databases. All you do is assign each element in an array to a key or value. An example is a shopping list. You would name the array: "shopping list." Your elements would be: "apples," "steak," "pears," "sugar" and "doughnuts" and your values would be "apples" = "item one," "steak" = "item two" and so on and so forth. The great thing about an array is that it allows you to database information. You just assign values to your elements and all you have to do is type in "\$\_shopping list[item1]" and it outputs: "apples." The explanation above is pretty simple but I got into some complicated stuff learning functions with arrays. Just one example is a function that would take an array and sort it alphabetically. This would be very useful so you could sort your shopping list and you could buy things in alphabetical order if you had Obsessive Compulsive Disorder. Some of the things I wrote did this:



The third chapter of my first book is *HTML Forms and PHP*.

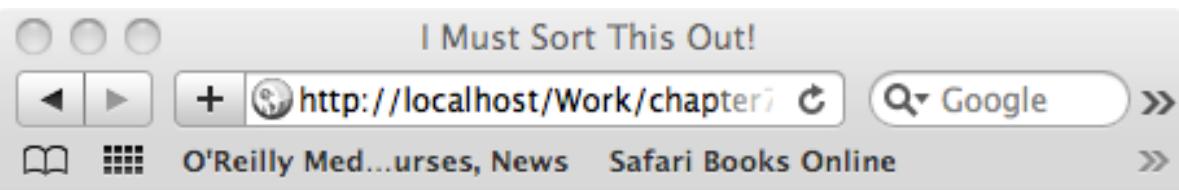
The first chapter of my second book is *Advanced PHP Techniques*.

The fourth chapter of my fourth book is *Introduction to My SQL*.

PHP VQS: Array

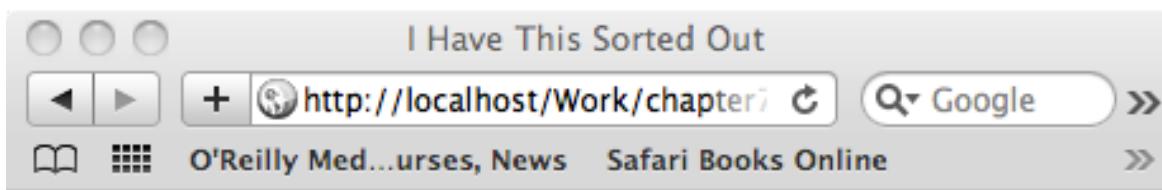
PHP 5 Advanced VQP: Array

PHP 6 and MySQL 5 VQP: Array



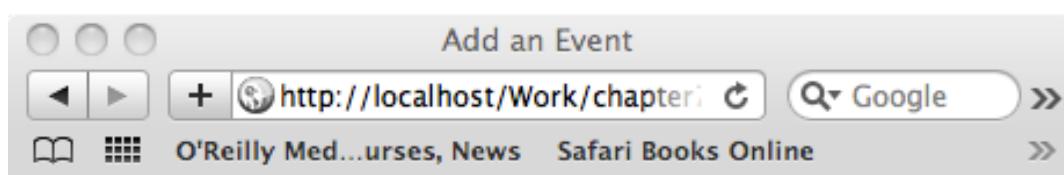
Enter the words you want alphabetized with each individual word separated by a space:

pop mom phydo zygorg phytoplasm you have failed vallos



An alphabetized version of your list is:

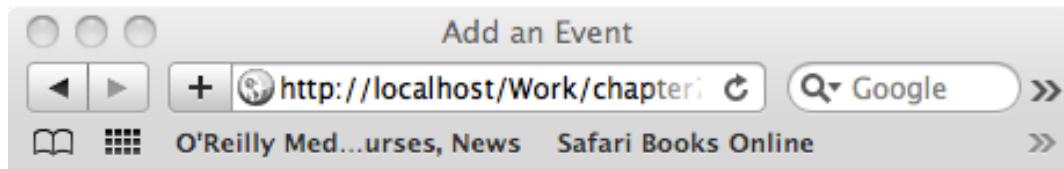
failed  
have  
mom  
phydo  
phytoplasm  
pop  
vallos  
you  
zygorg



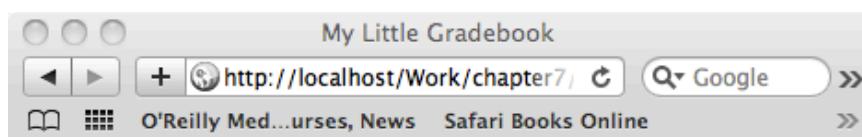
Use this form to add an event:

Event Name:

Event Days:  Sun  Mon  Tue  Wed  Thu  Fri  Sat



You want to add an event called **Training Seminar** which takes place on:  
Monday  
Tuesday



Origionally the array looks like this:

Richard: 95  
Sherwood: 82  
Toni: 98  
Franz: 87  
Melissa: 75  
Roddy: 85

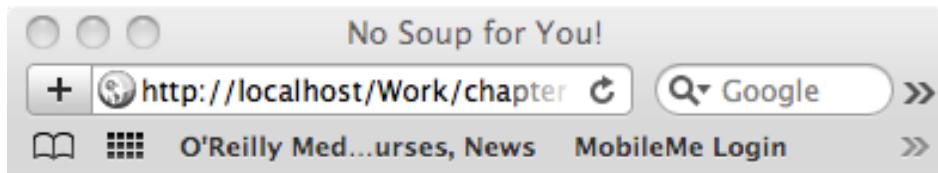
After sorting the array by value using `arsort()`, the array looks like this:

Toni: 98  
Richard: 95  
Franz: 87  
Roddy: 85  
Sherwood: 82  
Melissa: 75

After sorting the array by key using `ksort()`, the array looks like this:

Franz: 87  
Melissa: 75  
Richard: 95  
Roddy: 85  
Sherwood: 82  
Toni: 98





# Mmm...soups

Monday: Clam Chowder

Tuesday: White Chicken Chili

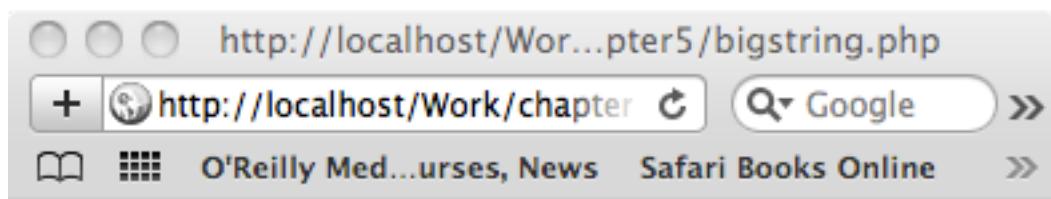
Wednesday: Vegetarian

Thursday: Chicken Noodle

Friday: Tomato

Saturday: Cream of Broccoli

After I was almost through chapter 7, the book said: “By the way, these next few sections will call on your understanding of chapter 5.” I spent the next part of the day working on chapter 5. It was on strings, another type of variable that assigns a name to a character string. One example is `$_name="Wyatt McAllister,"` or `$_password="afhasdkflhasd333838838."` I just learned about how these work and the functions which go with them. I wrote these things:



Hello World

A screenshot of a web browser window titled "Forum Posting". The address bar shows the URL "http://localhost/Work/chapter5/bigstring.php".

