**AAGS- SmartSole**

**Introduction:**

As we all know that India is famous all over the world for its great tradition and culture where women are given respect in the society since ancient times. Goddess Lakshmi, Saraswati, Parvati, Kali, Aditi show how much importance women are given in the Indian society. Indian women are found working in all fields like aeronautics, space, politics, banks, schools, sports, businesses, army, police, and many more fields. However if we introspect and think about it, we find crimes against women at home, offices as well as streets. By seeing the latest trend of crimes against women in India such as rape cases, acid attacks, etc, the safety of women has been in doubt..

Concerned because of such issues, Gauransh Arora and Akshat Gupta, two students of VIT Vellore, came up with a few ideas to overcome these social evils being socially responsible citizens..

**How we came up with the idea?**

While brainstorming for ideas, we decided to choose the topic Security. Akshat was talking to his mom on his phone. It was his mom’s birthday and he had gifted her a necklace. This is when Gauransh realized something that almost all women wear in common- a necklace or mangalsutra! Being a Cyber Physical Systems Researcher studying Arduino, he felt he could add sensors to the necklaces and the sensors would be able to monitor the heart rate and gather and transmit information through Real Time Communication using Voice Calls. Also when the necklace is snatched or opened by force, the sensors in the necklace would get activated and send a Voice Call to an assigned server alerting concerned authorities. Another suggestion we thought of was to create an App which would send distress calls to a pre-assigned emergency contact number. Both of us agreed to implement this idea but then Gauransh told that it had been just a few weeks since his classes started and he wouldn’t be able to monitor anyone’s heart rate with his limited knowledge. Plus he himself added that his own mother doesn’t usually wear necklaces.. This is when we decided to scrap this idea.

In a while, Gauransh got up to fill his bottle when his chappal suddenly broke! Then Akshat realized that Footwear is something that every person wears while leaving their homes! People may forget their phones or bracelets in a hurry but no normal person would go out barefoot! Plus it would require just simple Arduino skills as just a simple pattern or sequence of tapping the feet would activate the sensors! Gauransh agreed saying that he would able to code such a program efficiently without any problems..

This can also be added to footwear for children which will help preventing child trafficking, kidnapping, etc..

We aspire to make the lives of every female and child easier. Even though our product doesn't immediately help the victim, it alerts the emergency contacts and so with appropriate police help, the chances of stopping the crime increases thereby reducing crime rates in the long run..

A safer India and soon a safer world is our dream!

We hope you liked our idea!