After the ideation step, it is now time to prototype. Many find this step to be the most interesting and fun because you can now finally put your ideas into place. The purpose if this step is to come up with small yet quick prototypes where you then test the value and effectiveness. It is important to remember not to invest all your time on one idea. This also applies for money as well. Prototyping is valuable and in the article titled "Stage 4 in the Design Thinking Process: Prototype" written by Rikke Dam and Teo Siang, it demonstrates why that is what we can learn from the process. For example by creating small models one is able to have a better understanding of what works and doesn't work. If a model fails and a small amount of money has been spent other possible solutions can be explored. It is sometimes hard to know when to stop developing an idea, especially when it hasn't been tested in the real world. The reading titled "Design Thinking: Get Started with Prototyping" mentions this but also states that small details can be missed and in turn can cause the product to fail or not meet its purpose. The idea of prototyping is important and critical because without it there wouldn't be any way to test many possible solutions while also not breaking the bank in doing so.

In addition, the article also states that prototyping can be done at any level. This could range from someone sketching out their ideas to someone who has a more advanced set of skills to "print" out their design using 3D printing technology.

In class, we had the opportunity to create our own prototype for a "wacky app". We started off by looking at some examples online and then thought of possible products or services that would be functional but outrageous. During the beginning stages I thought of an app called "Pooper". It would be a spin off from the popular app Uber and would ultimately entail an on demand pooper scooping service for people who ad dogs. In class however, after hearing my fellow classmates ideas, I decided to create something else because I thought my app was too practical. I'm not

sure if the next idea I came up with was wackier per se, but it did bring a more futuristic and comedic take on the assignment. The app I developed was called "Planet Pooch" which was another on demand service for dogs but this time included drones. It would basically fly around and drop dog treats sporadically for a certain amount of time that the owner would pay for. Of course I realized that this was another practical app considering the epidemic of overweight dogs in this country. We used a website called Marvel App where we took pictures of each screen we designed and then turned them into a rudimentary app. Mine can be found here:

Once this was finished, it was time to test our apps on potential customers or users. I had my Mom and Dad test out the app as well as a couple of my friends to see what they thought of it as well as see what problems or suggestions arose. In turn this exercise demonstrated how important and useful prototyping can be.