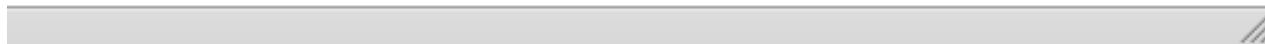
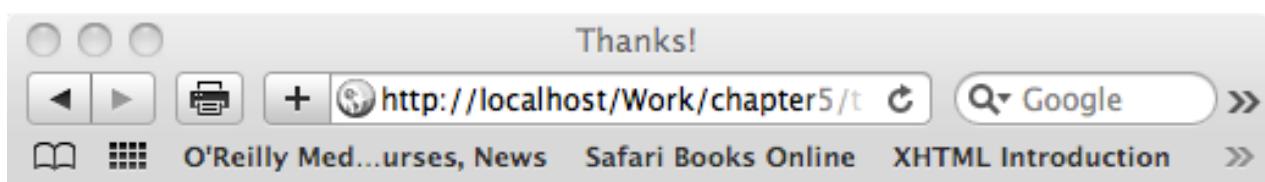
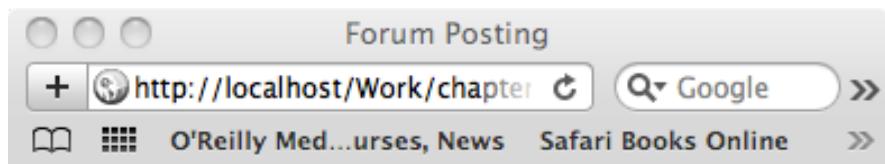
Please complete this form to submit your posting:

First Name:

Last Name:

Email Address:

Posting:



After I finished chapter 5, I went back and did the rest of chapter 7. I just decided to include the scripts from that part of the chapter in this journal for simplicities sake.

Before I left the office, Eder checked in with me to see if I was understanding everything. I told him that I understood everything in the book, I just did not understand some of the syntax that was involved in writing the script, syntax that the book did not explain. Syntax is just a word for how things are written. Improper syntax in English would be "Wyatt mcallister" instead of "Wyatt McAllister." Anyway, he realized that I did not know HTML, the language that PHP works with to create webpages and that the book assumed basic knowledge of the subject. HTML is just a layout language, meaning that it only tells the computer where everything goes on the page and what to put in each slot. Consequently, it is very easy to learn since there is no function syntax involved. Eder just gave me some reading to do at home. He said that the next day, after I had read over the material, he could explain HTML in 15 minutes.

I did not finish chapter 7 at the office. I went home and finished it, along with reading the introduction to HTML that Eder gave me. I stayed until 10:00 finishing all the material. Yet, I believe this was necessary since I was taking to much time learning the material and I thought I might not have time to do my project. I was right in this assumption, I had to stay late on the last day to get my project completed. If I had not stayed up late that night, I would not have finished in time.

Here is the tutorial I used:

The screenshot shows a Mac OS X desktop with a Safari browser window open. The title bar of the browser says "HTML Tutorial". The address bar shows the URL "http://www.w3schools.com/html/default.asp". The browser's menu bar includes "File", "Edit", "View", "Script", "Search", "Bookmarks", "History", "Safari Books Online", "XHTML Introduction", "MobileMe Login", "PowerSchool...rent Logon", and "Help". Below the browser window, the desktop background features a green and white abstract design.

The w3schools.com website is displayed. The header includes the logo "w3schools.com" and a search bar. The main navigation menu has links for "HOME", "HTML", "CSS", "XML", "JAVASCRIPT", "ASP", "PHP", "SQL", and "MORE...". On the left sidebar, there's a section titled "YOUR FREE WEBSITE" with links to "Free Flash Website", "Free Website Builder", and "Free Web Design". The main content area is titled "HTML Tutorial" and contains the following text:  
Are You A Webmaster? Discover The New Program Every Webmaster Needs to Join - It's Free  
IT Degree with CompTIA A+ Affordable Online IT Degree with 8 Certs Including CompTIA A+  
Boston University CFP Edu Live-Virtual Class Starts Jan 4th. Triple Savings of \$1875. Act Now  
With HTML you can create your own Web site.  
This tutorial teaches you everything about HTML.  
HTML is easy to learn - You will enjoy it.

Now for my challenges: My first challenge was getting my web browser to display documents. Last night, after I finished my journal, I had tried to open my PHP documents on my computer. They would not open. So I had to download programs and try to install things. It failed but after Colby used terminal to fix the problem, I was up and running.

My next challenge was that the scripts I was writing became more complicated and used more material. Since I had not, memorized everything, I had to copy many things because I did not want to look up everything again. This meant copying large strings of code and it was hard. I kept making mistakes and my files would not load properly. I soon found that a woman in the office named Carolyn is an expert debugger. Whenever I had a bug I could not get rid of, I took it to her. She scanned my document in thirty-seconds and found all the bugs. Needless to say, she had memorized all the syntax.

My biggest challenge was having to do chapter 5. For chapter five the book made me write programs that went together. In other words, two separate programs that I wrote worked at the same time to produce the end result. This was hard because I needed to get the programs to link up. I had to visit Carolyn a lot.

Another big challenge is that I had not come into learning the book with the appropriate skills. PHP is based off of HTML. The book and Drane Associates, assumed that I had a basic understanding of HTML before coming into the program. Throughout the book I had been typing the HTML code, which was not explained in the description of the code I was writing, as it appeared, thinking that it was just part of the language and needed no explanation. This was not a huge problem, since I understood everything in the book, it just meant that I needed to quickly read up on HTML and understand what all the symbols meant. After I did the reading on HTML, I could understand the syntax in the book.

The last challenge was that I was running out of time to do my project. Yet, after I decided to stay up late doing all the work on my own computer, I bought enough time for two full days on my project. I am sure that will be enough.

Now on to my successes: The first success of the day was that Eder gave me a small tutorial on strings and how they went together with arrays. This was the first full one on one tutorial I had gotten and it was great. It made me understand the material better and I made connections as I went through the material that I would not have made without the tutorial. Eder is a good teacher and knows some of the intermediate steps you have to go through to learn PHP, so he has stepped in when necessary to give me usefully one to one info throughout the week.

