Exactly 113 days ago, we started to work on our revolutionary idea that is meant to solve a problem that has been around since the first sound or note was ever played on this planet. Well, hello, I am Karshin, I am Jack and I am Thesara and we are the co-founders of Music Sensation.

Personally, music - is very much part of all of us; we get comfort in playing and listening to Music. Research has shown that listening to music can reduce anxiety, blood pressure, and pain as well as improve sleep quality, mood, mental alertness, and memory. But, unlike us, deaf people are not able to fully experience music the same way we do. At Music Sensation, we have come up with a solution to help deaf people enjoy the music through their other senses. You might be thinking; how can deaf people listen to music if they can’t hear anything?

Well extensive research has shown that deaf people experience and enjoy music and sounds through vibrations. People who are born deaf use areas of the brain typically devoted to processing sound to instead process touch and vision. Vibrations and perceiving musical notes are quite similar as they both are processed in the same part of the brain. Brain activity in the auditory cortex help the deaf person perceive the music and feel emotions from it. Taking this knowledge to our advantage we thought of hooking up a wristband to a website/application that will vibrate to the beat when played.

It is shocking but 1 in 6 Australians experience hearing loss/ varied degree of deafness, with ages ranging from students to seniors in their 90s. Our group personally know several people who have experienced hearing loss like this. To test if our idea will be useful to deaf people, we messaged our idea to 2 deaf people and 5 audiologists that have devoted their life to the research of deaf people -. One being Doctor Lana Joseph Ford, CEO of High-Level-Hearing, author of a best-selling book and winner of the business of the year 2020. She gave us positive feedback and loved the idea. Another audiologist even compared our idea to the famous mickey mouse ears they wear at Disneyland. We also received suggestions on how to develop our idea into a practical application. We also studied the market for products in this space.

Currently, people have created devices that can sense sirens and vibrate a deaf person’s hand to alert them. There are music videos that use sign language to explain the lyrics, these look very artificial. There is nothing out there in the market that fully allows deaf people to use both touch and vision to experience music

Here is a quick rundown of our MVP. We created a website using HTML, CSS and JAVASCRIPT. The website would have to send an output signal to the Arduino of what song is being played. The webpages we have created consist of about 1,500 lines of code. Based on the inputted beat and frequency, the haptic sensor connected to the Arduino would send a vibration through the wristband as an output. At the moment we created a webpage which introduces our motive and team and another webpage that is meant to control the music and vibrations. With your support, we can then progress into this project and fully automate our MVP by connecting the Arduino to the websites we created.

The next step would be to give a demo to some people who experience hearing loss and get feedback on it. We’ll use the social media account we used to contact the audiologists to spread the word about our product. Please support us so we as Haileyburians can help millions of deaf people across the world enjoy music the way we do.