

<u>Question</u>	<u>Definition</u>	<u>Sample Code/Notes</u>
<b>HTML FORMS</b>		
What is needed in html/client side?	<form> - contains the form elements on a webpage. Container tag.	
""	<input>- Configures many form elements including text boxes, radio buttons, check boxes, and buttons. Is stand alone tag	
""	<textarea>- cofigures a scrolling text box. Container tag	
What is needed in php/server side?	Server-side scripting language. Usually in file. . PHP starts with "<?php"and ends with ">"	
How to use a form element(which 2 attributes needed)?	"method"( = get or post) and "action" for server-side script (action="serversidescriptname.ext")	\$name = \$_POST["phone"]; /* php for getting data from input with name of "phone" */
What is an input tag?(know well- how to use)	"type" and "name" attributes. "type" specifies methoed of input, e.g. radio, button, textarea, submit). "name" identifies element to use in processing form.	<input type="textarea" name="sampleinput">
What are checkbox and radio button?	checkbox- form input type which allows to select multiple option. radio- allows one multiple choice option(use same name for all input tags)	<input type="radio" name="browser" id="firefox2" value="Firefox"> <label for="firefox2"> Firefox </label>     <input type="radio" name="browser" id="chrome2" value="Chrome"> <label for="chrome2"> Chrome </label>  
What is text area? How syntax works?	input type which allows user to enter text as form input.	<form method="get/post" action="scriptname"> <input type="textarea" name="aname"> </form>
What is field sett?(has to do with Legend)	<fieldset> opens and closes a container for elements. <legend> opens and closes name of fieldset.	<fieldset> <legend>Fieldsetname</legend> </fieldset>
Method attribute, should you use get or post (know the difference)	<b>"Get" requests a resource from the server</b> (appends form data to url to request file in the directory) . <b>"post" requests response from script based on user input</b>	
Action attribute(know this)	put the name of the script you use ("action ="scriptname" "	
Any element that uses data, type, id, name (important) what does that do? (for create a variable)		
What does Input type password actually do?	Masks input: shows dots where characters should be in text box	
What does the value attribute do?	For "text", "password" it defines initial value of data. <b>For "submit", "reset" and "button" it shows as the text on the button</b>	<input type-"submit" value="textonsubmitbutton" > /*puts value of value attribute n Submit button*/

What does PHP stand for?	PHP Hypertext Preprocessor	the "PHP" in first "P" is "Personal Home Page"
Code for creating PHP (with ? marks)	In <b>html</b> "<?php //PHP code here ?>". use \$variable for variable	
	the dot "." sticks strings together. If a = "hgh" and b = "uiu" then a.b is "hghuiu"	
What does the '=' sign do?	assigns the vlaue on the left to the variable on the right. e.g "a = b" nowgives "a" the value of "b"	
What is a super-global?		
How do you code a super global and where do you use it?	Variables availiabile throughout the script. No need to code them in advance. E.G. \$_POST('inputname') is the value of a form input with name 'inputname' \$_GET is as well	
Why do we trim and strip slashes"/" in PHP and how tdo we do it?	Hackers can enter malicious code in the form fields using slashes.	\$message = Trim(stripslashes(\$_POST ['message']));
<b>Other</b>	mail() = php code to sent mail using erver's mail software	header('Location: http://www.example.com/')
	header()- redirecct browser to new webpage	
	use a 'dot equals" to stick strings together at assignment	\$var1 .= var2 /* ver1var2 */
<b>JAVA, PROGRAMMING CONCEPTS</b>		
Why is it called web-behavior	Progressive enhancement	
	This is the 3rd level (behavior)	
	No Relationship with Java and Javascript	
Original intent for java	To do simple stuff, moving things around, beh.	
If you have mult. Scripts in what order do they go	Top-down	
3 types of build-in pop-up boxes	<b>Alert- Give information, user must click "OK" to proceed</b>	
	<b>Confirm- used to verify something. User must click "OK" or "Cancel" to proceed ("OK" returns true, "cancel" returns false)</b>	
	<b>Prompt- Gather information from the user."OK" returns input value, "Cancel" returns null</b>	
Basic programming concepts	Variable- stores a value/information. Name of variable must start with "\$", "_" or letter. No spaces allowed in name. No reserved words as name. Variables Case Senitive. must declare before use.	var username; username= "Karen";
	Always end statements with semi-colons	
	Block of one or more JavaScript Statements with specific purpose, run when needed	document.write(username);

