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Smart Sip

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Materials

The material that I have chosen to use to build the "Smart Sip" is 304 stainless steel. Many of the competing breathalyzer machines are just made out of plastic and over time that plastic can fade and become brittle due to cracking. To be quite honest, the existing breathalyzer machines look very plain and boring. I want the "Smart Sip" to stand out, and that's why I am choosing to case my machine in a sheet of 304 Stainless, opposed to a black, dull plastic shell. The stainless-steel exterior will give "Smart Sip" a sleek and fancy look that will attract people of all age groups. The goal with "Smart Sip" is to make people notice it sitting on the wall and ask "what's that over there?" instead of just walking right past it without even knowing its there like the existing machines now. Although the 304 stainless may look pretty, visual appearance isn't the main factor as to why I chose it compared to other materials.

Methods

Methods for use of the machine were stated earlier in the report, but I will reiterate on them here so that there are clear instructions. First you will enter your Uber account information by using the touch screen keypad and linking your account to "Smart Sip". Second you will use one of the plastic beverage straws provided to blow into the machine until the machine can get a reading of you blood alcohol content. Finally, you will act according to your results. If you record a BAC of less than 0.08 you are free to go, but if a BAC of 0.08 or higher is recorded than an Uber will be called for you automatically and you will wait for its arrival to pick you up and take you home.
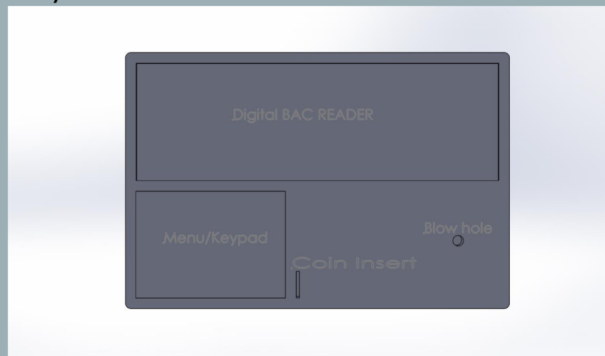
Problem Statement

The consumption of alcohol has many effects on people, both directly and indirectly. Its no question that when most adults get together for a good time, alcohol will be involved one way or another. However, the over consumption of alcohol can lead to some of the scariest and sometimes fatal results. There are too many people that lose their lives due to drunk driving accidents, or alcohol poisoning each year. No matter how terrifying the risks are of over consuming alcohol, people are still going to go out and take their chances. But what if there were a way to minimize the risks, or to possibly prevent someone from getting behind the wheel while under the influence? With some new technology and proper awareness, we could do just that.

I am proposing a system that can prevent individuals from even having the opportunity of getting behind the wheel after leaving a bar. I am developing a system to be placed in bars that doubles as a breathalyzer test and a designated driver. With this device, upon leaving the bar, the individual will be instructed by bouncers of the establishment to use the in-house breathalyzer machine to test "Blood Alcohol Level". If the results are below the number enforced by the law of whichever state they reside in, the individual will be free to leave. But if the results are higher than what the law states, this device will automatically notify a taxi service, or Uber driver to come to the current location and give the individual(s) a ride home.
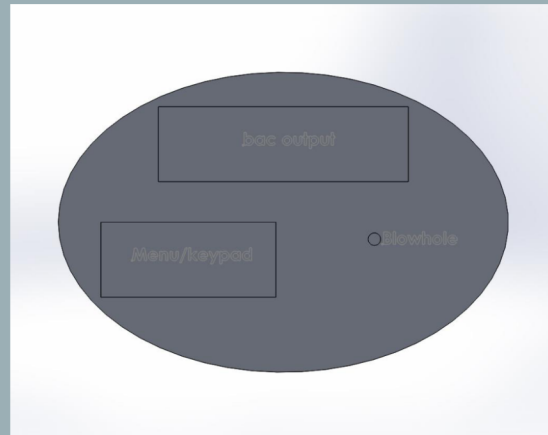
Conclusion

Drinking and driving have been a bad problem across the United States for a very long time. Lives have been ruined directly, and indirectly from drinking and driving accidents. Whether you have been involved in an accident of drunk driving, or if you have lost friends or family members due to drunk driving accidents, the effects can be detrimental. There are far too many people killed or injured each year due to being involved in a drunk driving accident. Driving drunk is such a selfish and irresponsible act that can be 100% prevented by using either a designated driver or calling a public transportation system. Innocent people should have to risk their lives driving down the road and get hit by a drunk driver. With "Smart Sip", I am trying to prevent people from getting behind the wheel after a night of drinking. This technology could eliminate the risk at the source if people would us "Smart Sip" and allow for an Uber to pick them up and take them home safely. "Smart Sip" will not be able to eliminate all drunk driving accidents, but if it can safe just a few lives, then that is a huge step in the right direction.