

Living Through Diabetes

New Mexico

Supercomputing Challenge

Final Report

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YWiC - 4

Young Women in Computing

Biology

AppInventor

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Executive summary

Diabetes is a disease that affects nearly half the american population. The body is unable to produce enough insulin or regulate the amount of insulin in the body to break down glucose. My best friend is a type one diabetic and was diagnosed at the age of 8 and I have seen them go through countless strips from testing the blood sugar and needles from the insulin pen. Having to

live with diabetes from such a young age has been challenging for this friend and as well as all the other diabetics. Diabetics have to go to endocrinologists for regular check ups, but my friend was told the closest endocrinologist was in Albuquerque. After doing research I found that there are 3 endocrinologists in Las Cruces but my friend continues to see theirs in Albuquerque, But that left me thinking, there must be diabetics in even smaller cities that have to travel out of city to get necessary care to stay healthy. I wanted to build an app that would make it easier for diabetics to count their calorie intake so they know how much insulin to take as well as a place to digitally share their blood sugars with their doctors. My app was built using App Inventor and I made a calorie counter and a small insulin and blood sugar log for the week. Although this app was not what I wanted it to entirely be, I was able to begin the small steps to making what I have been envisioning for quite sometime. This app could be very helpful to anyone who has been recently diagnosed learn to manage their diabetes or even someone who has been living with diabetes for a big portion of their life more easily manage their diabetes. This could also connect minors to their parents so they could see what their child has eaten and if they've been keeping up with their blood sugar and giving proper insulin doses if I were to be able to get this app to connect to multiple devices and share information. The conclusion I found was that I want to go even further with this app and keep working with it to make it entirely how I initially envisioned. My most significant achievement on this project was seeing it come together and knowing that I have the ability and the creativity to design an app and that continuous hard work I can come to my final end goal and this app will be able to help people. I would like to acknowledge Rebecca Galves for providing the other YWiC teams and I a place to learn and come together to work on our projects, Analyssa Martinez for giving me the guidance and help I needed on this project and my best friend for never letting my confidence down and giving me the support to realize that I can keep working and keep making improvements and never letting me think that this is too small to help anyone.