Where java actually runs (where does the code get computed)	It's always running on the computer in front of the user Can java send email? (no) Data-base (no)	
Event handlers	Common ones On-mouse-over on-blur/on-focus See "Other"	
Document Object Model(DOM)	DOM is a W3C standard which defines accessing HTML and XML documents.	
	Separated into parts. Core DOM- all structured documents. XML DOM- standard for XML documents. HTML DOM- standard for HTML documents	
	HTML DOM accessed with Javascript. Everything in HTML document is a node All HTML elements are objects. Objects have object methods and object properties	
	Method- an action you can do	
	Property- value you can get or set(like name or content of a node)	
Recognize the difference between a method and a property in code	Pro- just a word to represent something	
	Method just has ( ) at the end, that line of code does something, it has a action	
Know the 3 places where you can put java in HTML	External file; embedded, html tag (script); add a attribute to any element (Event), you can write java (on-mouse-over,on-hover) They don't override each other They will execute in order	
<b>Other</b>	Events: things the webpage user does. E.g. clicking, hovering over with mouse, loading page, clicking a form element, etc.	<a href="index.html" onmouseover="alert(Click to go home')">Home</a>
	<b>Print Entire Second Javascript slides (lecture 19)</b>	
<b>JAVA LIBRARIES AND PLUG INS</b>		
Who wrote jquery, some guy from RIT	John Resig	<b>Sample JQuery</b>
Different java library and plug-in	Plug-in depends on another library	<script src="http://code.jquery.com/jquery.js"></script>
	{Advance JavaScript Programming} * Difficult and time-consuming * Difficultly dealin with browser differences.	<script src="http://code.jquery.com/ui/1.11.4/jquery-ui.js"></script>
	{JavaScript (helper) Libraries} * Sometimes called "frameworks" * Files of JavaScript, written so you don't have to	<script>

		<code>\$( ".exapandything" ).accordion({</code>
Installing a plug-in, what needs to be done	In what order you install them in what matters	<code>collapsible: true,</code>
	Copy the file to your file system	<code>heightStyle: "content"</code>
	Link to the file from your HTML file	<code>});</code>
	Learn how to use the library	
	Write the JavaScript code in your HTML file to "turn-on" and use the library	
Downsides to using a library	1. Unused code leftover, 2. Yet another learning curve. 3. You don't learn to do it yourself. 4. You inherit bugs & bad practices	
CDNs, content delivery network	Get a url to where the same file lives	
	You want your web pages to be as fast as possible. You want to keep the size of your pages as small as possible. You want the browser to cache as much as possible. If many different web sites use the same JavaScript framework, it makes sense to host the framework library in a common location for every web page to share. A CDN is a network of servers containing shared code libraries. CDNs provide a number of popular JavaScript libraries, including (jQuery, Prototype, MooTools, Dojo, Yahoo!)	
What is minified code	Minification //1. For faster Websites a). Faster downloads, b), Fewer HTTP requests (when minifying multiple libraries together). //2. Remove unnecessary characters (comments, line breaks, extra spaces).	
Website Construction		
What is the point of server side includes (SSI)	To reduce code duplication	
	Use PHP (common, but not the only way)	
PHP included, where is the webpage assembled	It runs on the server, before the webpage gets downloaded. This is the opposite of java	
Trigger, "stop" there is PHP code	Change the extension of the file from HTML to PHP	
How do you write PHP code, the syntax		
MOBILE DESIGN		
9 basic principles of mobile web design	Not sure if this is important, so maybe print the slides out	

The goal is to go with flow (natural doc flow)	Why is mobile web hard, we have been breaking the flow on purpose Then design for mobile, you have to redesign it	
Suggested best practices	Use relative units Percentages instead of pixels (There is a page about it, so maybe print it)	
What is a <b>break point</b>	There isn't a code for this, It's just a place	
Max-width (the opposite, just make sure you know this concept)	For example having width of 100% and Max width of 1000px would mean that content will fill the screen, but don't go over 1000px.	
Concept beh. vs. adaptive beh.	How one relates to the other and how they are different	
Web fonts	How to use web fonts Fewer the better	
Vector and bitmap images	Vector works great on mobile	
	Does your icon have lot of details and some fancy effects applied? If yes, use a bitmap. If not, consider using a vector image. ////For bitmaps use a jpg, png or a gif. /////For vectors the best choice would be a SVG or an icon font.	
	Each has some benefits and some drawbacks.However keep in mind the size-- No pictures should go online without optimization	
	Vectors are often tiny, but some old browser won't support it. Also, if it has lots of curves, it might be heavierthan a bitmap.	
Meda-viewport tag, know what it does, when you should use it	All the time	
	The default action for most mobile devices is to zoom out and scale the web page	
	Viewport Meta Tag: Created as an Apple extension to configure display on mobile devices./////Configures width and initial scale of browser viewport	
	Insert, in the <head>... <meta name="viewport" content="width=device-width, initial-scale=1.0">	
How to make a images scalable (Flexible Images in HTML)	in the HTML: 1. Remove height and width attributes. 2. Wrap the image in a container that has a controlled width	

