**Module 1: HTML Bootcamp**

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| **Title of Unit** | HTML Bootcamp | **Grade Level** | 9-12 |
| **Subject** | Web Design | **Time Frame** | 20-25 Days |
| |  |  | | --- | --- | | **Description** | This project is meant to be a challenge that touches multiple concepts from the course to produce a digital artifact. In this Practice PT, students will be developing their first digital artifact: their very own website! This website will start off as their own personal homepage, and as students progress through the course, they will keep adding links to their favorite projects. By the end of the course this homepage will serve as their own personal portfolio website showcasing their work! | | | | |
| **Stage 1 - Identify Desired Results** | | | |
| **Learning Outcomes**  What relevant goals will this unit address? | | | |
| * *SC. 1: Understand the basic principles of computer program development in order to create a foundation on which to base more complex software design.* * *Students will create their own website from scratch, hosted at their own custom domain* | | | |
| **Enduring Understandings** | | **Essential Questions** | |
| *Students will understand that…*   * *EU. 5: The student will understand that proper planning and documenting programs allows for maintenance and sustainability.* * *EU. 7: The student will understand that incorporating critique and feedback into design creates more robust programs.* | | *Content specific….*   * *How do we plan a website?* * *How do we create the necessary files for a website?* * *How do we host a website?* * *How do we make a website aesthetically pleasing for end users?* | |
| **Knowledge:** | | **Skills:** | |
| *Students will know...*   * *How to identify the purpose and applications of HTML* * *How to discern the various parts of an HTML page* * *How to incorporate different kinds of lists to their web pages* * *How to compare various ways of displaying information and choose the appropriate format* * *How to explain the benefits of including tables on web pages* * *How to describe how CSS adds styling to HTML pages* * *How to explain the order of precedence of CSS rules* * *How to explain why CSS allows rules to cascade* * *How to Articulate why multi-page websites make sense from a user experience perspective and from a development perspective* * *How to articulate the difference between visibility and display properties (visibility still takes up space when it’s not visible, display does not)* | | *Students will be able to…*   * *Create their first simple web page* * *Create fully formed HTML pages* * *Apply formatting tags in order to modify the appearance of text and make web pages look clear and aesthetically pleasing* * *Add and utilize hyperlinks on their webpages* * *Embed an image in HTML* * *Create tables in their web pages* * *Apply HTML styling to make their web pages more visually appealing and unique* * *Use CSS tag selectors to select all elements of the same kind and give them all the same style* * *Use CSS Class selectors to apply CSS styling to all HTML units that share a specified class* * *Use CSS Selectors by ID to select a single element to format on a webpage* * *Apply the order of precedence of CSS rules to achieve the desired styling of specific elements on the webpage* * *Create multi-file websites that are divided for clarity and organization* * *Use divs to group and style multiple elements at once* * *Use the <span> tag to style multiple elements of inline text* * *Combine CSS selectors to style multiple selectors, parent/child selectors, and specific combinations of classes, ids, and tags* * *Use special selectors to style their website as the user interacts with elements on the page* * *Use the visibility property to make elements visible or invisible on their page.* * *Add simple animations to their websites, such as transitions, transition delays, color changes, size changes, and rotations* * *Add simple interactions to their websites, so that parts of the website change if the user hovers or clicks on parts of the site* | |

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| **Stage 2 – Assessment Evidence** | | |
| **Performance Task** | | |
| Homepage: Your First Website  This project is meant to be a challenge that touches multiple concepts from the course to produce a digital artifact. In this Practice PT, students will be developing their first digital artifact: their very own website! This website will start off as their own personal homepage, and as students progress through the course, they will keep adding links to their favorite projects. By the end of the course this homepage will serve as their own personal portfolio website showcasing their work!  Objective   * Students will create their own website from scratch, hosted at their own custom domain.   Activity  2.1.1 Example Homepage  2.1.2 Real World Homepage  2.1.3 Set Up Your Website  2.1.4 Create Your Homepage  [Rubric](https://docs.google.com/document/d/1cQZAVt-td_lGjwd_m6UhdZy9Q2DRLjQm2W-Ls_WQRQE/edit?usp=sharing) | | |
