

Lesson plan with instructor notes sample 03/08/2018

Topic: HTML, CSS, JavaScript. Putting them all together

Product: Crypto currency price and alert site. CryptoTicker

Prerequisite: Students are familiar with HTML and CSS styling from previous classes.

Time	Outline	Topics and Notes	Links, Tools and Q&A
	Intro – Understand the problem/client needs	<p><b>Lesson Topics:</b></p> <ul style="list-style-type: none"><li>• Lists: ordered and unordered lists</li><li>• Create buttons to interact with JS file.</li><li>• id and span</li><li>• Putting HTML and JavaScript together:<ul style="list-style-type: none"><li>◦ Use JS to add functionality to buttons</li><li>◦ onclick [get const values from JS file]</li><li>◦ document.getElementById</li><li>◦ Declare constant values</li><li>◦ Conditional statement</li></ul></li></ul> <p><b>Extensions/Next class:</b></p> <ul style="list-style-type: none"><li>• CSS = styling the look of the site.</li></ul>	<p><b>Lesson Link:</b> <a href="https://github.com/thelandlords/DC-SampleLesson">https://github.com/thelandlords/DC-SampleLesson</a></p> <p><b>Ordered list and ordered list types</b> <a href="https://www.w3schools.com/html/html_lists.asp">https://www.w3schools.com/html/html_lists.asp</a></p> <p><b>Use JS functions to change HTML</b> <a href="https://www.w3schools.com/js/js_statements.asp">https://www.w3schools.com/js/js_statements.asp</a></p> <p><b>JS - style HTML objects</b> <a href="https://www.w3schools.com/Jsref/dom_obj_style.asp">https://www.w3schools.com/Jsref/dom_obj_style.asp</a></p>
	Basics – Planning the overall big picture	<p><b>Pseudocode/diagram the program:</b></p> <ul style="list-style-type: none"><li>• Title</li><li>• place to show BTC and ETH prices</li><li>• place to ask user for alert settings [high and low for both coins]</li><li>• get price button and</li><li>• save alert info button</li></ul>	<p><b>What essential info needs to be displayed?</b></p> <p><b>What should we use to compare the user value to the current price?</b> Conditional statement if</p>
	Demonstrate – details of turning	<p><b>Display essentials [HTML]</b> <i>Use forks to show and type each stage of the code.</i></p>	<p><b>Fork 1 = HTML</b> <a href="https://codepen.io/thelandlords/pen/wmvJBo">https://codepen.io/thelandlords/pen/wmvJBo</a></p>

pseudocode into actual code.	<p>1<sup>st</sup>: What any HTML needs: doctype, head, body, and usually needs h1...h6,</p> <p>2<sup>nd</sup>: The details our program needs:  ordered lists &lt;ol&gt;  unordered lists &lt;ul&gt;  nested lists  getting user input &lt;input =... id=...&gt;  buttons [get price and store user input]</p> <p>3<sup>rd</sup>: JavaScript is needed for the conditional statement:  <pre>if(price&gt;=alertHigh) { [alert the user by changing the fields background color] }</pre></p>	<p>Fork 2 = JS  <a href="https://codepen.io/thelandlords/pen/QmbvXY">https://codepen.io/thelandlords/pen/QmbvXY</a></p> <p>Fork 3 = CSS  <a href="https://codepen.io/thelandlords/pen/zWGWgv">https://codepen.io/thelandlords/pen/zWGWgv</a></p> <p>GitHub – all code  <a href="https://github.com/thelandlords/DC-SampleLesson/tree/master/code">https://github.com/thelandlords/DC-SampleLesson/tree/master/code</a></p>
End Product – testing, and launching	Make sure it meets client requirements and has been end user error proofed.	<p>How to improve and add features for the next version?</p> <p>Final product  <a href="http://cryptoticker.glitchdoctor.net/">http://cryptoticker.glitchdoctor.net/</a></p>
Extensions/ Next class topics	<ul style="list-style-type: none"> <li>• Style the site using CSS</li> <li>• Add ETH price and alerts option</li> <li>• Get data from API instead of using the const testing values.</li> <li>• Show and compare two or more cryptocurrencies.</li> <li>• Add a graph to chart one or more cryptocurrencies.</li> <li>• Give user alternate alert modes – sound, email, image, etc.</li> </ul>	<p>What are some mistakes a user may make when interacting with the app?</p> <p>How can we error proof the code so that a users mistake would not result in unintended app behavior?</p>