

CSCE 102 Study Guide for Test 1

You must bring your id to the test.

Test Format - No Multiple Choice - No True false

On the test, you will solve problems by writing code, answering questions about code that is given, correcting, changing, or filling on the blanks in code. There will also be a few short answer and explanation questions.

What to study:

Your **class notes, the study guide, the lab assignments**, the textbooks, the information on the class web page.

Text book page numbers: Will be updated during review class.

I have also added lots of example codes and tutorial for JavaScript. Download them from my website.

General Information:

- HTML is the standard markup language for creating Web pages.
 - HTML stands for Hyper Text Markup Language
 - HTML describes the structure of Web pages using markup
 - HTML elements are the building blocks of HTML pages
 - HTML elements are represented by tags
 - HTML tags label pieces of content such as "heading", "paragraph", "table", and so on
 - Browsers do not display the HTML tags, but use them to render the content of the page
 - What file extensions can be used to create an HTML document?
- Explain exactly what an element is when you are looking at the code. How is it different from a tag? Know the difference.
- Know the difference in an element name and an attribute name. (if asked for an element name give the element name without any attribute names)

HTML

- What are the two sections of an HTML document?
- What elements can only go in the head?
- What elements can only go in the body?
- What is an empty/void element?
- Name the empty elements that we have discussed. (In which section, can each element be placed?)
- What does the title element do?
- Nesting elements properly
- Be able to use the elements that we have used in class.
- Which elements are inline/phrase elements, which are block-level elements; what is the difference?
- Be able to identify and correct simple errors in the code.
- What is a comment tag?

- How is a comment tag different from other tags? What are the two things that they are used for? What does a comment look like?
- Where can a comment be placed?

Images

- Does an HTML file (filename.html) ever actually contain an image?
- How do you place an image on a web page?
- Be able to write the code.
- Is the image element an empty element?
- Attributes used in the img element. Which of these attributes are required?
- What does the alt attribute do?

Image Maps

- Essential attributes: <map> and <area>
- Use of different shapes
- How to find coordinates

Anchor Element

- What is a hyperlink?
- Creating a hyperlink using the anchor element
- Be able to write the code
- Linking to other files that you have created. (Relative hyperlink)
- When is the path name necessary?
- Creating an image that is a link. Be able to write the code.
- Internal/fragment identifiers
- Target attribute

Lists

- Types, ordered, unordered.
- Be able to write the code to create an ordered/unordered list.
- Be able to write the code to create a nested list (in your notes)

User defined elements

- div (Container element, block level)
- span is in-line but works just like div
- Be able to use them to solve a problem.
- Know how to use them and which one to use

Cascading Style Sheets

- What are Cascading Style Sheets?
- How can we put a comment in CSS?
- What are the three types of CSS and how to use them? (internal/ embedded, external, and local/inline)

- The type that takes precedence and inherits from and overrides the others is the one that is listed last. So if the style element occurs after the link element the internal override the external.
- Internal Style Sheets? What are they? How is the style element used?
- External Style Sheets, how to create? What is the file extension? Using the link element
- Classes creating multiple styles for one type of element
- Using the id selector to create different styles.
- What are properties? How are they used? What is the format to use?
- What are the possible values or types of values for the following properties and what do they do? background-color, color, text-align, font-size, font-style, font-weight, text-decoration, text-transform, text-indent, font-variant, and line-height, border and all other CSS properties covered in class
- Creating local styles. When would a local style be used?
- Be able to look at the code and figure out the exact style using classes, id, local styles (remember the inheritance)
- Using Background images for the entire page
- Positioning background images
- Repeating background images along X-axis and Y-axis

JavaScript

- What type of language is JavaScript? – It is a scripting language used for web development.
- What are the 3 different ways to associate JavaScript into your HTML document? – Usage of script tags (refer lab 5), usage of inline JavaScript statements (refer event handler notes from class), and usage of an external .js file. Usage of .js file is not in scope for Test1.
- Know the syntax so that you can write the code correctly.
- Be able to write the code, to solve a problem, by making a web page interactive using an event handler.
- alert, prompt (built in methods/functions of the windows object) Be able to use to solve a given problem.
- Two types of JavaScript comments (single line and multiple line)
- Giving a value to a property.
 - JS Example 1: `document.body.style.backgroundColor = 'red';`
 - JS Example 2: `document.getElementsByTagName("body").style.backgroundColor='blue';`
 - JS Example 3: `document.getElementById('idNameOfAnyHtmlElement').style.color='green';`
 - JS Example 4: `this.style.backgroundImage=url('/pathtofile/filename.fileextension');`
- Remember the property names are very similar to the ones used in CSS without the hyphen and also the text is written in camel-case. In CSS the same properties will be background-image, background-color, font-size etc.
- Data types - Look in your notes (also Web Design Chapter 2 - DOM)
 - What are the data types?
 - Identifying the data type
 - Changing the data type
- Assignment statements

- Determine how to solve the problems of how to change the presentation of particular parts of the web page after the page has loaded and write the code in JavaScript to do it.
- Concatenation operator (+)
- Be able to write the code to solve the problem.
- Finding and correcting errors in code
- Following the logic in code that is given.

For JavaScript, you must look into the following links:

1. https://www.w3schools.com/js/js_where.asp
2. https://www.w3schools.com/js/js_output.asp
3. https://www.w3schools.com/js/js_syntax.asp
4. https://www.w3schools.com/js/js_statements.asp
5. https://www.w3schools.com/js/js_comments.asp
6. https://www.w3schools.com/js/js_variables.asp
7. https://www.w3schools.com/js/js_operators.asp
8. https://www.w3schools.com/js/js_arithmetic.asp
9. https://www.w3schools.com/js/js_assignment.asp
10. https://www.w3schools.com/js/js_datatypes.asp
11. https://www.w3schools.com/js/js_functions.asp
12. https://www.w3schools.com/js/js_strings.asp