Quiz 1 Study Guide: CSCI 344 (Spring 2026)

To study for the first quiz, please review the slides, required readings, and exercise files from Weeks 1-4. I have summarized the topics that you will be quizzed on below:

1. How the Web / Internet Work

Please be prepared to explain what the following terms mean and what they do / why they're important (in your own words).

The Internet

- What is the Internet?
- What is the web?
- How are they different?
- What is the cloud?
- What is TCP/IP?
- What is a domain name?
- What is DNS?
- Who invented the Internet?
- Who controls the Internet?
- Where is the Internet?
- What is Net Neutrality?
- What kind of data do you generate as you use the Internet?
- Who can see your data and how can they see it?

The Web

- Who invented the world wide web?
- What is a URL?
- What is HTTP?
- What is a web browser? What are some examples?
- What can a browser do? What languages does it understand?
- What is a web server? What languages does it understand?
- What is a search engine? What are some examples?
- How can someone "own" a domain name?

2. File Organization

- Know the naming conventions (**all lowercase**, no spaces, no special characters other than underscores and hyphens).
- Know how to specify **relative paths** (linking between files in different folders).

- Know the difference between **relative paths** and **absolute paths**.

3. HTML

- Know the HTML Rules of Thumb
- Be familiar with the basic HTML tags we've been working with, including:
    - Images
    - Hyperlinks (absolute, relative, and internal)
    - Paragraph and header tags (**`<h1>...<h6>`**)
    - Embedding iFrames
    - Semantic tags (**`<header>, <nav>, <section>, <article>, <footer>, <aside>`**)
    - Ordered and unordered lists (**`<ul>, <ol>`**)
- Know how to make a comment (`<!-- your comment here -->`)
- Know how to link to a style sheet
- Know what goes in the **`<head></head>`** section and what goes in the **`<body></body>`**.
- Know how to make an HTML file and a CSS file from scratch using VS Code (like you did in Tutorial 3).

4. CSS Basics

- Know the CSS Rules of Thumb
- Know how to use the following 5 selectors: id, class, element, descendent, direct child.
    - id example: **`#myElement { ... }`**
    - class example: **`.myClass { ... }`**
    - element example: **`h1 { ... }`**
    - descendent example: **`nav a { ... }`**
    - direct child example: **`nav > a { ... }`**

  To Practice:
    - Play the CSS Diner Game and review Tutorial 3
    - Review the CSS Selector slides

- Know how to set some common properties:
    - Box model properties (**`width, height, padding, margin, border`**)
    - Color properties (**`color, background-color`**)
    - Font properties (**`font-family, font-weight,`** `etc.`)

- Know how to make a comment (**`/* your comment here */`**).

5. CSS Media Queries

Know how to make a media query for tablet and mobile devices in your CSS file. Example:

```
@media screen and (max-width: 800px) {

      /*
       Individual rulesets go here; these rules kick in
       when the screen is 800px or less.
      */
}
```

Also, to ensure your media queries are honored on mobile devices, you need to include a meta tag in the **<head></head>** of your html file:

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

6. Know how to use Flexbox

- Know what properties and values need to be set in the **flex container** (parent):

```
display             flex
align-items         flex-start, flex-end, space-around, space-between, center
justify-content     (same options as align-items)
flex-direction      row, column, row-reverse, column-reverse
flex-wrap           no-wrap, wrap, wrap-reverse
```

- Know what properties and values are typically set in the **flex item** (child)

  padding, margin, width, height, border

- To practice, play Flexbox Froggy and review Tutorial 3

7. Know how to use CSS Grid

- Know what properties and values need to be set in the **grid container** (parent) element:
  - **display** (should be set to **grid**)
  - **grid-template-rows**
  - **grid-template-columns**
  - **gap**
- What needs to be set in the **grid items** (child elements)?
  - **grid-column-start**

    - **`grid-column-end`** `(with or without span keyword)`

- To practice, play CSS Grid Garden and review Tutorial 3

8. Accessibility Principles

- Name some of the things you need to take into consideration when designing for accessibility?
- What are things you can do in your HTML to ensure that they're screen-reader compatible?