My general success was that I learned a ton today. I learned all about PHP, wrote some basic applications and webpages, and figured out some HTML code. I did a great job and I think that with just a small amount of work I will be ready to do my project. I will be starting tomorrow.

Project Name: Dumela Service Project  
Name: Wyatt McAllister  
Advisor: David Heroy  
Date: 12/2/2010

## Journal-Day 3

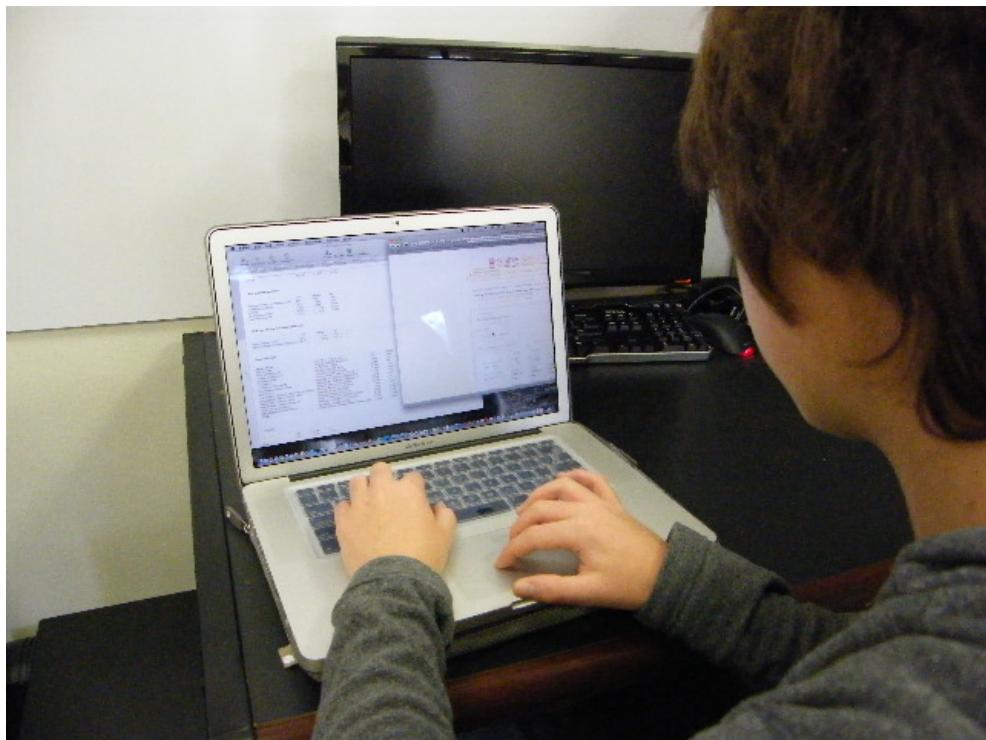
Today was another long day. It started with this:



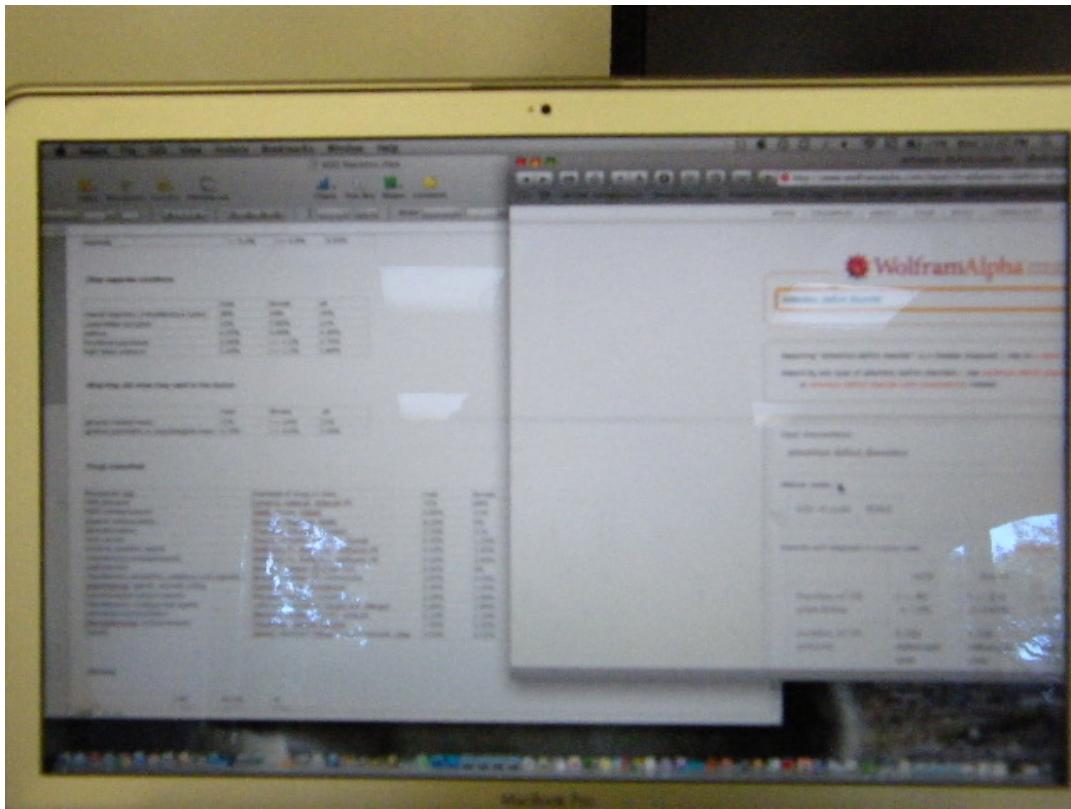
A medium double chocolate Frappuccino with whipped cream and a shot of espresso, from StarBucks. I was really tired after staying up so late. The first thing I did was to create the home page for my website by loading the HTML template and changing it around to look how I wanted. I just changed the code and then viewed it in my web browser to see how it had changed. I also used my PHP skills from earlier in the week. Here is me editing my website:



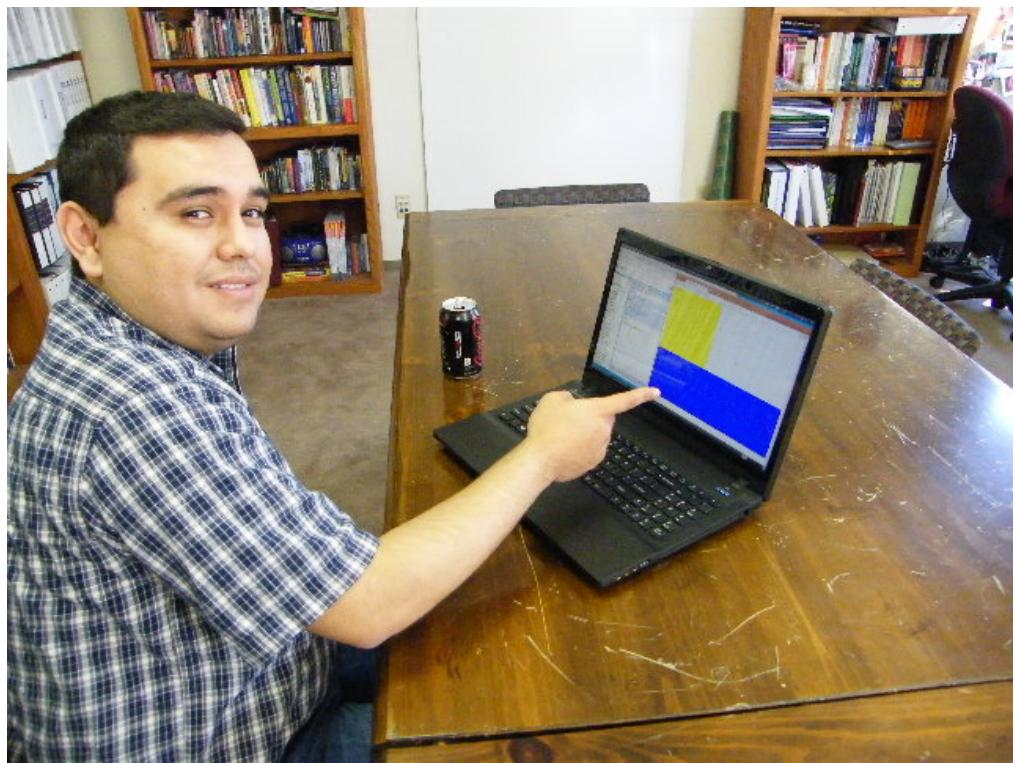
After I had done that, I had an idea of how my website was going to look. I took a break and got some of the pictures I needed for this portfolio. I then went into the WolframAlpha site and put all the data into tables on a spreadsheet. This is me doing that:



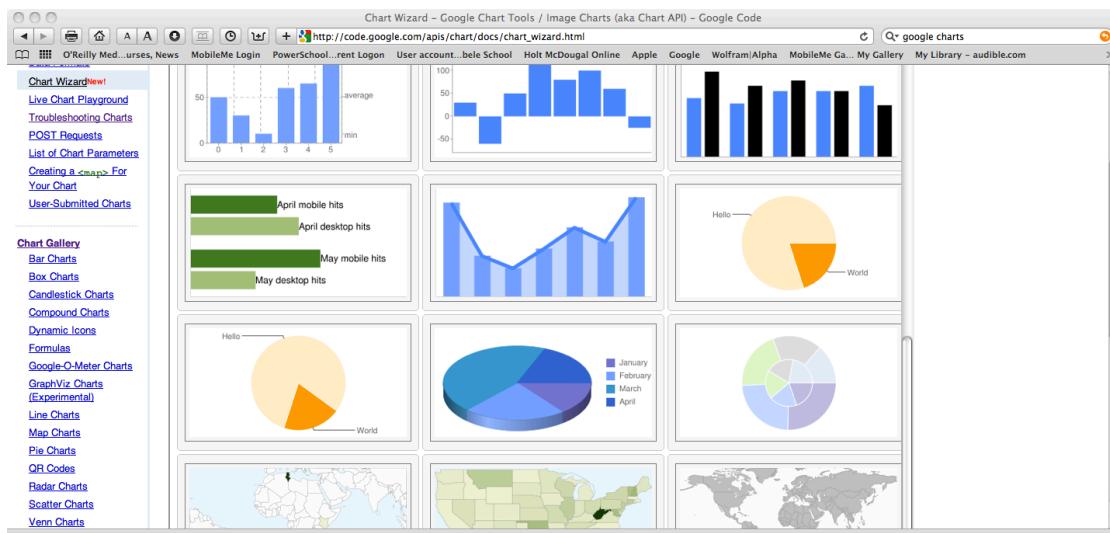
Here is the screen in the picture up close:



Afterward, I talked to Eder about how I was going to represent my data and what I should do next. He said that I should use graphs, as there were many good graph templates. Also, more complicated representations would not be feasible for the timeframe of this project. He told me to figure out which data needed its own graph, what type of graph it should have, and what data deserved higher quality graph because it was more important. I then got a tutorial from Eder about how to use HTML which helped me finish learning the syntax of the scripts I had been writing throughout the week:



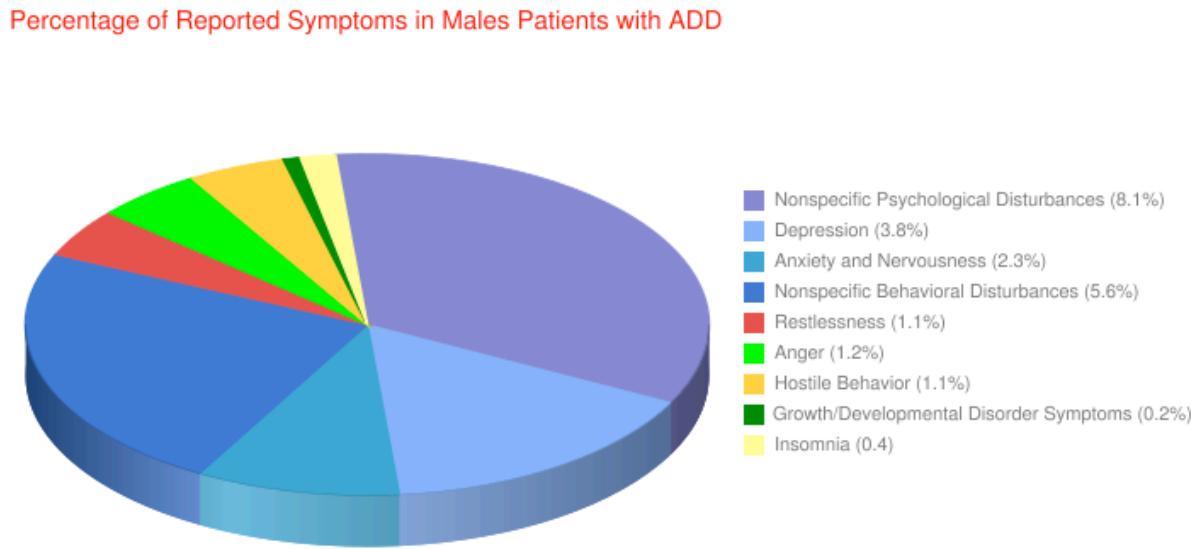
I spent the next part of the day looking at chart ideas on Google:



