Week 1: Course Introduction

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Overview

This week we will introduce ourselves and learn a bit about how we start planning the creation of a website.

What's Due

- Introduce Yourself Post (at least one post)
- Web Experiences (two posts)
- Website Planning Exercise
 - o 2 Needs Assessments
 - o 2 Wireframes
 - o 1 Style Tile

Course Introduction

Who am I?

Hello students! My name is Christopher Velez, I will be your instructor for this course. I am a graduate of the University at Albany and have a Bachelor of Arts degree in Information Science (2013) in addition to a Master of Science degree in Information Science (Information Systems & Technology – 2015). Besides that, I have worked as a Computer Systems Programmer for New York State for about 6.5 years. I have also taught CINF 201/362/499 multiple times during that period.

What will we be learning?

This class at its core is a web design/development course. We will be examining and utilizing front-end and back-end technologies to create high quality websites capable of functioning across various devices/platforms. These websites will also be able to utilize databases to input/output data. Specifically, we will work with the following technologies:

- HTML
- CSS
- JavaScript
- PHP
- MySQL

HTML/CSS are the front-end technologies that allow our website to have a look/feel to them. Think of the support beams, walls, wood, paint, and other aesthetics which make up a house. JavaScript is a programming language that gives our website functionality. Think of light switches, air conditioning, and other appliances which add to the comfort and ease-of-use in your home.

The last components we will use are PHP/MySQL. These are the back-end technologies which will allow our website to use databases to store and retrieve information. Think of a house and how it is connected to the energy grid, waterlines, or even sewage lines. You may be able to see them in your house (front-end), but to access them, you will need to go a little deeper (using servers/databases aka the back-end technologies).

The main difference between this course and CINF 201 is that we will be learning responsive web design principles in addition to server-side technologies. The course material will be more involved in terms of programming and the complexity of your website.

How will we learn it?

One of the best ways to learn to build websites is through hands-on activities. Throughout the course of the semester, you will be given tasks to fix or build various components of web pages. In completing these exercises, you will learn best practices for building websites and how to implement them into your work. These tasks aren't designed to be overly strenuous or tedious but will require effort and your active participation for you to succeed.

In addition to weekly exercises, there will be discussion posts to test your course content knowledge and research abilities. Research and discussion allow us to obtain more knowledge through the sharing of new information and debating of existing ideas.

Lastly, we will have a final project consisting of multiple parts due at the end of the semester. The overall project will be for you the build a website based on a topic of your choice. The purpose of this project is to demonstrate the web development/design skills you'll have picked up throughout the course of the semester. Each week, we will learn new things to aid you in the completion of the project, so weekly participation is very important if you want to be able to finish it.

Course Expectations

This course will require a good deal of effort if you want to succeed. Each topic builds upon the previous one and missing work can result in you falling behind quickly. To do well, please try to stay on top of your work and contribute to the class regularly via discussion posts and by submitting assignments on time. All posts and assignments will be done through Blackboard.

Each week on Sunday night, new assignments and potential discussion questions will be released for you to complete by Sunday at midnight. Initial discussion posts should be submitted by Thursday at midnight and response posts will be due the following Sunday at midnight. You can submit assignments whenever you'd like but know that late submissions will lose the ability to be resubmitted for additional credit.

I expect all work to be original and not from previous semesters. If you use online resources, you **must** cite them in your posts or as a comment in your HTML, CSS, etc. A simple link to the resource on your page or in a comment of some sort is enough for the purposes of discussion posts or your web pages.

In return for your effort, I will do my best to respond to your questions/concerns in a timely manner. My general policy is to respond within 24 hours but sometimes life gets in the way of that so please be patient with me. I will try to grade things quickly and provide you with feedback to help you improve. If you feel my feedback is vague or there isn't enough, let me know and I'll try to give you better feedback. Also, if you have concerns, email me at any time or post to the help forum on Blackboard.

Office hours as of right now will be on Monday/Thursdays from 7-8PM. Otherwise, you will need to email me and make an appointment for office hours outside of those times. If you're struggling with the course material, please come to me as soon as possible, I am always willing to help.