| **Other Evidence** | | **Student Self-Assessment** |
| * Challenges * Regular task Completion suggest DOK 2 * Peer Evaluation | | * Work Ethics Self Evaluation * Reflection on Design |

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| **Stage 3 – Learning Plan** | | | | |
| *Homework*   * Video and micro quizzes   *Tasks*   * Examples and Exercises   *Challenges*   * Advanced Exercises to challenge student to try something beyond their basic understanding   *Project Tracker*   * A digital log of work done on the project. | | | | |
| **How will you engage students at the beginning of the unit? (motivational set)** | | | | |
| Example Homepage  In this project, you’ll make your own website, hosted at your own custom URL!  This is an example homepage for you to see what a completed homepage might look like.  Students will look over the webpage and discuss it in pairs. They will evaluate the webpage and take a guess how difficult each component on the web page will be to create. They will then draw out their own webpage using basic art programs like google draw or a wireframe program to design a simple webpage they will create. | | | | |
| **#** | **Lesson Title** | **Lesson Activities** | **CCCs** | **Resources** |
| P1 | Lesson: 2.1 Homepage: Your First Website | This project is meant to be a challenge that touches multiple concepts from the course to produce a digital artifact. In this Practice PT, students will be developing their first digital artifact: their very own website! This website will start off as their own personal homepage, and as students progress through the course, they will keep adding links to their favorite projects. By the end of the course this homepage will serve as their own personal portfolio website showcasing their work!  Objective   * Students will create their own website from scratch, hosted at their own custom domain.   Activities  4.1.1 Example Homepage |  |  |
| 1 | Lesson: 1.1 Introduction to HTML | In this lesson, students will be introduced to HTML: the language for building web pages. Students will discover why HTML is important and how it works in order to start building their own web pages.  Objective  Students will be able to:   * Identify the purpose and applications of HTML * Create their first simple web page   Activities  1.1.1 Introduction to HTML  1.1.2 Introduction to HTML Quiz  1.1.3 Our First HTML Page  1.1.4 Say Hello! |  |  |
| 2 | Lesson: 1.2 Structure of an HTML Page | In this lesson we upgrade from simple tags to full HTML documents. We learn some new tags that let us put information in different places on the web page, and we learn about the nested tree structure of an HTML document.  Objective  Students will be able to:   * Discern the various parts of an HTML page * Create fully formed HTML pages   Activities  8.2.1 Structure of an HTML Page  8.2.2 Structure of an HTML Page Quiz  8.2.3 HTML Template  8.2.4 Hello World Page  8.2.5 The <title> Tag  8.2.6 Your First HTML Page |  |  |
| 3 | Lesson: 1.3 Formatting Text | In this lesson, students learn about formatting tags that let them modify the appearance of text and make their web pages look clear and aesthetically pleasing.  Objective  Students will be able to:   * Apply formatting tags in order to modify the appearance of text and make web pages look clear and aesthetically pleasing   Activities  8.3.1 Formatting Text  8.3.2 Formatting Text Quiz  8.3.3 Dictionary  8.3.4 Word Definitions  8.3.5 Pet Names |  |  |
| 4 | Lesson: 1.4 Links | In this lesson, students learn how to add hyperlinks to their web pages using the <a> tag.  Objective  Students will be able to:   * Add and utilize hyperlinks on their webpages   Activities  8.4.1 Links  8.4.2 Links Quiz  8.4.3 The <a> Tag  8.4.4 Bookmarks |  |  |
| 5 | Lesson: 1.5 Images | In this lesson, students learn how to add images to their own web pages using the <img> tag!  Objective  Students will be able to:   * Embed an image in HTML   Activities  8.5.1 Images  8.5.2 Images Quiz  8.5.3 The <img> Tag  8.5.4 Building the CodeHS Homepage  8.5.5 Collage on a Theme |  |  |
| 6 | Lesson: 1.6 HTML Lists | In this lesson, students learn how to add lists to their web pages and practice making different kinds of lists.  Objective  Students will be able to:   * Incorporate different kinds of lists to their web pages   Activities  8.6.1 HTML Lists  8.6.2 HTML Lists Quiz  8.6.3 Grocery Shopping  8.6.4 Class Planning |  |  |
| 7 | Lesson: 1.7 HTML Tables | In this lesson, students learn how to create and add tables to their web pages!  Objective  Students will be able to:   * Create tables in their web pages * Explain the benefits of including tables on web pages * Compare various ways of displaying information and choose the appropriate format   Activities  8.7.1 HTML Tables  8.7.2 HTML Tables Quiz  8.7.3 Address Book  8.7.4 National Sports |  |  |
