Introduction to ITWS

Quiz 2: November 1, 2021

Place your name on the top of this document in the header

Enter your answers directly into this document (unless instructed otherwise)

All answers should be in be in Your Own Words, and use proper grammar

There are 4 questions on this test. Make sure you complete them all.

Make sure your answers use an alternative font and/or color – (not black or red)

Save this document as *yourName*-*yourRCSID-*F21Quiz2.docx

Create a readme file and discuss any relevant information about the lab, include at least; your GitHub id, Repo name, and Discord handle.

Place all quiz specific documents including this one under your iit folder in a folder named

quiz2

When finished with the quiz, zip your iit folder into a file named

*yourName*-*yourRCSID-*F21Quiz2.zip

Commit your changes as instructed below and push to GitHub

Submit it to LMS

NOTE: You are not to discuss this quiz with anyone. You are not to reference old (previous semester) submissions for ‘help’ or guidance. You may not solicit or receive help online or in-person. You may reference online resources, and you may use the notes from this class, but all work must be your own and you must figure out the solutions on your own.

ALSO NOTE: This quiz is due at 11:59PM on the date shown on LMS. From 11:59-12:09:59 it will be accepted as late with a -30% penalty. At 12:10 it will NOT be accepted, and you will get a 0. Please submit your quiz on time.

1. Technology (coding): (45 points)
   1. You will be making changes to your website
   2. Create an issue indicating that Quiz 2 is taking place.
   3. Check out a branch from your iit repo, and name it quiz2

You should make stages/commits to this branch – DO NOT merge it back into the master/main until you are finished with the quiz

* 1. jQuery/jQueryUI
     1. Modify your menu to use jQueryUI widgets (Menu, Tabs, etc)
     2. Add an instructions description for each lab on the individual lab pages. The description should show up in a modal window and be resizable. (You may use the text for the instructions from the corresponding lab’s instructions)
     3. Add 1 additional new interaction (your choice) to your projects page
     4. Add 2 widgets or effects (your choice) throughout your whole site

*(You may need to modify your design to accommodate the above. Be creative – use this opportunity to jazz up your site)*

* 1. Using external fonts from Google – make sure your Header and Menu and Footer use one unique font, and your text uses another.
  2. Make sure you give a detailed description of your design choices, why you made them and how you went about implementing them. Be descriptive. Include this in your readme and in your comments
  3. When done, merge your changes back
  4. Close the issue with a detailed comment
  5. Make sure your readme is descriptive and styled

1. Technology (description) (15 points): Web Development
   1. Based on the discussions in class, what is the dollar sign ($) used for? How could we accomplish the same functionality without it?

The dollar sign symbol is used as shorthand for using jQuery, also known as an *alias*. It’s the exact same as just writing out “jQuery” but is easier because writing that out would be tedious every time. The same functionality can be attained by using the jQuery.noConflict() method to use a different alias for jQuery instead of the dollar sign symbol.

* 1. What is the difference between an application layer protocol, a Transport layer protocol and a Link layer protocol? Give 3 examples of each.

Application layer protocols are the protocols that help serve data to the end user. Examples include HTTP/HTTPS, SFTP/FTP, SMTP, and DNS.

Transport layer protocols deliver the data from the Application layer to the layers below it, specifically to the network layer to be routed to other services/computers. The two most well-know Transport layer protocols are TCP and UDP, and another example is RTMP for streaming audio, video, and data.

Link layer is one of the lowest layers and is based on physical standards. Examples include Ethernet, Wi-Fi, RS-232, and PPP (Point to point protocol).

1. HCI - Website mockups (20 points) (deck and video are online on LMS in week 9)
   1. Explain, in your own words, per the in-class lecture, what is a paper prototype
   2. Using Balsamiq, create a prototype of your personal website. Include the files in a subfolder of yor quiz2 folder named quiz2HCI. Make sure it gets added to your repo.
   3. In your prototype, add the current functionality and add future planned next steps. Make sure they phases are indicates clearly in your mockups
   4. As described in the HCI lecture what is the magic 7 seconds? Why is it important?
2. Web Science (20 points)
   1. Explain, in your own words: What is a URI? How does it relate to a URL? How do they help make ‘the Web’? Name 3 examples from class in your answer. (use complete sentences and your own words)

URIs are Uniform Resource Identifiers, and URLs are Uniform Resource Locators. URLs are a specific type of URI that gives you information on the protocol used and how to access it (the location), such as https://, ftp://, and others. URI are just an identifier of a resource, like documents, XML files, or just a file on your computer. They just need a scheme name and a file path. All URLs are URIs, but not every URI is a URL.

URIs help make the web by forming links between different websites, servers, resources, systems and more. It wouldn’t be a web if nothing was connected, and URIs connect things together. The most common example of a URI is a link to a website. It can also be an indicator of a textbook (ISBN). A final example could be an identifier for an email address (mail:)

* 1. Social Problem
     1. Using references from the in-class lecture, identify a social problem and propose an engineered solution. What could you do to offer a solution?

(In your response, identify how to measure, analyze evaluate and iterate. In other words, how might you analyze and visualize information to help make your case?)