Unit 5 Critical Thinking Questions

1. **Consider these two hypothetical server providers. Which would you select for your business? Explain which features are the most important to you.**

TABLE Hypothetical Server Providers

SolutionCloud	MegaData, Inc.
$159.99/month	$99.99/month
Live, 24/7 tech support by phone, chat, and email	M-F, 9am-5pm, tech support by chat
SSD storage	SSD storage
Downtime is 0.87%	Downtime is 0.96%
In business since 2013	In business since 2016

I would select MegaData because there really is not much difference between two, except for price and support hours. In my opinion, the support hours are fine, and the price is much less than SolutionCloud. I would save so much more money annually going with MegaData over SolutionCloud. The downtime between the two is almost the same, and the more years the company has existed doesn't always mean the longer running company is the best.

2. **A friend tells you that they want to set up a website because they are about to publish their first book. They want the name of the website to be their own name. They ask you, "How do you get a website name?" How would you give them advice on selecting their domain name and the process of establishing that domain name?**

The first thing I would tell them is that they want to make their domain name something that people can remember. If the user can remember what your site is over another, they'll most likely go to your site over the other. Also going off remembering, you want the domain name to be short. The longer the domain name is, the easier it is for someone to forget it. If its short, the person will remember it easily.

In terms on getting a domain, you want to choose a hosting provider that offers what you need at the price that is best for you. Don't get a plan with a hosting provider that offers more than you need, because in that case you most likely will be paying more money than you need to be paying. You also want to make sure that the hosting provider has a good reputation, because this will ensure that you are getting your money's worth. Also, make sure to get a plan that has good servers, because you don't want to run a company website that takes 10 minutes to load. In that case, most people will just leave your site after a minute.

3. **An elderly relative who doesn't use computers is reading a newspaper article. They ask you what "e-commerce" is. After you define it in a way they understand, they ask you how it can be safe to do e-commerce. How would you define the term in your own words, and how would you explain how it is made safe?**

E-commerce, or electronic commerce, refers to the buying and selling of goods or services using the internet, and the transfer of money and data to execute these transactions. Think of going to a store and buying things there; it's the same thing here, except you buy stuff online and it gets shipped to you. Security for e-commerce is very important, as there are millions of transactions going on all at one time. This poses a threat for bad people to steal personal financial information (like your credit/debit card information being stolen or your house address). E-commerce is made safe using what's known as SSL (Secure Sockets Layer) and TLS (Transport Layer Security). They are protocols that are set into place to establish authenticated and encrypted links between networked computers. This means your information is encrypted as it goes from your computer to the intended server. Think of the Caesar cipher, it is basically like that. There are different kinds of encryption, like 128-bit and 256-bit encryption. This means that a hacker or cracker will require 2^{256} different combinations to break a 256-bit encrypted message.

4. **In this unit, you learned about some new trends in web technology. Which one do you think will have the largest impact on web development? Why? How might it be used in the future?**

I believe that the JAM stack will be one to have a big impact on web development because this stack allows amazing customization and user interaction on websites. As things always get better as time goes by, I could only see this stack allowing for even better user interaction and site customization (development-wise).

5. **When you have a choice, which browser do you prefer to use? Why? What role has this browser played in the history of web development?**

In all honesty, I don't care which browser I use. I use by default Microsoft Edge (the new one), just because it's new and I want to see its development as a new browser.