| 8 | Lesson: 1.8 HTML Styling | In this lesson, students will use HTML styling to make their pages visually appealing and unique.  Objective  Students will be able to:   * Apply HTML styling to make their web pages more visually appealing and unique   Activities  8.8.1 HTML Styling  8.8.2 HTML Styling Quiz  8.8.3 Stylish Address Book  8.8.4 Background Colors |  |  |
| P2 | Lesson: 2.1 Homepage: Your First Website | This project is meant to be a challenge that touches multiple concepts from the course to produce a digital artifact. In this Practice PT, students will be developing their first digital artifact: their very own website! This website will start off as their own personal homepage, and as students progress through the course, they will keep adding links to their favorite projects. By the end of the course this homepage will serve as their own personal portfolio website showcasing their work!  Objective   * Students will create their own website from scratch, hosted at their own custom domain.   Activities  4.1.1 Example Homepage  4.1.2 [Real World Homepage](https://www.betatakaki.com/)  Students will sign up for github and create a basic homepage with no style to start out with. |  |  |
| 9 | Lesson: 1.9 Introduction to CSS | In this lesson, students will begin using CSS to add styling to their HTML pages.  Objective  Students will be able to:   * Describe how CSS adds styling to HTML pages   Activities  8.9.1 Introduction to CSS  8.9.2 Introduction to CSS Quiz  8.9.3 Styling your H1s  8.9.4 First style with CSS |  |  |
| 10 | Lesson: 1.10 CSS Select by Tag | In this lesson, students will learn CSS superpowers! CSS tag selectors can be used to select all elements of the same kind (<table>, or <h1> for example) and give them all the same style.  Objective  Students will be able to:   * Use CSS tag selectors to select all elements of the same kind and give them all the same style   Activities  8.10.1 CSS Select by Tag  8.10.2 CSS Select by Tag Quiz  8.10.3 Rainbow  8.10.4 Puppy Styling  8.10.5 Setlist |  |  |
| 11 | Lesson: 1.11 CSS Select by Class | In this lesson, students will learn how to use CSS class selectors to apply CSS styling to all HTML elements that share a specified class. This allows for more specific styling.  Objective  Students will be able to:   * Use CSS Class selectors to apply CSS styling to all HTML units that share a specified class   Activities  8.11.1 CSS Select by Class  8.11.2 CSS Select by Class Quiz  8.11.3 Simple Checkerboard  8.11.5 Favorite Things |  |  |
| 12 | Lesson: 1.12 CSS Select by ID | Using CSS to select an element by ID helps to select a single element to format on a webpage. This is helpful when there is a need to be very specific in applying the CSS rules for the web page.  Objective  Students will be able to:   * Use CSS Selectors by ID to select a single element to format on a webpage   Activities  8.12.1 CSS Select by ID  8.12.2 CSS Select by ID Quiz  8.12.3 Logo  8.12.4 Must Do Today! |  |  |
| 13 | Lesson: 1.13 The Cascade | In this lesson, students will learn how CSS rules are applied when more than one rule applies to an element.  Objective  Students will be able to:   * Explain the order of precedence of CSS rules * Explain why CSS allows rules to cascade * Apply the order of precedence of CSS rules to achieve the desired styling of specific elements on the webpage   Activities  8.13.1 The Cascade  8.13.2 The Cascade Quiz  8.13.3 Using Importance  8.13.4 Order of Precedence  8.13.6 Style the Table |  |  |
| 14 | Lesson: 1.14 Multi-file Websites | In this lesson, students will learn why multi-file websites are important and how they can create them.  Objective  Students will be able to:   * Articulate why multi-page websites make sense from a user experience perspective and from a development perspective * Create multi-file websites that are divided for clarity and organization   Activities  8.14.1 Splitting Your Site into Files  8.14.2 Splitting Your Site into Files Quiz  8.14.3 Multipage Site Example  8.14.4 Add a Style Sheet  8.14.5 Dividing the Site |  |  |
| 15 | Lesson: 1.15 Divs | In this lesson, students will learn how to use divs to group and style multiple elements.  Objective  Students will be able to:   * Use divs to group and style multiple elements at once   Activities  8.15.1 Divs  8.15.2 Divs Quiz  8.15.3 Divvying up the Site  8.15.4 Quotes  8.15.5 Flags |  |  |
| 16 | Lesson: 1.16 Spans | In this lesson, students will learn how to use spans to group and style multiple elements of inline text.  Objective  Students will be able to:   * Use the <span> tag to style multiple elements of inline text   Activities  8.16.1 Spans  8.16.2 Spans Quiz  8.16.3 Span Formatting  8.16.4 Vocabulary  8.16.5 Text Decoration |  |  |
| 17 | Lesson: 1.17 Combining CSS Selectors | In this lesson, students will learn how to combine CSS selectors so they can style multiple selectors and combinations, or specific parent/child selectors.  Objective  Students will be able to:   * Combine CSS selectors to style multiple selectors, parent/child selectors, and specific combinations of classes, ids, and tags   Activities  8.17.1 Combining CSS Selectors  8.17.2 Combining CSS Selectors Quiz  8.17.3 More Specific Styling  8.17.4 Choosing Nested Tags  8.17.5 Highlight the First Item |  |  |
