

<b>Time Frame: 7 Weeks</b>	<b>Unit Title: Web Development</b>	<b>Course Name: Computer Science Grade 6</b>
<b>Stage 1 - Desired Results</b>		
<b>Established Goals</b>	<b>Transfer</b>	
<ul style="list-style-type: none"> <li>Students will create digital artifacts that use multiple computer languages to control the structure and style of their content.</li> <li>Students will create a website as a form of personal expression.</li> <li>Students will use different programming languages to solve different problems.</li> </ul>	<i>Students will be able to independently use their learning to...</i>  <b>use creativity, problem solving, and coding skills to create a web page for personal expression.</b>	
	<b>Meaning</b>	
	<b>UNDERSTANDINGS</b> <i>Students will understand that....</i> <ul style="list-style-type: none"> <li>Websites are created for a variety of purposes, including self expression,</li> <li>HTML communicates text structure on a webpage</li> <li>Use of style conventions makes reading/writing HTML easier.</li> <li>Using the structured practice of pair programming can make problem solving in coding more efficient.</li> <li>Use of copyrighted materials require permissions when adding content to web pages.</li> </ul>	<b>ESSENTIAL QUESTIONS</b> <i>Students will keep considering</i> <ul style="list-style-type: none"> <li>Why do people create websites?</li> <li>How can text communicate content and structure on a web page?</li> <li>How do I safely and appropriately make use of the content published on the internet?</li> <li>What strategies can I use when coding to find and fix issues?</li> <li>How do web developers work in teams to solve problems?</li> </ul>
	<b>Acquisition</b>	

<ul style="list-style-type: none"> <li>Students will examine their role and responsibilities as both creators and consumers of digital media.</li> </ul> <p><b>NH CS Standards</b>  <i>IC - Impacts of Computing</i></p> <ul style="list-style-type: none"> <li>1B-IC-18 - Discuss computing technologies that have changed the world and express how those technologies influence, and are influenced by, cultural practices.</li> <li>2-IC-20 - Compare tradeoffs associated with computing technologies that affect people's everyday activities and career options.</li> <li>1B-IC-21 - Use public domain or creative commons media and refrain from copying or using material</li> </ul>	<p><i>Students will know...</i></p> <ul style="list-style-type: none"> <li>Website</li> <li>Website Content</li> <li>HTML</li> <li>HTML Element</li> <li>HTML Tag</li> <li>Website Structure</li> <li>Heading</li> <li>Digital Footprint</li> <li>Citation</li> <li>Copyright</li> <li>Creative Commons</li> <li>Intellectual Property</li> <li>Bug</li> <li>Comment</li> <li>Debugging</li> <li>Indentation</li> <li>Whitespace</li> <li>CSS</li> <li>CSS Selector</li> <li>Pair Programming</li> </ul>	<p>Students will be skilled at...</p> <ul style="list-style-type: none"> <li>Identifying the reasons someone might visit a given website</li> <li>Identifying websites as a form of personal expression</li> <li>Explaining that HTML allows a programmer to communicate the way content should be structured on a web page</li> <li>Writing a simple HTML document that uses opening and closing tags to structure content</li> <li>Using documentation provided in the development tool</li> <li>Using heading tags to change the appearance of text on a web page.</li> <li>Structuring content into headings, subheadings, and paragraphs.</li> <li>Using pair programming techniques to write and debug code</li> <li>Explaining reasons why it is difficult to control who sees information published online.</li> <li>Justifying guidelines for safely publishing information online.</li> <li>Using the &lt;ol&gt;, &lt;ul&gt;, and &lt;li&gt; tags to create ordered and unordered lists in an HTML page.</li> <li>Creating and naming a new HTML page.</li> <li>Explaining the purpose of copyright.</li> <li>Identifying the rights and restrictions granted by various Creative Commons licenses</li> <li>Adding an image to a web page</li> <li>Describing why using whitespace, indentation, and comments makes your code easier to maintain.</li> </ul>
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<p>created by others without permission.</p> <ul style="list-style-type: none"> <li>• 2-IC-23 - Describe tradeoffs between allowing information to be public and keeping information private and secure.</li> </ul> <p><i>NI - Networks &amp; the Internet</i></p> <ul style="list-style-type: none"> <li>• 1B-NI-05 - Discuss real-world cybersecurity problems and how personal information can be protected.</li> </ul> <p><i>AP- Algorithms &amp; Programming</i></p> <ul style="list-style-type: none"> <li>• 1B-AP-11 - Decompose (break down) problems into smaller, manageable subproblems to facilitate the program development process.</li> <li>• 1B-AP-12 - Modify, remix or incorporate portions of an existing program into one's own work, to develop something</li> </ul>		<ul style="list-style-type: none"> <li>• Developing a set of techniques for preventing bugs in HTML code and finding them when they occur</li> <li>• Using CSS selectors to style HTML text elements.</li> <li>• Creating and linking to an external style sheet.</li> <li>• Explaining the differences between HTML and CSS in both use and syntax.</li> <li>• Using CSS properties to change the size, position, and borders of elements.</li> <li>• Creating a CSS rule-set for the body element that impacts all elements on the page.</li> </ul>
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<p>new or add more advanced features.</p> <ul style="list-style-type: none"> <li>• 1B-AP-15 - Test and debug (identify and fix errors) a program or algorithm to ensure it runs as intended</li> <li>• 2-AP-13 - Decompose problems and subproblems into parts to facilitate the design, implementation, and review of programs.</li> </ul>		
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