**Prompt 1: Some students have a background, identity, interest, or talent that is so meaningful they believe their application would be incomplete without it. If this sounds like you, then please share your story.**

Under the blazing sun in Oman, I was greeted with blasts of scorching heat. Sweat leaked from my head and sizzled as it collided with the asphalt road. Out of the corner of my eye, I see a thin figure. I turn to see a malnourished dog limping down the road. Its hunger was apparent from its rib cage protruding out of its body. Its crusted tongue dangled from its withered mouth. “Should I give it food?” I thought. But before I could move, the stray became aware of my presence and bolted out of sight. Reality set in that I was unable to help. My heart sank. If only I could do something to help…

Seeing Rimba, my golden retriever, at home made me feel heart-broken for the strays. Unlike strays, he has food and is protected from the threat of getting shot by the police due to Oman laws. With so many strays roaming around, I yearned to find a solution to create a positive change for them.

After brainstorming, I opted to build an automatic animal feeder because it would feed strays whilst eliminating human presence so they do not feel threatened. This was vital considering their poor treatment from residents. It was the most practical option as it would lead them away from the city and, thus, decrease the chances of residents calling the police. I finally found a purpose because my engineering skills could be harnessed to help countless lives.

The first prototype I constructed was a feeder with a plywood base and a remote food dispensation feature. It also has a solar panel that takes advantage of the abundant sunlight in Oman. After a trial run with Rimba, I started to question whether the machine was operating at its full potential as only a small amount of food was dispensed.

Not long after, I saw a post from BAWABALI, one of the biggest animal rescue shelters in Indonesia, about donating and volunteering to help strays. I witnessed how hard the volunteers worked, so I thought I could show them my device when I go back there. I got in contact with them and, with their guidance, I developed a plan to build a new prototype for their shelter.

In Indonesia, I designed the second prototype using Computer Aided Design. I followed up on BAWABALI’s advice of incorporating a rectangular shape for stability and increasing the food capacity. I showed them my latest design and they’re able to visualize the best place for it. Upon their approval, I started building.

Days of struggling followed, the whirring of motors and the clanging of food pellets against the metal bowl echoing through the night. It could only mean one thing: the feeder was working. Bursting with joy, I observed the machine operate expeditiously. The upgrades had enhanced the feeder so it doesn’t need to be refilled often by staff. I was proud that I completed it, yet anxious to see how the strays would react.

The following morning, I donated the feeder to BAWABALI. A sense of relief washed over me when I saw that the strays weren’t fighting over the food. Their wagging tails insinuated their gratitude. Although I was pleased with my journey, I began to contemplate about the future designs and how it can be more suitable for strays in Oman. I figured the current enhancements are sufficient but a strong material is required to withstand the hot weather.

I was delighted to be able to help these creatures. I feel I’ve reached new milestones in my designing capabilities as well as using sustainable energy. I’m more motivated than ever to reach greater heights in my journey by increasing the complexity of my designs and therefore the effects of my creations. Finally, I vow to use my engineering skills to help not only animals, but also the environment by understanding and utilizing renewable energy.