Grade Breakdown

35% - Assignments

Each week, there will an assignment or two to complete by the following week. These assignments will be based on the material learned that week or in previous weeks. Make sure you read all materials/look through example code, so you have the best chances at finishing the work.

15% - Discussion Posts

Discussion questions will be provided each week. Your job is to make sure you post quality content, ask helpful questions, and engage with other students in a respectful manner.

50% - Final Project

Your final project is to build a website based on a topic of your choice. This project will be broken up into several parts with each one being worth a different amount. Please see the breakdown below. Details on the Final Project will be released after the first week of class.

Project Proposal – 10% Midterm – 15% Final Project Review – 5% Final Project Submission –20%

Important Grading Policies

I believe that students should be able to learn from their mistakes and improve the quality of their work, but time management is also important. In this course, you are allowed unlimited resubmissions to improve your work and earn up to half of the points lost.

However, this only applies to assignments and certain final project stages if you submit the work by the initially stated deadline. If you submit an assignment late, you will not lose any points but the grade you earn is final (unless there is an extenuating circumstance).

If you feel that you can't submit work on time, please reach out to me at least 48 hours in advance to request an extension. This will allow you to have more time and submit higher quality work. Also, you won't lose the ability to resubmit your work for extra credit.

If the work you submit is on time, but contains a broken link/inaccessible files, I will give you a zero and ask for a resubmission. Please note, the zero is just a temporary placeholder until I receive a new resubmission. Once I get your new work, I'll grade it again, and you can still resubmit it for extra credit (since it was on time).

Make sure to review the syllabus for additional details on late submissions for other items in this course.

Introduce Yourself (One Post)

Due Sunday, January 30th at Midnight

Write a bit about yourself. This will not be checked for grammar or punctuation. Feel free to write as much or as little as you'd like. The more you tell us, the more I and others will know about you as a student. After you've introduced yourself, feel free to respond to other students if you'd like. **Only one initial post is required**, but you can talk to as many people as you want.

Not sure where to start? These can be good things to talk about.

- Who are you?
- Where are you from?
- What are your hobbies?
- What are some of your dreams/fears?
- What motivates you to succeed?
- 3 greatest strengths/weaknesses?
- What teaching styles do you prefer?

To submit your posts, go to Blackboard \rightarrow Course Materials \rightarrow Lecture Notes \rightarrow Week 1. Inside of the Week 1 folder, you will find a link to the "Meet Your Classmates" discussion area. Click the link and either respond to my initial post or create your own thread by clicking "Create Thread." This post is **due by January 30**th at midnight.

Web Experiences (Two Posts)

Initial Post due Thursday, January 27th

Briefly describe your experiences with the web. Specifically, I'd like for you to talk about your experiences online or how much web development knowledge you have. You are not required to answer anything listed, but feel free to use these questions/concepts to guide your post.

- When was the last time you did coding for a website? Are there any projects you're proud of?
- What are your strengths/weaknesses in web development/design?
- Is there anything you'd like to learn from this course?
- Do you think the internet has had a more positive or negative impact on society? Why or why not?
- Have you ever been a victim of cyber bullying or know someone that has been?
- What are some of your favorite or least favorite websites?
- Do you think experiences on the web differ for people from various ethnical backgrounds, genders, or age groups? How so?
- What web-based tools do you like to use?

The initial post is **due Thursday, January 27**th **at midnight**. To submit, go to Blackboard → Course Materials → Lecture Notes for this week's class. There will be a discussion area called "Web Experiences" where you can post your initial post. You can also visit the Discussion Board area directly from the Course Materials folder.

Response Post due Sunday, January 30th

In your response post, compare your experiences to those of another student. Was any of the information presented a shock to you? Or was their experience like yours? Do you share any strengths or weaknesses when it comes to web development/design?

The response post is **due Sunday, January 30th at midnight**. To submit, go to Blackboard → Course Materials → Lecture Notes for this week's class. There will be a discussion area called "Web Experiences" where you can post your response post. You can also visit the Discussion Board area directly from the Course Materials folder. Make sure you are responding directly to another student's post and that it is relevant to what they discussed.