Then, after eating lunch, I started using a graphing program that Eder found on Google. It is called GoogleCharts and it uses a Graphical User Interface (a program that looks pretty that users can use to communicate with the computer) to help you create graphs. You would tell it what to do and then it would output an image file and some code that you could put into the code of a website to access the image file on Google. While Eder went out to lunch I started to make the graphs on Google:

The screenshot shows the 'Image Chart Editor' BETA version of the Google Chart Wizard. On the left, there's a sidebar with links for 'Using Charts' (Getting Started, Data Formats, Chart Wizard), 'Chart Gallery' (Bar Charts, Box Charts, Candlestick Charts, Compound Charts, Dynamic Icons, Formulas, Google-O-Meter Charts, GraphViz Charts (Experimental), Line Charts, Map Charts, Pie Charts, QR Codes, Radar Charts), and 'Google Code' links. The main area has tabs for 'Start', 'Editor' (which is active), and 'Gallery'. In the 'Editor' tab, there are sections for 'Orientation (angle in radians)', 'Title' (Text: 'Jar', Color: black, Font size: 11.5), 'Size' (Width: 300, Height: 150), and 'Data' (Encoding: Simple, Data set 1 (January) with a size of 45). A preview window on the right shows a 3D pie chart with four segments labeled 'Jar', 'Felt', 'Ma', and 'Apr'. Below the preview are links for 'Paste link in email or IM' (with a URL), 'Paste HTML to embed in website' (with code), and a detailed URL for the chart.

I soon found out that the UI (User Interface) of the program was horrible. Yet, since Eder was out to lunch and Colby had not used the program I had no choice but to keep going and do the best I could. I finished many of my graphs and by the time Eder got back, I had many of them done. The finished product looked something like this:



When Eder got back, he and Colby talked and decided it was not a good idea for me to use the Google, program, for reasons I will tell you later. I was very unhappy that I had wasted so much of my time on GoogleCharts. The program I was now going to use was called PChart. Eder gave me the files I needed and started to tell me how to use it. PChart gives you code for different graphs and then you just fill in you data into the appropriate spot in the code. He told me to play around with PChart after I went home

and see what I could do with it. PChart does have some drawbacks, which was why Eder first had me using GoogleCharts. Eder also told me to get all the text edited for my website when I went home.

After talking to Eder, I left the office, drove home, edited and finalized all my text, played with PChart, did my journal and went to sleep.

Here are some of my challenges: The first big challenge I had today was that I had to put the data from WolframAlpha into a spreadsheet so I could access it easily. The WolframAlpha data was an image so I could not copy it as text. I clicked on the "show copyable text" button and I got copyable text, yet it was not organized in a table. It was just listed. I had to copy every individual cell in the three page data sheet on WolframAlpha into a spreadsheet. It took a long time and it made me go insane.

My second challenge today was that I needed to get some pictures for my portfolio of me and other people doing things. Everyone was busy so I had to work hard to get the pictures and it distracted me throughout the day.

My third biggest challenge was that I had to find a representation for all my data. It was hard because I needed the data to be represented in a fun, simple and easy way for the user. I am learning that in programming, the harder it is for you to do, the easier it is for the user to do. It took me awhile to find a good type of graph and/or chart for the data. I ended up having to make multiple charts for one table of data and this I knew would be time consuming. I had to think about problems like: "Is this data more like a part of a whole or more like an amount of a certain thing or is it an amount of a certain thing related to other things?" Each of these three representations required a different graph, the first was a pie chart, the second a bar graph and the third a double bar graph (a bar graph with two bars for each thing you want to represent). I also had to find out what data was more important than other data so I could accentuate it for the user.

Another big challenge today was writing the graphs of the data. Eder and Colby chose a program template for me to do this. There are two such feasible templates available at this time. One is called PChart and it is just a coded template of a graph. In other words, it gives you the code for the graph and you edit it to personalize your graph the way you want it. This one sounded great except for the fact that the pie chart (the representation I was primarily using to represent my data) had a bug in it. The percentage that you put in the code for each element on the pie chart was not what showed up in the browser. It used an obscure function where you put in a seemingly unrelated number and it output a percentage. Neither Eder nor Colby could figure out the function so they had me use GoogleCharts, a beta program with Google that creates HTML charts. A beta program is just a program that has not been finalized, but is in testing for people to use.

GoogleCharts is a web application that I viewed in my browser that was entirely graphical, in other words it did not require editing code. I would create the chart by inputting numbers into slots like "width" and it would output a link to an image file on Google Images and some basic code that called up the image file on Google. I was not able to run it successfully in my browser, which is Safari. Eder went out to lunch and Colby did not know how to work the program since Eder was the one that learned to use it. I spent a long time painstakingly making the graphs in the Google application. I could not scroll to a different part of the window without the Google application changing the data I had inputted. It had a glitch where scrolling in Safari made the values change, up

scrolling was a higher number and down scrolling was a lower number. I finally figured out that the beta program was designed for Google's browser, which is Google Crome. Yet, by then I had already spent a long time using the GoogleCharts application.

Eder came back and he decided that the Google application was not feasible for a few reasons: One was that it was not a good program and would take too long to work. Another was that it outputted image files and the point of my project was to learn to use PHP and HTML, not images. Finally, it outputted code that went through Google. My page would depend on another site to work and since this was a beta program, it might not be supported by Google in the future. Parts of my page might disappear. I wasted lots of time on the program because I will now have to rewrite all the graphs I had written on GoogleCharts onto PChart. I was really sad. Yet, Eder said that I had pretty much all the data and templates I needed. All I had to do the next day was put things into place. I just had to put the data into the graph templates in PChart and the text and graph templates into the website templates.

I created and edited all my text when I went home which was also a challenge. I wrote an introduction to ADD with general information. ADD does not have definitive information or definitions, only studies, since we don't completely understand the brain. Because of this, I had to write basic information (there was not definitive complex information) and logically explain it. I also had to write it in a non opinionated way. This was hard for me since I have had to deal with ADD in my life and I have passionate opinions about it. I was able to get it right with the help of my parents and it worked out well.

Now for my successes. The first was that I created a great homepage for my website early in the day. I looked at the template and thought: "Wow, I don't understand this! I can't remember all the functions!" I learned from Eder later in the day that programming is becoming less and less about memorizing and more and more about understanding and creativity. There are thousands of templates for websites, graphical representation programs and just about anything else you would want to put in a website. All you have to do is be creative and use the code in interesting ways. If you do this, you will do great.

I programmed the webpage really well after an introduction from Colby on how to use the template. It looked great and I topped it off with a picture of a kid who had ADD screaming out of the webpage. This was the first image that came up on GoogleImages when I searched for "Attention Deficit Disorder."

Another success was that I got a great tutorial from Eder on how to use HTML near lunchtime. It was really cool and I learned how to use the basic features of the language. HTML, unlike PHP is a layout language. It is much more based off of English and it is not hard to understand. The tags (things that you put data inside of) are just abbreviations for "list," "table," "header," "footer," "body," "title" and things like that. This makes the language easy to use.

