

INFSCI 2560 Web Standards & Technology

Exam 1 Study Guide

This guide is designed to be a list of topics that might appear on the exam. Most (if not all) of the answers to these questions are in the lecture slides or links referenced from the lecture slides.

The exam will cover topics from Week 1 - 7.

1. What is a web standard? What is the role of web standards?
2. What is the difference between the Internet and the World Wide Web?
3. What is HTTP? Know the features of HTTP.
4. What is the client? What is the server? Understand the client-server architecture.
5. Understand the structure and components of a URL.
6. Describe the parts of an HTTP request and response. Know the differences between the various HTTP methods (e.g. GET, POST, PUT) and when each method should be used.
7. What is HTML? Know the HTML syntax. Be able to read HTML code and describe its output. Be able to look at a website and write HTML code that achieves the desired layout. Know the basic anatomy of an HTML document.
8. Know the difference between block and inline elements. Be able to list or identify the different block and inline elements.
9. Know the basic structure tags that are frequently used in HTML code.
10. Know the basic tags for structuring text elements.
11. Review and know how to use all of the tags described in the lecture slides.
12. What is CSS? Know the CSS syntax. Be able to read CSS code and describe what it does. Be able to look at an element on a web page and write CSS code that achieves the desired style and layout. Know the CSS Box model. Know how to position elements using CSS.
13. Review and know the CSS examples described during the lecture.
14. Know how to select specific elements in CSS code. Know how to use combination selectors.
15. What is JavaScript? Know the basic language syntax and structure. Know the language operators (assignment, comparison, arithmetic, etc.)
16. Know how to create and use variables, collections, and functions. What is a callback function? What is an anonymous function? Understand how hoisting works. Know how to write JS conditional statements and loops.
17. Know how to bind events to DOM elements. Know how to use JavaScript to change the behavior of a web page. Know how to write and use event listeners to react to events.

18. What is the DOM? How is it useful? Given an HTML document, know how to generate the DOM tree. Know how to traverse, access and modify DOM elements using JavaScript.
19. Know how to create an HTML form. What are the basic form elements discussed in class? Know the different input types and common attributes to form elements. Be able to write JS to process the form. Know how to use HTML5 validation attributes to specify input rules.
20. Know how to embed different types of media in your web page.
21. Understand the HTML5 APIs discussed during class and how to use them.
22. What is local storage? What are the two types of local storage? How do you retrieve, set and clear items in local storage?
23. Know the high-level principles that describe functional web accessibility (POUR). Identify or describe concrete examples of how we can design towards accessibility.
24. What is responsive design? What is the difference between responsive design and mobile-first design? Know how we can use different HTML5 elements and attributes to achieve responsive design.
25. Know how to write CSS media queries to adapt your webpage to different viewports. Know the common breakpoints. Know the different responsive design patterns presented in class.