The initial post is worth 1.5pts and the response post is worth .5pt for a total of 2 points. I will be evaluating your posts based on the following criteria:

- Did you meet the post length requirement?
- Was the content posted relevant to the discussion questions?
- Is the content mostly grammatically correct?
- Quality of discussion (new ideas, good suggestions, interesting topic, etc.)

Website Planning

In CINF 201, I went over the planning process for creating websites. Most of you were not in my course or may not have any web development experience at all. Therefore, I think it's important to review those concepts again as a refresher.

Before doing any development on a website in terms of coding, it is important to have a plan or idea of the goals for the website. Thinking about the purpose of a website, its intended audience, the content, and other items will allow us to build a more user-friendly website that draws in people. We will learn a few methods to help streamline the process and get our ideas flowing before we code.

Needs Assessment

It is a good idea to evaluate your website and what it requires to be successful. Normally, you would ask prospective clients about the website so you could gain an understanding of their wants and goals. If it is a preexisting website, you might ask how was it performing before? Where does most of the traffic come from? What features does it have? Are users able to work with them easily? In the case of a new website, there will be other types of questions to answer.

Without this information, you couldn't realistically expect to deliver a product which works for a client. The links below cover types of web development cycles and steps to take before building a website. Skim through the content in the following links to discover useful questions a web developer would ask prior to developing a website.

Reading Links:

- https://paper-leaf.com/insights/steps-to-take-before-designing-a-website/
- https://www.smashingmagazine.com/2018/02/comprehensive-website-planning-guide-part1/
- https://www.signitysolutions.com/blog/web-development-life-cycle/

Some of the most important questions to ask are listed below. This list isn't exhaustive but will serve as a useful starting point for your assignment this week.

- What is the website about?
- Who is the intended audience?
- Why does this website matter?
- What pieces of information are the most important?
- What are the goals for the website?
- What do other websites in this field look like?
- What features will be required?
- How will users primarily access the website?
- What types of colors/fonts will be used?
- How many pages will be needed?
- Do we need to track users and other information?
- How do we measure success in this website?

Wireframes

Wireframes are used to assist with the planning and development of websites, applications, etc. Rather than beginning with coding, a developer might use a wireframe to plan out the different components and how they will interact. These components are typically laid out in black and white with only major headings/links written out in text.

For web development, wireframes are used to provide a visual structure of the website's layout. Wireframes allow us to do this by separating content from styles. We can then focus on content and where it is placed rather than worry about aesthetics like color. This will enable us to figure out what HTML is required for the structure a little more easily.

Wireframes are intended to be basic and shouldn't have a lot of content in them. The goal is to depict what various parts may look like on a page. Navigation menus, blocks of text, headings, etc. may be shown in a wireframe.

Additional Reading

- https://www.webopedia.com/TERM/W/wireframe.html
- https://webdesign.tutsplus.com/articles/a-beginners-guide-to-wireframing--webdesign-7399
- https://www.slideshare.net/folletto/introduction-to-building-wireframes/68-Lets-sketch-Wordpresscom homepage (Only slides 1-28)

Wireframe Examples (Inspiration for Web Planning Exercise)

- https://www.invisionapp.com/inside-design/wireframe-examples/
- https://www.justinmind.com/blog/20-inspiring-web-and-mobile-wireframe-and-prototype-examples/

Wireframe Tools

Wireframes are created by drawing out the structure of the product you intend to build. This can be done on paper, markerboard, online, and even in a local image editor. I've listed some tools that should be a good start if you don't know where to begin. There are many others out there are free or cost money, but the ones below don't require logins for the most part and are capable enough for our purposes.

Online Editors

- https://wireframe.cc/
- https://www.gliffy.com/examples/wireframes

Draw/Print

- http://media.konigi.com/tools/graphpaper/pdf/konigi-wireframe-gray.pdf
- http://gridzzly.com/
- https://sneakpeekit.com/

Image Editors

- https://www.getpaint.net/index.html
- https://www.gimp.org/

Style Tiles

These are used to convey the aesthetics of a website in terms of its look and feel as opposed to the way the content is structured. Unlike wireframes, style tiles are supposed to have colors, varying fonts, logos, patterns, and other parts which help to show potential styles for the website.

