Introduction to ITWS

Quiz 1: February 14, 2022

**Directions**

There are 3 questions of multiple parts. Point values and suggested times are indicated

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

Enter your answers directly into a copy of this document (with the exception of #2)

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

Make sure your answers use an alternative font AND color – (a legible font, and not Black or Red)

* By now, you should have your local iit folder and your GitHub iit repo connected
* Create a branch call iitQ1 – you are to work in this branch for this quiz
* Somewhere below the root (iit) folder of your site, and consistent with your IA, create a folder for this quiz named: s22Quiz1
* Save this document (or a copy) as: *yourRCSid*-quiz1.docx (or doc) into this folder
* Copy the quiz1.html file (provided) into this folder, and rename it to: *yourRCSid-*s22Quiz1.html
* When finished with the quiz, zip your website root (iit) folder and all related files into a file named

ITWSQuiz1-*yourname*-*yourRCSid*.zip

* Submit the ZIP file to LMS
* Commit your changes to your repo in the q1 branch

**Additional Notes**

DO NOT merge the branch back to main

DO NOT move these changes to your RCS website

Make sure your submitted document remains in MS Word format – Pages, GDocs, etc… will not be graded.

Follow all these instructions and additional instructions throughout this document, or you will lose points

1. Network protocols, HTML & WWW : (20 points, 10-20 minutes)  
   1. What is a VPN and what is it used for? If you have used it, how have you done so and why – be specific? (5 points)

A VPN stands for a virtual private network. VPN has many uses but one of the many uses a VPN is that it helps to protect and safeguard the online presence of an individual. VPN works by masking the IP address of the user thereby creating anonymity and security.

I use VPNs frequently when I am browsing the internet because I want to hide my private information. Another reason why I use VPN is to access shows tat are region blocked in the US. I watch a lot of anime and not every anime that’s made is available in the US. So whenever I want to watch a certain show that’s available I Japan but not in the US I use my VPN.   
I use a service called ExpressVPN. I decided to go for it because I had seen youtubers I watched talk about it so I decided to give it a try.

* 1. As discussed in class, what is a protocol? What are some examples, and explain how we found them during class (5 points).

Protocols are a set of rules that govern and control the treatment or allocation of data in a communication system. Protocols determine how data is transmitted or transferred between different devices on the same network. Protocols allow said connected devices to communicate together. Some examples of protocols are HTTP, DNS, IP and Ethernet protocols

* 1. Explain the IP and OSI stack as discussed in class. How are they different and why? (5 points)

The main difference between IP and OSI stacks is the number of layers each has. IP has 4 layers where TCP has 7 layers. OSI acts as a middleman or a gateway that connects the network and the user. The OSI decides how different software and hardware in a network should work together.

* 1. What is the difference between TCP and UDP? Explain in detail how/why/where they are used and give examples (5 points)

UDP are User Datagram Protocol while TCP are Transmission Control Protocol. The main difference between TCP and UDP is that TCP is protocol based on connection whereas UDP is a connectionless protocol. TCP is much slower compared to UDP. UDP’s are much faster and more efficient type of protocols.

Both TCP and UDP are both used to send data called packets around the internet. TCP is used to provide a reliable connection between applications. However, UDP provides unreliable connection between applications. Data transfer is transferred by link and there is no security that data might be stolen or lost.

An example of a TCP can be found in our mobile phones in the form of Text messages or text communications. Text messages are usually encrypted and meant to be secure between the sender and receiver. Example of TCP are found in applications like Whatsapp, Instagram, iMesage etc.

TCP can also be used in file transfer applications. We use these technologies because they provide safety of our information. Examples of these file transfer applications are FileZilla client etc.

UDP are used a lot in the video game industry especially on video games that require an online connection. UDPs are perfect for online games because it doesn’t transmit the data that’s lost. It is also used because it’s a connectionless type of protocol.

HTML & CSS (60 points, 40 minutes) In Lab 3, you created a website to host your classwork; specifically, your labs, according to your Information Architecture (IA). You are now going to build a template for showing the lab instructions in your individual styles.

As instructed above, make sure you have the appropriate files in your quiz folder. You will be working primarily on the quiz1.html and related files for this question

* 1. Modify the file to look consistent with your site by linking it to a new CSS file (which you must create) named *yourRCSid-s22*Quiz1.css and place it in the same resources folder as your personal website’s CSS file (Hint: you will likely have 2 CSS files linked in your html file)
  2. Add at least 1 new external font from Google Fonts to the page
  3. Add readme.md or readme.txt file to your quiz folder. Put anything into it that you’d like us to know about your strategy for this question – if there is nothing, it may be empty, but it must be included. (Hint: partial credit can be your friend)
  4. When done, commit your code and push it to your GitHub account.

(NOTE: Do NOT merge the branch back to main or you will receive no credit)

* + 1. You may edit the HTML as you will – the local file links have been removed for clarity.
    2. (Hint: if you have not added us as contributors, then this is your last chance. To receive credit for this question, we will be looking at your commits and comparing the versions – if we cannot see your repo, you will not receive credit for this question)

1. “Ford” Case (20 points, 20 minutes)  
   1. From the case, the discussion in class, on Discord, and what you have learned since: In your opinion, has Ford continued to follow the strategy outlined in the case? Explain how or how not. (10 points)

Ford has continued to follow the strategy outlined in the case because Ford hasn’t fully committed to the autonomous future of the automobile industry. Ford for no now has no reason to change the F-150 to an autonomous vehicle. Ford and every other company don’t see the potential in the change yet but no one knows the future.

* 1. Based on the conversation in class, did you change your opinion? Why or why not? Be specific. (10 points)

I didn’t change my opinion based on the conversations we had in class because I felt no one convinced with their arguments. A lot of students in class went with moral argument approach that autonomous cars aren’t safe or ethical and I don’t believe that. I believe that autonomous cars are the future of automobile industry ad most companies will pursue it. Ford is already in the game for a fully autonomous and in just a few years almost all car companies will be just that fully autonomous.