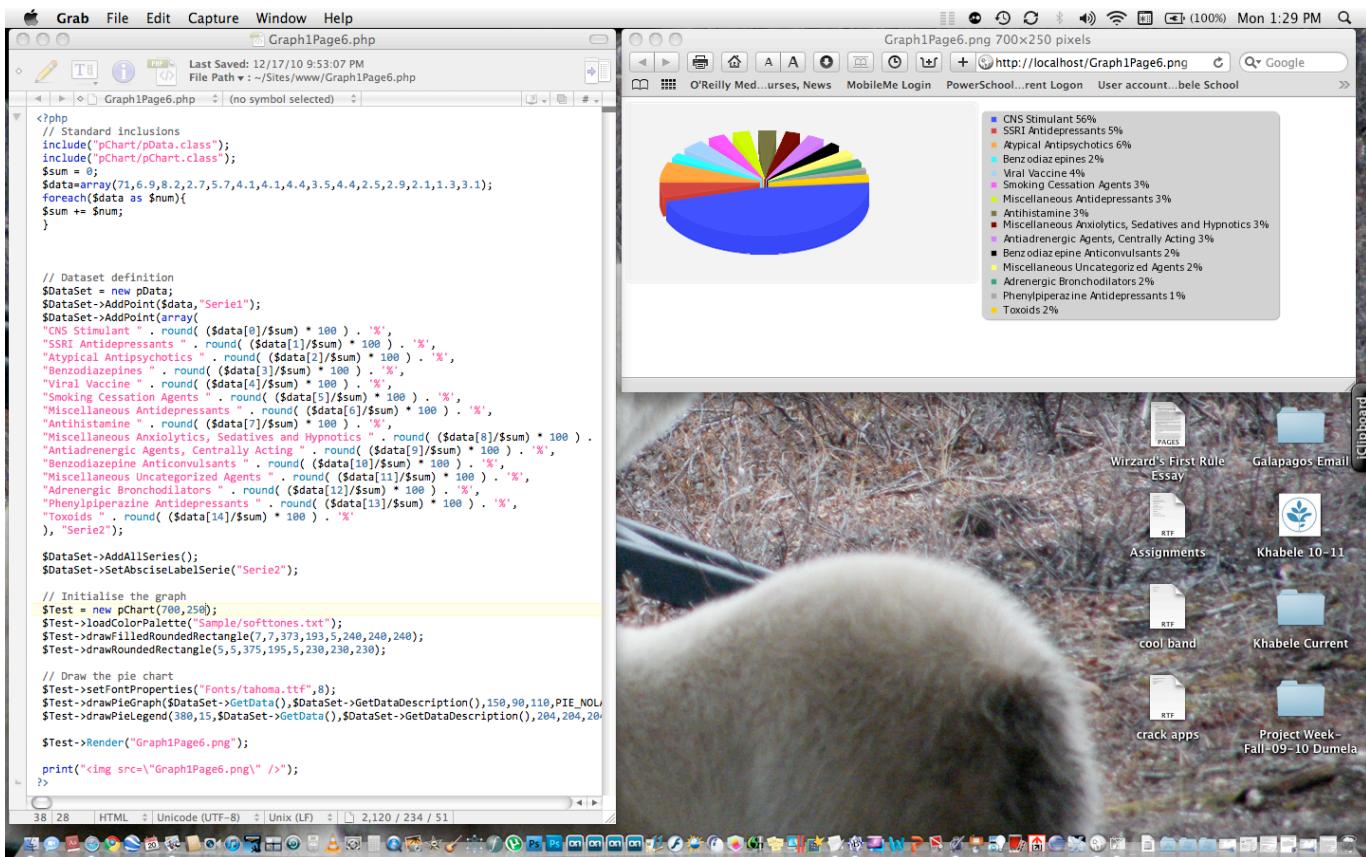
A general success is that I accomplished a ton today: I got all my data saved and edited so all I need to do tomorrow is put it together. I learned more things about programming. I got to try out a cool beta program even though it did not work out. I got a ton of stuff done!

Project Name: Dumela Service Project  
 Name: Wyatt McAllister  
 Advisor: David Heroy  
 Date: 12/2/2010

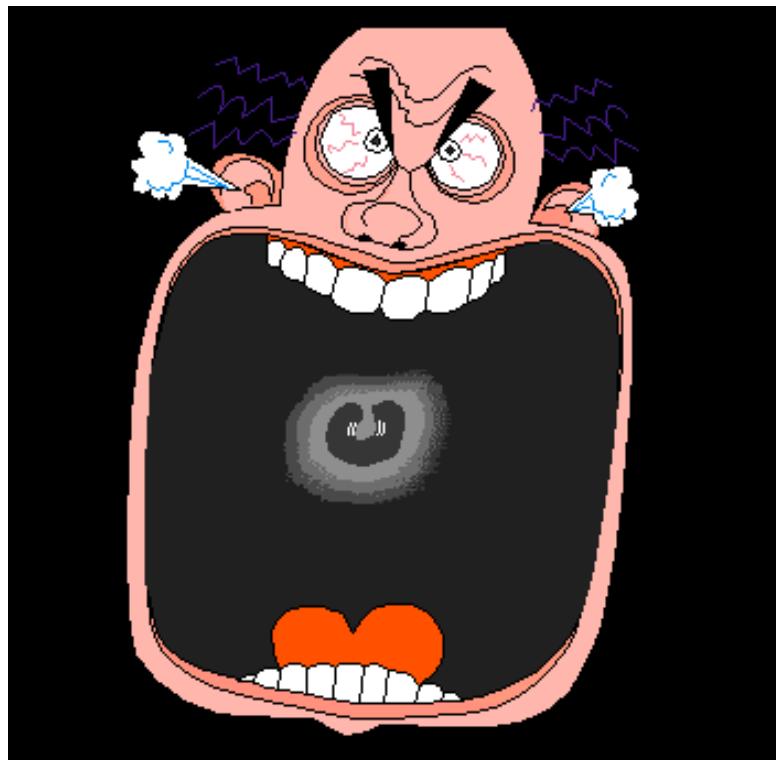
## Journal-Day 4

Today was *another* long day. At least it was the last one I had to have for a while. I got to the office at 9:00, with another Frappuccino in hand since I stayed up late again editing all my text. I started to play around with the graph templates a little more to get a feel for how to work PCart. I talked to Colby about the graphs and how I wanted to change them. When Eder got in at about 9:20, we worked together to change around the graph templates to look how I wanted them to look. There were two types of templates, bar graphs and pie charts, and each required different edits. There were several things I wanted to do to them to get them to represent my data in the best way possible. I will discuss these more later in the journal, as these were challenges for me.