Review the following link to understand more about style tiles in general: http://styletil.es/

Style tiles don't have to be done in the format shown in the link. The different visual styles you'd like to apply can be formatted in any way, but a user should be able to understand what you are trying to convey. Style tiles are typically made with an image editor of some sort, but physical materials such as markers and paper can be used as well.

Website Planning Exercise

Due January 30th at Midnight

Look at the list of potential websites below. Think about the kind of content you might find on these types of websites. Based on your thoughts and some light research, your task is to complete a needs assessment and wireframe for 2 of these websites. Additionally, you will select one of the website ideas you choose and create a style tile for it.

- 1. Online store for purchasing fruits/vegetables for delivery
- 2. A legal blog
- 3. A social media website for post cat/dog pictures
- 4. A website for finding jobs
- 5. Financial advice and services website

WATCH THESE VIDEOS BEFORE COMPLETING THE ASSIGNMENT:

I created the two videos below to assist you with the creation of the style tile and wire frames for this week's assignment. If you're having trouble with them, please come see me in office hours and I can do a live demonstration for you.

- https://www.albany.edu/~cv762525/cinf362/videos/Wire-Frames.mp4
- https://www.albany.edu/~cv762525/cinf362/videos/style-tiles.mp4

For the needs assessment, answer some of the questions mentioned in the lecture notes/reading above. Who is the audience for the website? What are the goals? What features would be needed? Etc. About two paragraphs for each assessment is enough. Researching other websites that are similar could be helpful.

Your wireframes should have enough content to convey a clear structure for the page. Think about what would be present on a page for the website you're choosing. Major headings/links should have English words. Otherwise, you can use lines to indicate text.

Wireframe Tips

- Find similar websites for inspiration
- Use https://www.wirify.com/ to see how potential wireframes would look (do not submit wirify screenshots as your wireframes)
- Label your boxes, write an x to signify an image, don't write too much text
- No colors except black, white, or greys
- Explain things as needed in comments or in the wireframe
- Don't worry about perfection, this is mostly a thinking/planning exercise

- **Don't base your wireframe on a website.** Your wireframes should be based on your original ideas for a fake website. Preexisting websites may be used for inspiration, but the wireframes shouldn't be built for them.
- Submit only 1 wireframe for each website for a total of 2 wireframes

For the style tile, I have attached a file to the assignment called "style-tile-template.png" that you can use. You would open it with any image editor and add styles, colors, patterns, etc. as you see fit for your website idea. You don't have to create any logos, but fonts, colors, and adjectives should be used at the very least.

I should receive the following items by Sunday, January 30th at midnight:

- 2 Needs Assessments
- 2 Wireframes (do the websites you chose for the needs assessment)
- 1 Style Tile (choose one of the websites you've done already)

To submit the work for this exercise, visit Blackboard → Course Materials → Lectures Notes for this week's class. You can also go into the "Assignments" folder and the submission area will be titled "Website Planning Exercise." You can submit each file individually or as a zip folder with everything inside of it. I should be able to open your documents to view your written work and images. If you choose to draw your wireframes/style tile, make sure to take pictures and upload them to Blackboard. The work submitted will be evaluated based on the rubric explained below.

Website Planning Rubric – 10pts

- Needs Assessments: 3pts
 - o Each Assessment: 1.5pts
 - Length of writeup: .5pts
 - Quality of writeup: 1pt
- Wireframes: 4pts
 - o Each Wireframe: 2pts
 - Sufficient relevant wireframe content: 1pt
 - Content is understandable: 1pt
- Style Tile: 3pts
 - o Colors included: .5pt
 - o Fonts included: .5pt
 - o Relevant adjectives used: .5pt
 - Overall website vibe/mood/theme conveyed successfully: 1.5pt

Next Week

We will have the first of our "bootcamp" sessions. These are designed to catch you up on the core web technologies used in this course. If you're still familiar with HTML, this next week should be fairly easy for you. If you've never seen HTML before, next week will help get your feet wet so that you can become comfortable with coding HTML.

- https://www.w3schools.com/html/html intro.asp
- https://www.htmldog.com/guides/html/beginner/ (Getting Started/Tags, Attributes, and Elements are good places to start)