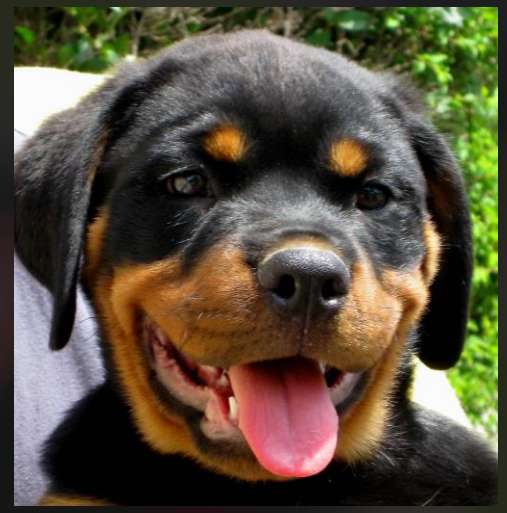
Poopatrol

Hello, I am a student and this year I decided I wanted to make the Poopatrol! Now, I know what you are thinking, what is the Poopatrol? Well, the Poopatrol is a dog walking aid so when your dog goes poop it holds the full poop bag in a bag on your leash. (And its washable).

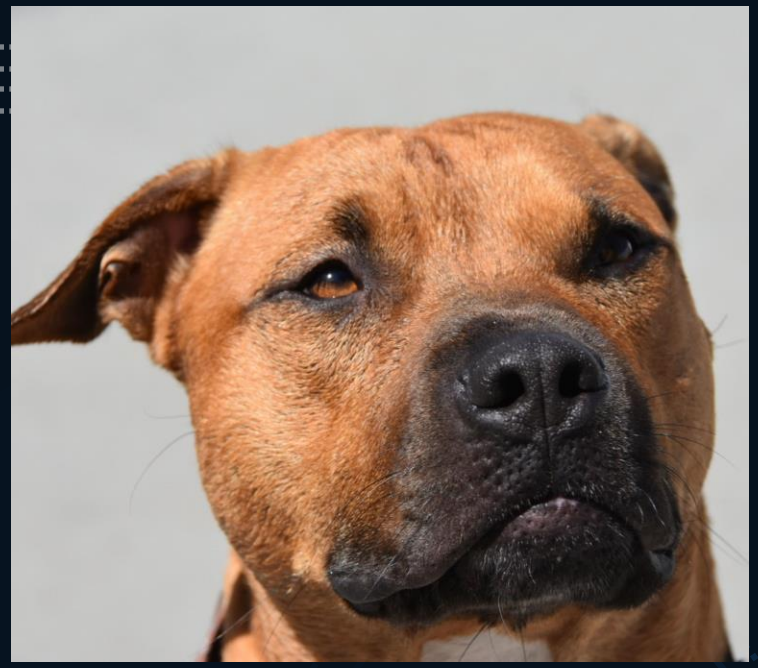


Hypothesis

I hypothesized that the Poopatrol will help people keep their hands free by holding their poop bags, while also decreasing the smell.

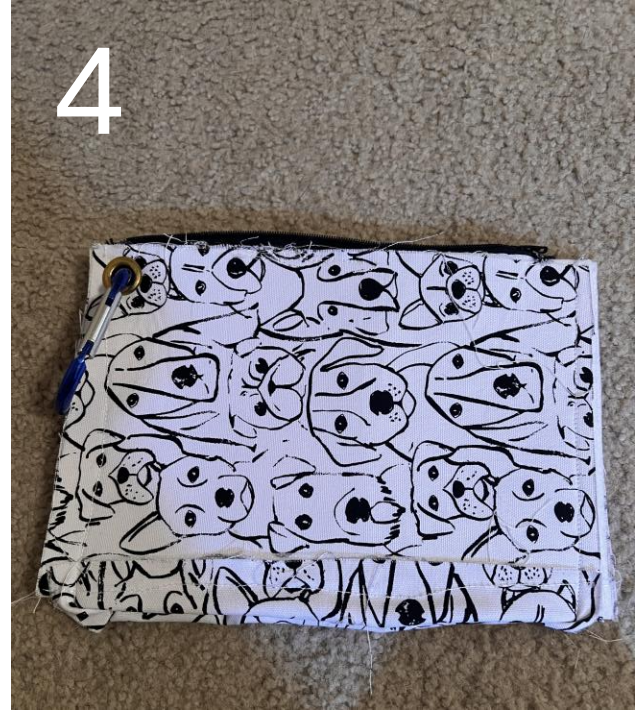
Problem

When people walk their dogs, they have to hold their smelly poop bags. Sometimes people have problems holding them and they need a free hand.



Solution

My solution is to provide a dog walking aide that will hold dog poop bags and keep the smell contained while you walk. It will also keep your hands free. For instance, if you have any other activities you like to do when you walk your dog, you can do them easily . When you get home, you can unzip/unlatch it and throw away the poop bags. This is the solution when you have the Poopatrol.



Data

My first prototype got a 9/10 and an 8/10. Both people didn't think they needed that much space. The second person runs and she didn't like how it bounced off her leg. The first person thought it would be cool if there was a pouch to hold the roll of poop bags. My second prototype got a 9/10 because if poop got on the outside or inside it would be really gross. They thought it was a good size and its didn't get in the way. My third prototype got a 9/10. She also didn't think it needed to be that big. It didn't get in the way, and it didn't smell . My fourth prototype was rated a 10/10. He thought it could be smaller because they don’t need that much space. My fifth prototype was rated a 9/10. She liked how it was light, and how it clipped on to your leash easily, and it was helpful on the walk. She also thought it would be nice if there was a pouch for the other poop bags.

Design Criteria

It must be strong and sturdy so the prototype doesn't fall apart when you are walking. Also, it has to be light so it doesn't weigh the leash down. It must have a carabiner or else it can't clip onto the leash. Lastly, it has to have a zipper or latch or the poop bags will fall out.

Materials

- Fusible Midweight Interfacing
- Linen dog print fabric
- Silver/Gold Gromets
- Colorful Gromets
- Black or White Zipper
- Velcrow
- Sewing Machine
- Scissors
- Hot Glue Gun
- Thread

Research

It all started with a question. What problem can I solve? Then I got it I was going to make the Poopatrol. So, I went online and went to Chewy to see if there was anything like my idea and there was and it was called Dooloop so I looked at the reviews and took notes on what I should include and remember. Later I made my first prototype, and I only changed one thing. I also did customer discovery, if you don't know what customer discovery is which you probably do but if you don’t it is interviewing potential costomers and learning there needs and seeing how you can change your next prototype. So, I interviewed ten people and asked then a few questions and all ten people said that holding poop bags was a problem. Chewy, Dooloop, and Woof & Wonder were my main sites.

Conclusion

In the end one of the best ways to do research when you are doing an engineering project is customer discovery because you can get a feel on what your customers want. I also learned that the Poopatrol should have a variety of sizes and not just one size. Also, someone told me it would be cool if there were different patterns. Lastly, I learned that you should always sew on the wrong side and then flip it so there are no raw edges.(Raw edges is when the edges start to fray). I had so much fun making the Poopatrol, I think I've helped a lot of people, and I enjoyed the weeks I was an engineer.