

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

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