**ITC370 – Final Exam Study Guide**

Fall 2021

**Textbook: The HTML and CSS Workshop**

**Chapter 1 – Introduction to HTML and CSS**

**Topics**:

* Basic HTML structure
* The difference between HTML and XHTML
* How to create basic websites in HTML

**Key terms and concepts**:

HTML

tags, attributes, comments, paragraph, content types, img element, embedded content, body element, flow content, phrasing content, interactive content, metadata, sectioning, headings, root element, head element, title element, div element, HTML DOM, node, parent class, doctype, quirks mode, href, link element, text editors, noindex, nofollow, meta, viewport, style element, hidden attribute, main element, semantic constraints, disabled attribute, HTML validation

CSS

CSS declaration, external CSS files, CSS Object Model (CSSOM), CSS selectors, universal selector, attribute selecto4r, pseudo-classes, pseudo-elements, descendants, direct children, next siblings, specificity, !important

Web Development

web crawlers, search engines, separate concerns, dev tools, web page render process

**Chapter 2 – Structure and Layout**

**Topics**:

* Use HTML5 elements to markup a web page
* Types of CSS styles that provide layout options

**Key terms and concepts**:

XHTML vs HTML5, structural elements, wireframe

HTML5 Page Elements

Header, footer, section, article, nav, aside, div

CSS page Layouts

Float, flex, grid, width, clearing elements

The box model

Padding, content, border, margin, width, height

**Chapter 3 – Text and Typography**

**Topics**:

* How to make typography changes on your web pages
* Types of lists
* How to modify and display different types of content using CSS

**Key terms and concepts**:

Text-based elements

Headings, paragraphs, inline text elements, lists, semantic markup, CSS resets

Inline text elements

Em, strong, span

Lists

Ul, ol, li, list-style

CSS Text Properties

Text-align, text-decoration, color, text-transform, capitalize, line-height, font-family, font-size, display

**Chapter 4 – Forms**

**Topics**:

* How to use HTML Form elements to build an online form
* Customize elements to improve the look
* Apply form validation styles

**Key terms and concepts**:

Get vs post

Form elements

Form, input, label, textarea, fieldset, select, button, method, action, checkbox, submit, radio

Styling form elements

Validation styling

**Chapter 5 – Themes, Colors, and Polish**

**Topics**:

* Create a CSS theme for a website
* Use different CSS properties to control color, borders, and backgrounds
* Use CSS color value types (hex, RGB, RGBA, HSL)
* Customize a theme using CSS hooks

**Key terms and concepts**:

CSS value types, adding colors, pre, hsl, CSS Hooks

CSS Background

Background-image, background-repeat, repeat, space, round, no-repeat

CSS Invert

Invert, filter

**Chapter 6- Responsive Web Design and Media Queries**

**Topics**:

* Build websites in a responsive, mobile-first way
* Use media queries in your CSS
* Create web pages that respond to different screen sizes
* Use printer-friendly web page styling

**Key terms and concepts**:

Responsive design, mobile first, feature enhancements, graceful degradation, responsive viewport, media queries, device orientation media queries, combining multiple queries, print stylesheets

**Chapter 9 – Accessibility**

**Topics**:

* What is accessibility and why do we need it?
* How we can use accessibility tools to make websites better

**Key terms and concepts**:

Accessibility, alt, Web Accessibility Initiative's set of web standards for Accessible Rich Internet Applications (WAI-ARIA), aris-modal, accessible images, accessible ratings, semantic HTML, landmarks, accessible forms, keyboard accessibility, accessible motion, accessibility tools, Axe

**Textbook: Learning PHP, MySQL & JS: With jQuery, CSS and HTML5**

**Chapter 13 – Exploring JavaScript**

**Topics**:

* How we can use JavaScript to make dynamic web pages
* Basic JavaScript syntax
* The JavaScript Object Model

**Key terms and concepts**:

Client-side scripting, noscript, including JavaScript files, debugging JavaScript errors, using comments, semicolons, escaping characters, functions, Document Object Model (DOM), writing elements

Variables

String, numeric, arrays, variable typing, global variables, local variables

Operators

Arithmetic, assignment, comparison, logical, increment, decrement, concatenation

**Chapter 14 – Expressions and Control Flow in JavaScript**

**Topics**:

* Create a program loop
* Work with the for loop
* Write comparison and logical operators
* Create a conditional statement
* Use the if statement

**Key terms and concepts**:

Expressions, literals, operator precedence, associativity, with, onerror, try/catch, ternary operator, explicit casting

Relational operators

Equality operators, comparison operators, logical operators

Conditionals

If, else, switch, break, default

Looping

While, do/while, for, break, continue

**Chapter 15 – JavaScript Functions, Objects, and Arrays**

**Topics**:

* Create an event handler
* Reference an attribute from a page element
* Change the inline style of a page element
* Create code for mouse events
* Create code for keyboard events
* Design and apply custom cursors
* Create and apply anonymous functions
* Work with alert, confirm, and prompt dialog boxes

**Key terms and concepts**:

Functions

defining a function, arguments array, returning a value, returning an array

Objects

Declaring a class, creating an object, accessing objects, prototype, static methods, static properties, extending objects

Arrays

Numeric arrays, assignment element values, associative arrays, multidimensional arrays, array methods, concat, foreach, join, push, pop, reverse, sort