Try to do the following to the best of your ability. Please put answers into a [github](https://help.github.com/articles/set-up-git) repository.

1. Create a basic 1-5 page zombie survival website. This site should utilize modern Responsive Web Design concepts to scale between desktop & mobile viewing.

2. Create a program that sorts a list of ninja related book titles alphabetically. Once sorted, it should output them as if they were sitting on a bookshelf (e.g. the titles are written downwards besides each other). It should look something like this:

f b h w

o a e o

o r l r

l l

o d

BONUS: Write the alphabetical sorting algorithm yourself.

3. You have just been asked to create a zoo, which showcases at least 2 dragons. How would you go about building a habitat that keeps the dragons safe and healthy, as well as keeps the customers alive? Please explain each step of your design and how it helps accomplish your two goals.

4. Describe what excites you about Zappos and more specifically this apprenticeshiop. BONUS: Submit a video (less than 5 minutes) answering.

(Put these in a [github](https://help.github.com/articles/set-up-git) repository.)

BONUS!

Build a program that can generate a random and valid sudoku puzzle.

BONUS (THE SEQUEL)!

Build a to-do list that allows for adding, editing and deleting items. As a second phase make it possible to sort and save the list.

\*Feel free to use any persistent storage you want (cookies, localStorage, indexDB, MySql, etc.).

Try to accomplish the add, edit and deleting first, as they are the most important.

Get creative and have fun with it!

*2. Create a program that sorts a list of ninja related book titles alphabetically. Once sorted, it should output them as if they were sitting on a bookshelf (e.g. the titles are written downwards besides each other). It should look something like this:*

*f b h w*

*o a e o*

*o r l r*

*l l*

*o d*

*BONUS: Write the alphabetical sorting algorithm yourself.*

$ninja\_book = array("shadow", "ninja star", "loyalty", "patience");

sort($ninja\_book);

foreach ($ninja\_book as $key => $val) {

echo " ninja\_book [" . $key . "] = " . $val . "\n";

}

ninja\_book [0] = loyalty

ninja\_book [1] = ninja star

ninja\_book [2] = patience

ninja\_book [3] = shadow

\*\*\*Sorry I’m still too junior to know how to print vertically, would like to learn how to print it out vertically \*\*\*

3. *You have just been asked to create a zoo, which showcases at least 2 dragons. How would you go about building a habitat that keeps the dragons safe and healthy, as well as keeps the customers alive? Please explain each step of your design and how it helps accomplish your two goals.*

Well, if I did own Dragons, I would not keep them in a zoo. I would have the dragons trained (Like in “How to Train your Dragons”, DreamWorks style) and give them the opportunity to roam free but that’s not the question.

Now, for this question, there are many unknowns that we have to think about. We have at least two dragons, the very first question would be… do they get along. Will they kill each other before the visitors get a chance to see them or will they live in harmony? If they do not get along, then we’ll have to build multiple pods, so they can have a safe place to sleep. It will be connected to a centralized hub, a place where they can “play with each other”.

Dragons come in many size, so we will have to assume that they are large, so the habitat will have to be large. This way if they are small, we do not need to rebuild the habitat. Do they fly? If they do, they will need to room to fly. So not only is the foot print of the habitat going to be large but the height of the habitat would have to be tall. Now we have the basic dimension of the habitat, the frame work.

Next well have to work on the pods. Let’s assume that there are four types of pods; one for flying dragons, cave dwellers, under water, and fire breathing dragons. For each of the pods, there will be viewing windows that are going to be built with bulletproof glass to protect the customers. It will also have a wired mesh fence to further reinforce the strength in case a dragon tries to ram the glass. The wired fence will have a low amperage electrical voltage running through it to prevent dragons from hanging on the fence which also prevent them from being ripped apart by the dragons. These wired fences will also be grounded if any dragons have the capability of conducting electricity. Above each of our windows, we will have a water spout, so if our fire breathing dragons decides to shoot flames towards our customer, we can extinguish them.

The pod for the fliers will be the highest set of pods. Build with mountain tops and trees. We will have walk ways within the mountains so that customer may see the dragons in their natural habits. The walk way will also be ADA accessible because everyone loves dragons. Then you’ll have the cave dwellers, these will be placed towards the ground level. The caves will be based towards the base of the mountain. It will also have walk ways within the caves. The walk ways will be lit with red light as to not disturb the dragons in their natural settings. The underwater pods will house the same viewing capability. Each of these pods will be home for the specific class of dragons and being in their natural habitat, they’ll be able to grow in a semi natural way. With the technology of the viewing glass, the customers will be protected and can enjoy the dragons in their somewhat natural habitat.

4. *Describe what excites you about Zappos and more specifically this apprenticeship. BONUS: Submit a video (less than 5 minutes) answering.*

I’m very excited in the idea that I may have an opportunity to learn code with a company like Zappos. I’m currently in an environment that does not give me the chance to practice code. What I learn does not get the real world application. I would be grateful to learn within your company and utilize what I learn in a real world environment, this will also help further my career in web development.

I’m currently attempting to change my career from retail banking to web development. I have a background in engineering and always love the idea of being able to build things. I see web development as another avenue to express my creative side. In regards to your company, I’ve learn that your company not only works hard but play hard as well. You teach your employees to value your company but also have expectation that your company can help employees improve themselves. I love the idea of an open library so that the employees can take steps to further their education.

I come from a customer service and core value based corporation but the difference I’ve seen and heard is that your core value can make or break you. It’s not just a set of rule that you may see from time to time, you live it. Customer service in your company is just that, customer service. I pride myself in offering the best customer service in my environment but because we’re sales oriented, we’re still required to upsell. Zappos longest call was 8 hours!!! Record set was back in 2011 and I feel that it’s an amazing feat. I can confidently say that no other company has done that. That was my WOW experience with your company.

Lastly, if accepted to the apprenticeship, I know that being immersed in a coding environment, I will be able to pick up HTML/CSS/ and even PHP more quickly.