After I had a preliminary edit of the templates, I went and put my data into the graphs. I ran into some unforeseen problems and had to edit the templates again. After I had the templates done, it was a simple matter to put the data in the slots in the code. I had not foreseen that I would have to edit the templates so much, and it was very time consuming. Most of my day today went like this:

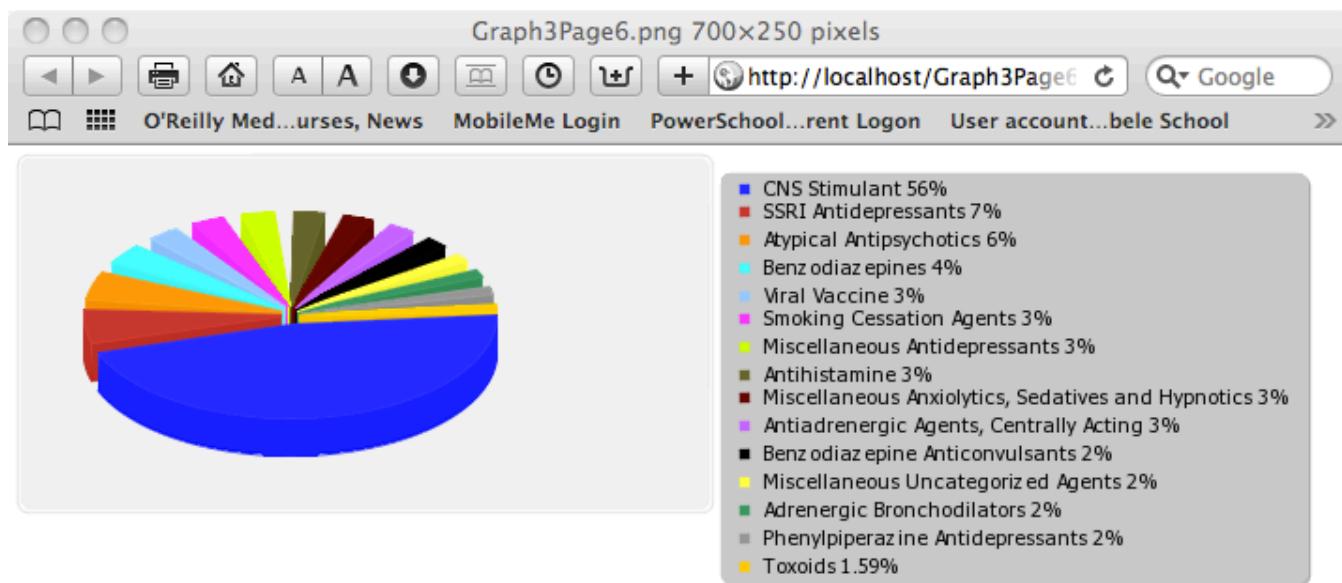


Editing the templates could sometimes be infuriating:



After I had finished all of my graphs, I went through them and tweaked some of them so that the data would be displayed best for each specific graph. I would sometimes change the size of the graph to best represent the data. I would also sometimes change the colors around so that the graph would be pleasing to the eye.

One finalized graph that I am very proud of looked like this:



After I finished and finalized all of my graphs, I finalized my homepage for my website. I finished tweaking the page to look like I wanted it to look. Then, I started putting things in my webpages. I made a sidebar with all the categories of statistics and linked a new page to each one. I put the title in each webpage, put in the graphs and then put a description of each graph above it. I put in a link to the description of ADD that I wrote and a link to the spread sheet that contained all my data so people could easily use my website for research. While I was doing this I realized that I was not going to finish by 4:10 so I called my mom and got her to pick me up at quarter to six.

One interesting thing about my webpage is that the way the code for the graphs works is that they generate an image when run in a browser. This means that every time you look at my webpage, it shows images that the graph codes have generated.

After I finished the pages for my website, I took them to Eder and we finalized them. Some of the graphs were not displaying correctly so we gave them a white background. We made it so that the big title which said: "Current statistics for Attention Deficit Disorder as of December 2010" and was above the title for each individual page, would link back to the homepage. We also tweaked the dimensions of the page so that it would look good and not switch sizes from page to page. Finally we renamed all my files so that they would be recognized by any server.

After we finalized the webpages I got more pictures for my portfolio and got Eder to make my web browser show errors in the code it displayed. Finally, we posted my site on Dumela so everyone at Khabele would be able to access it. I got pictures of everyone in the Office:



Eder, my teacher and mentor



Colby, my other teacher and mentor



Sarah, the secretary of Drane  
Associates and the person working  
next to me. She is a good  
photographer and took all the  
pictures I needed that had me in  
them.



Ron, one of the people working on  
the technical side of Drane  
Associates.



Matt, another technical person at Drane. He would sometimes help me with my project when Eder and Colby were both busy.

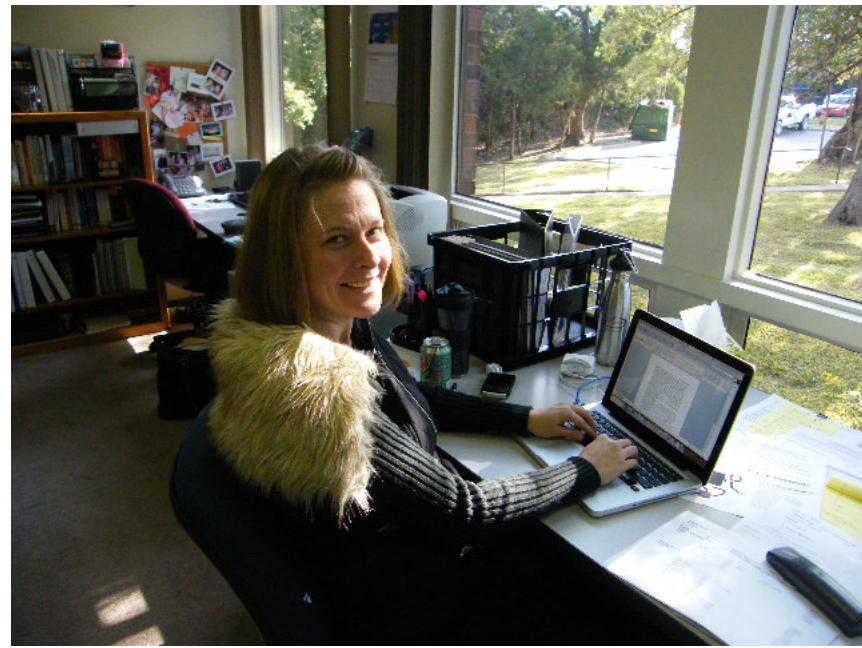


Erin, someone working at Drane who I did not talk to very much.



Doug (Left), the manager of Drane Associates whose last name is Drane.

