HTML Questions

* **What does a doctype do?** 
  + It tells the browser what version of html or xml it needs to use while rendering the page.
  + The standard for html5 is <!doctype html>
* **How do you serve a page with content in multiple languages?**
  + When a HTTP request is made to a server, the requesting user agent usually sends information about the language preference such as in the Accept-language header.
  + The server then can use this information to return a version of the document in the appropriate language
  + The returned HTML document should declare the lang attribute in the html tag
* **What kind of things must you be wary when developing for multilingual site?**
  + Use lang attribute in html
  + Directing users to their native language
  + Restrictive word/sentence length
  + Be mindful of how colors are perceived
  + Formatting dates & currencies
  + Language reading direction
* **What are data- attributes good for?**
  + store custom data in DOM node
  + There generally not used anymore because users can modify the data using inspect element
  + It can also be used for end to end testing without creating meaningless classed or IDs
* **What are the building blocks of HTML5?**
  + Semantics, allows you to describe more precisely what your content is
  + Connectivity, allows you to communicate with the server
  + Offline & storage, allowing webpages to store data on the client side locally & operate offline more efficiently
  + Multimedia, making video & audio first-class citizens in the Open Web
  + 2D/3D graphic & effects, allowing a much more diverse range of presentation options.
  + Performance & integration, providing greater speed optimization & better usage of computer hardware
  + Device access, allowing for the usage of various input & output devices
  + Styling, letting authors write more sophisticated themes
* **Describe the difference between a cookie, sessionStorage & localStorage?**
  + cookies only 4kb, can be manually set.
  + LocalStorage are 5mb, can store forever even if browser session ends.
  + sessionStorage are 5mb, the data will be removed when the page is closed
* **Describe the difference between <script>, <Script async>, and <script defer> ?**
  + <script>, HTML parse is blocked then the script is fetched & executed immediately after the script is done the HTML parsing resumes.
  + <script async>, runs the script & html parser at the same time sometimes before html parse is completed. Good use case is analytics when you need a script that’s is independent of any others.
  + <script defer>, runs the script & html parser as the same time but waits for the page to finish parsing before executing.
* **Why is it generally a good idea to position CSS <link>s between <head></head> and JS <script>s just before </body>? Do you know any exceptions?**
  + Placing <link>s in the <head>, it part of building an optimal website because HTML, CSS will parse simultaneously and show design so the user doesn’t view a blank white page.
  + Placing <script> just before </body>, scripts blocks HTML parsing while being downloaded and executed so placing the script at bottom will allow HTML to be parsed and displayed first
  + An exception for position of <script>s as the bottom is when script contains document.write() but that not good practice
* **What is progressive rendering?**
  + Progressive rending is the technique used to improve performance of a webpage in particular to improve load time
  + Example of such techniques:

1. Lazy loading of images, javascript loads an image when the user scrolls instead of loading it all once

2. Prioritizing visible content, include only minimum CSS/content/script necessary for the amount of page would be rendered in the users browser first to display as quickly as possible

3. Async HTML fragments, flushing parts of the html to the browser as the page is constructed on the backend

* **Why you would use srcset attribute in an image tag? Explain the process the browser uses when evaluating the content of this attribute.**
  + You would use the srcset attribute when you want to serve different images to users depending on their device display width
  + serve higher quality images to devices with retina display enhances the user experience while serving lower resolution images to low-end devices increase performance and decrease data wastage.
* **Have you used different HTML templating languages before?**
  + Yes I have used mustache, handlebars, underscore, Jade to name a few.
  + They're all basically the same and provide similar functionality of escaping content and helpful filters for manipulating the data to be displayed.
  + Most templating engines will also allow you to inject your own filter in the event you need custom processing before display