	In the CSS: 1. Target the image that needs to scale Example: <code>scalable { width: 100%; }</code>	
Media Queries	Determines the capability of the mobile device, such as screen resolution Directs the browser to styles configured specifically for those capabilities	
	In CSS <code>@media (max-width:768px) { //CSS here }</code> <code>@media (max-width:480px) { //CSS here }</code>	
	This is what web designers use	
	What the thing that they focus on	
	The width on the browsers	
	Assume that it is a small width, then it's a phone	
	Width of the view-port	
Reconfigure HTML Tables, Floats...anything that doesn't fit	HTML Tables 1. Change the font-size 2. Move the table to a different area of the webpage 3. Use <code>overflow-x:auto</code> on a container element 4. Reconfigure the table into some other element (like an unordered list) using Javascript	
	Floats: Remove floats - use <code>text-align: center</code> instead	
DRIVING TRAFFIC TO WEBSITES		
What did google do that changed the search industry	They started counting inbound links	
Periodic table	Focused on certain groupings (on the ones he went over)	
	Styled with background color, why would you want to do that (invisible)	
	Search thing, doesn't like it (key word stuffing)	
Search directory vs. search engine (difference)	Searching Engine:	
	1. An online tool that helps users of the internet find sites and information.	
	2. Most search engines use automated programs (spiders, robots) to look for relevant information to index in their database (s)	
	Examples: <a href="http://www.google.com">www.google.com</a> , <a href="http://www.yahoo.com">www.yahoo.com</a> , <a href="http://www.bing.com">www.bing.com</a>	
	Search directory	
	1. A catalog of websites organized by category to allow users to easily browse for the information they need	
	2. Search directories are organized by real people who discover new sites and relevant information by exploring the internet themselves and by reviewing submitted sites.	
	Examples: <a href="http://www.dmoz.org">www.dmoz.org</a> ; previously <a href="http://www.yahoo.com">www.yahoo.com</a>	

	Historically, dmoz provide database access to search engines like Google, Yahoo, others, to enhance their results (not so much any more)	
	Note: Engines "won"...they became more popular than directories	
Google analytics	Doesn't track ind. Trackable info	
	Doesn't give you who, just more broad	
	No names or phone numbers	
On the page and off the page SEO, know the difference	On the page, you as the web developer can do directly (increase/decrease search engine ranking)	
	Off the page, things that you can't control	
Benefit of sitemap	Help the search engine, gives better ranking	
Sitemap.xml what is it written in	Xml (lol)	
What you need to do for google analytics	Just put script	
What is a surp, page-view, click-through rate	What does surp stand for	
Definitions		
Search Robots	A.k.a. bots, wanderers, spiders, and crawlers.// Tools many web search engines use to build their databases.//Most robots work like web browsers, going to webpages and following their links, except they don't require user interaction	
Search Engine Results Pages (SERP)	The page you see after you perform a search. // A ranked listing of results (web pages) based on the keywords you provided as part of your search. /// Ranking is performed by an algorithm (usually proprietary); the higher the ranking(the position in the list) the higher the relevance to your serach term(s)	
"Organic" results vs. Paid Placements	In addition to ranked listings from the algorithm ("organic" results), paid placements may appear om a SERP/////The ranking of the paid placements is also determined by an algorithm which primarily counts payment as a ranking factor.	
More Defintions (Paid)		
Impression	Every time a user views a SERP that displays your as, it is counted as an impression	
Page view	Every time a user clicks your as, it is counted as an page view	
Pay per click (PPC) and Cost per (thousand) Impressions (CPM)		
Clickthrough rate (CTR)		

Hlstroy	<b>Yahoo!</b> founded: January 1994 • Started as a directory (manual)	
	<b>AltaVista</b> founded: December 1995 • The first search engine (automated)	
	<b>Google</b> founded: September 1998 • Started as a search engine	
	<b>Bing, formally Live Search, formally MSN Search founded:</b> 1998 • Originally used AltaVista data under their own brand	
	Notes: Most services, both directories and engines, provide access to each other's database; when using any particular service it's not clear which company actually indexed (obtained) the results you are looking at	