Kent (right), another person at Drane that I did not talk to a lot.



Tanna, another person working at Drain who I did not talk to much.

Here is our group photo:



Here is the one where Tanna took the picture.



Here is the one where Kent took the picture.

Finally, after a discussion with Eder and Colby about how I can continue to use my programming skills later in my life, I went home, contented that I had successfully completed a great project week.

Now for my challenges: My first challenge was getting PChart to display my data in the way I wanted it to. I displayed my data in two main ways: One, 3D pie charts which showed percentages of different things in a group. Two, bar graphs which showed the amount of something. I also used triple bar graphs which showed groups of people: "male, female and all" who had ADD that did certain things. I would have the amounts of each group in one category, these bars would be put together and then I would have another group of three bars for a different category, all in one graph. All of these templates needed different adjustments.

The PChart templates were not very good. They had a ton of glitches that I had to edit out. I spent most of the day rewriting the templates to suit my needs. I made the x-axes of the bar graph start at 0 and not 1. I made the pie and bar graphs show brighter and more interesting colors that I set manually. I made the pie charts show the percentages of each pie on the key and not next to the piece of the pie since some pieces were too small for the later to work. I used a 3D pie graph as opposed to a basic one and I needed to rewrite some of my data in this format. I also made it so that the key in the pie charts was outside the graph area so that it would not obscure my graph. I had to make it a different color and change the size of the file so that the key could fit long data, such as some drug names which were very long. I also had to make the labels of the axes on the triple bar graphs say things like: "pregnant," "not pregnant," and "unknown" and not "1," "2" and "3."

Another challenge was that I spent some time finalizing my text because of a change in my data I needed to make. Most of the percentages in my data did not add up to 100. I needed to show a relative scale. I realized that the way the pie chart in PChart worked is that it added all the values you put for the percentages of the pie up and took them out of 100 so that values that did not take up 100% would be reformatted so that they would. This function was the reason we had used Google Charts first and wasted all that time. I wish we had figured it out sooner. I had written some of my text to say that the values were not out of 100% and I needed to rewrite the text so that the values being out of 100% would make sense. If I had not done this I would have had to make a separate section of my pie charts that said: "all other \_\_," so that it would add up to 100%. This would not have looked good. I had to rewrite some of my text and I made some mistakes. I did not realize this until I had left the office. I just found the mistakes and emailed Eder and Colby to fix them on the Dumela server. They did. I ended up doing this a lot as I continued to edit my website throughout the break.

One big challenge was that I realized that the template I was using for my webpage was not written in the best type of layout mode. It did not give me all the editing capabilities I wanted. I solved the problem by making all my webpages really wide and then everything fell into place and looked good. I didn't have to rewrite the templates in the best code.

Now for my successes: First, I got Eder to help me get my browser to show me where the errors in the PHP code were. It was kind of silly because this would have saved me a ton of time looking through my code throughout the week for poor syntax, or bugs. At least I was will be able to have it for future reference.

My general successes were great. I got all my data entered and made my webpage. It looks great and I have a skill that can last a lifetime. With my PhotoShop and PHP and HTML skill, I can create great webpages in five minutes. This will help me throughout my life and could even help get me into a good college.

Project Name: Dumela Service Project  
Name: Wyatt McAllister  
Advisor: David Heroy  
Date: 12/2/2010

## Final Essay

My project was a huge success. I had a great time doing it, which made me happy. I made a great product that is relevant to me and the community. I learned useful skills which will help me in life. My project week fulfilled all the requirements and it was wonderful.

I had a great time during my project week. I did something I was interested in. I love computers. I love being with people who share my interests. I love learning about ADD because I have it and it makes me understand myself better. I got to do tons of things that I loved during this project week. This project week also kept me occupied. My biggest fear is to sit around in a room with nothing to do. I often stay up late thinking about things rather than go to sleep and do nothing. I am a work horse. I overdo all of my assignments to make them perfect. This project week had me working up to fifteen hours a day and it was fun. It was tiring, but it was still fun. I also got to work with people who I liked. Colby and Eder, and everybody else at Drane Associates shared my interest in computers. They were all really kind to me and willing to share what they knew. Eder was a great teacher and fun to be around. Colby was a great organizer and knew what I needed to do to complete a successful project. They both helped me a lot.

After my project week was over, I had made a great product. ADD is relevant to my life, and to every body else at Khabele as well. I struggled with ADD for a long time

when I was younger. I did not learn anything in school until the fist semester of fifth grade. I could not sit still for more than three-seconds. I would just go to school and the teachers would have to make me leave the room because I could not pay attention. I had to go and get Neurofeedback (see my website under the description of ADD for a definition) and get drugs so I could get over my ADD. I learned a lot about ADD while getting treatment and doing this website helped me to make sense of this. I know that many people at Khabele have ADD. This website will be a great resource for them and I hope they will use it and get something out of it. I believe the Khabele community as a whole could also benefit from education about ADD so that the people who do not have ADD can interact better with the people who have it and vice versa. Finally, all my data is true and non opinionated. I used a relevant source that pulled data from people who had been proven to have ADD. I also wrote up proven facts in my description, with the only opinions being those commonly accepted by the public as to why and how to treat people with ADD. I was able to produce a great product based upon proven fact alone.

During this project, I learned great skills that will help me throughout life. The world is becoming more computer based all the time. Everything is moving to computers: communication, news, recreation, travel, preparation of food and so much more. Having programming skills will allow me to create some of the stimulus people receive rather than just receive it myself. I will no longer be a bystander to technology. I can use technology to express myself at a whole new level, with much more room for edit ability than other people who only have programs which other people make. I can use these skills at school by using web based applications to do projects and express myself to the community. I can use my PHP and HTML skills to create applications that

will allow me to database information and coordinate people. I can create websites for clubs that I enter. I can create applications that will allow me to communicate with people in my group. For example: I could create an application where people could post tasks for others in a group doing a project together. People could check off these tasks and save their document when they were finished with the tasks. The document could be edited with everyone in the group without anyone having to come face to face. The final product could then be saved to the server for easy access if someone was sick. This would be amazing for my group and we might get the highest grade in the class. I could create this in a few hours with my programming skills. These skills can also get me into college. I can create a website in five minutes and start posting successful projects from school and videos from my life. If this web portfolio was good enough, it could get me into college. In general, the skills I have learned can help me express myself to the world around me using the internet. I will be able to do things that can't be done without programming skills.

A project needs three things to be successful: One, it needs to be something that interests you and makes you happy, which mine was. Two, it needs to produce a great product which is relevant to your life and the community around you, which mine also did. Three, it needs to teach you skills that will help you throughout life, which mine taught me. To be good, a project week has to accomplish something. My project week accomplished many things. This project week was a huge success, and I loved it.