

CMPSCI 120 Homework 6

This homework is due in hard copy (paper), at the beginning of class on Thursday, November 8. No emailed submissions will be accepted.

Furthermore, please ensure your first and last names are written on your homework. Please write neatly or type your homework; illegible solutions will not receive any credit. Please staple all pages together. Points may be deducted for not following these rules.

1. Create a webpage called `hw6.html` in your `public.html` directory. Add the four essential tags. Have the title of the webpage (in the `<title>` tag) be “CMPSCI 120 Homework 6.”

Put an image on this webpage. This image can come from anywhere; it can be your own image you’ve created; a photograph you’ve taken and uploaded, or a piece of artwork you’ve found online. If you do not own the copyright to the image (if you didn’t create it yourself), then you should follow the copyright laws and/or Terms of Use for that image. For example, if you can’t find anything specific on the website that says you may use their images, then *you cannot copy them!* Some sites put no restrictions on their clip art, others say it can only be used on personal websites, not commercial ones; some want a link back to their homepage from the page where you use their art. Whatever the rules are, you should follow them for this assignment, all future assignments, and the final project.

The image should be stored on the OIT webadmin server (no linking to images elsewhere). You will likely need to use SFTP software to transfer the image to your `public.html` directory.

On the paper on which you write the rest of this homework, for this question, simply write down the URL of this webpage you created.

2. For this question, you will conduct a number of web searches. For each search, write down all the search engines and queries you use, up to a maximum of four queries for each question. If you need more than four queries to find what you’re looking for (which is fine), just write down the first two and the last two (so the very last one should be the query that found what you wanted). Also write down the URL(s) of the final webpage(s) where you found the answer to the question(s).

For these questions, use a number of different search engines and/or meta-search engines and keep track of which ones work better for which queries. *Do not use Google for everything. At least try another one like Yahoo! Search (search.yahoo.com), Windows Live Search (www.live.com), or another search engine other than Google, so that you’ll have something to discuss in question 3.*

- (a) Search the web to answer this question: “Who was the first U.S. President to live in the White House?”
- (b) The prefixes in the names of the months of September, October, November, and December come from the numbers seven, eight, nine, and ten, yet these months are the ninth, tenth, eleventh and twelfth months of the year. Investigate this. Look for a webpage or webpages that describe this numerical inconsistency and why it is.
- (c) Search the web for people who have the same name as you. Is there anyone with the exact same name as you, or an extremely similar name? Describe what you find.

3. You have found a cooking website that has a number of webpages with recipes. Assume that this is a very small website and only contains five recipes at the moment. Below are summaries of each of the recipes:

- Recipe A: Beef stew. Ingredients include beef, carrots, and potatoes.
- Recipe B: Potato salad. Ingredients include potatoes, carrots, and mayonnaise.
- Recipe C: Egg salad. Ingredients include eggs, mayonnaise, salt, and pepper.
- Recipe D: Baked potato. Ingredients include potatoes, salt, pepper, and sour cream.
- Recipe E: Carrot slaw. Ingredients include carrots, mayonnaise, salt, and raisins.

This website contains a search engine for the recipes that supports Boolean queries (queries where you can use **AND**, **OR**, and **NOT**) to specify what you're looking for.

- (a) What recipes would be returned if you searched for **(potatoes AND carrots) OR mayonnaise**? (You can just give the recipe letters.)
- (b) What recipes would be returned if you searched for **potatoes AND (carrots OR mayonnaise)**?
- (c) Now assume that the website has been updated with many more recipes. What query would you use to return all the recipes that use **salt** but not **pepper**?

Remember that the **OR** used in search engines is usually an “inclusive **OR**.” This means that when you search for **Hawaii OR Maui**, you'll get results that contain **Hawaii** or **Maui** or both terms. This is contrasted with “exclusive **OR**” (not usually supported by search engines) that returns results that contain one term or the other, but not both.

4. We discussed in class that because instant messaging was not developed as an original component of the internet, there are no real standards that instant messaging programs have to use. This is why there are so many competing instant messaging programs (AOL Instant Messenger, Yahoo Messenger, MSN Messenger, ICQ, etc) and why (usually) you can only message people using the same service as you.

Think about this issue from both the perspective of the users and the companies that run the instant messaging services. Take a stand: do you think there should be standards created so that different instant messaging services can inter-operate with each other? Why or why not? What are the pros and cons (for both the users and the companies) for creating or not creating these standards? Write (at least) a paragraph on your opinion and views on this.