***The problem***

**We love dogs and so does every other dog owner. Dogs are more sensitive to sounds as compared to us. Their hearing range is from 67-45,000 Hz. So when you are blasting that heavy rock music through your speakers or when you are travelling with your faithful companion through the concrete jungles, they probably are not enjoying it as much as you are. Next imagine a scenario where you both are in the car and ou have to get somthing from the store. They don’t allow pets in there so you had to leave you mate in your car. You can become distracted and forget your pet is in the car, which can result in heat stroke, suffocation, hyperthermia/hypothermia and even death. All it take is 8 minutes for your dog to die (McDonald’s takes more time then that to get your order ready).**

**Now imagine that you were playing with your dog outside and you get a call from your friend or your mom calls you inside, and in the process, you forget about you dog. Now he’s sitting there in scorching heat while you are sitting in your comfortable air-conditioned room blasting music through your headphones.**

**While you might not be one of those careless people but there have been cases where dogs (and other pets) have scrummed to death.**

**Only a pet owner knows the pain of separation from their beloved pets.**

**The Solution:**

**We will make small and compact module which can be attached to the collar to keep track of our dog’s heart rate, temperature and oxygen dissolved in blood (Which you can monitor through the app). It will also keep a check on Air Quality and Sound level. If the sound level is above the recommended level for our dogs, the headphones will perform Active Noise Cancellation and if the any of the vital signs shows any defection or the air quality is bad, The owner will get a high priority message on their phone. The speakers will also start to play a pre-recorded message and the led’s on the collar and headphone will start to glow so as to get attention of any bystander. It will also have a feature where the owner will get an alert every time their pet gets left behind (Every time the bluetooth disconnects). It will also be capable of interacting with the car window’s controls so the get rolled down automatically if the temperature inside the chassis rises to dangerous levels.**

**Hardware we’ll use: Arduino Uno, Circuit Playground Express, HC05 Bluetooth module, ESP8266 Wifi module Temperature sensor, Oximeter, Air quality sensor, Speaker, Sound Sensor (For Active Noise Cancellation) and Pulse Sensor.**

**We focused mainly on dogs (because we love dogs) but the same problems are faced by other pets, small children and old people alike.**

**This device will help ensure that your loved ones always stay in comfortable environment.**

**P.s. Well make sure that the device can be attached to clothes in case of humans. A dog collar won’t look good on your grandpa anyways ;-)**