| 18 | Lesson: 1.18 Special Selectors | In this lesson, students will learn about special selectors such as :hover and :focus, and how these selectors can be used to style elements as the user interacts with them on the page.  Objective  Students will be able to:   * Use special selectors to style their website as the user interacts with elements on the page   Activities  8.18.1 Special Selectors  8.18.2 Special Selectors Quiz  8.18.3 Vote For Me  8.18.4 Vote For Me Pt 2  8.18.5 Extend Vote For Me  8.18.6 Special Vendors |  |  |
| 19 | Lesson: 1.19 Visibility | In this lesson, students will learn how to use the visibility property to make elements visible or invisible on their page.  Objective  Students will be able to:   * Use the visibility property to make elements visible or invisible on their page. * Articulate the difference between visibility and display properties (visibility still takes up space when it’s not visible, display does not)   Activities  8.19.1 Visibility  8.19.2 Visibility Quiz  8.19.3 Display Example  8.19.4 Fading Text  8.19.5 Favorite Sea Creature  8.19.6 Caption on Demand |  |  |
| P3 | Lesson: 2.1 Homepage: Your First Website | This project is meant to be a challenge that touches multiple concepts from the course to produce a digital artifact. In this Practice PT, students will be developing their first digital artifact: their very own website! This website will start off as their own personal homepage, and as students progress through the course, they will keep adding links to their favorite projects. By the end of the course this homepage will serve as their own personal portfolio website showcasing their work!  Objective   * Students will create their own website from scratch, hosted at their own custom domain.   Activities  4.1.1 Example Homepage  4.1.2 [Real World Homepage](https://www.betatakaki.com/)  4.1.3 Create Your Homepage  Students will add style to their homepage by linking a CSS file to the index of their homepage and customizing it to make their homepage look good. |  |  |
| 20 | Lesson: 1.20 Animation | In this lesson, students will learn how to add simple animations to their websites.  Objective  Students will be able to:   * Add simple animations to their websites, such as transitions, transition delays, color changes, size changes, and rotations   Activities  8.20.1 Animation  8.20.2 Animation Quiz  8.20.3 Animated Image Filter  8.20.4 Animated Invert Filter  8.20.5 Album Cover |  |  |
| 21 | Lesson: 1.21 Interaction | In this lesson, students will combine special selectors like :hover with animations to create sites that respond to the user’s actions.  Objective  Students will be able to:   * Add simple interactions to their websites, so that parts of the website change if the user hovers or clicks on parts of the site   Activities  8.21.1 Interaction  8.21.2 Interaction Quiz  8.21.3 Interactive Image Filter  8.21.4 Smooth Interactive Image Filter  8.21.5 Smooth Change on Click  8.21.6 Button Interaction  8.21.7 Create Your Own Tooltip |  |  |
| P4 | Lesson: 2.1 Homepage: Your First Website | This project is meant to be a challenge that touches multiple concepts from the course to produce a digital artifact. In this Practice PT, students will be developing their first digital artifact: their very own website! This website will start off as their own personal homepage, and as students progress through the course, they will keep adding links to their favorite projects. By the end of the course this homepage will serve as their own personal portfolio website showcasing their work!  Objective   * Students will create their own website from scratch, hosted at their own custom domain.   Activities  4.1.1 Example Homepage  4.1.2 [Real World Homepage](https://www.betatakaki.com/)  4.1.3 Create Your Homepage  4.1.4 Final Product  Students will finish their personal homepages and write a reflection on the project and what they learned thus far. They will also evaluate each other's webpages and receive feedback which they will use to improve their webpage. |  |  |

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| **Stage 4 - Assess and Reflect** | |
| **Considerations** | **Comments** |
| **Is there alignment between outcomes, performance assessment and learning experiences?** |  |
| **Have I made purposeful adjustments to the curriculum content (not outcomes), instructional practices, and/or the learning environment to meet the learning needs and diversities of all my students?** | For struggling students:                    For students who need a challenge: |
| **Do I use a variety of teacher directed and student centered instructional approaches?** |  |
| **Do the students have access to various resources on an ongoing basis?** |  |
| **Have I nurtured and promoted diversity while honoring each child’s identity?** |  |