**Wearable Device for Women Security**

**Field of invention**: - Women Security

* The invention pertains generally to women's security to avoid any mishap/harassment. It also helps to pursuit the victim .

**Novelty**:

* Our Invention helps women in such a way that they can able to communicate with the area police station and parents by wearing our smartwatch for help when they are forced to any mishap/harass.
* Additionally, parents can also able to track their kid frequently.

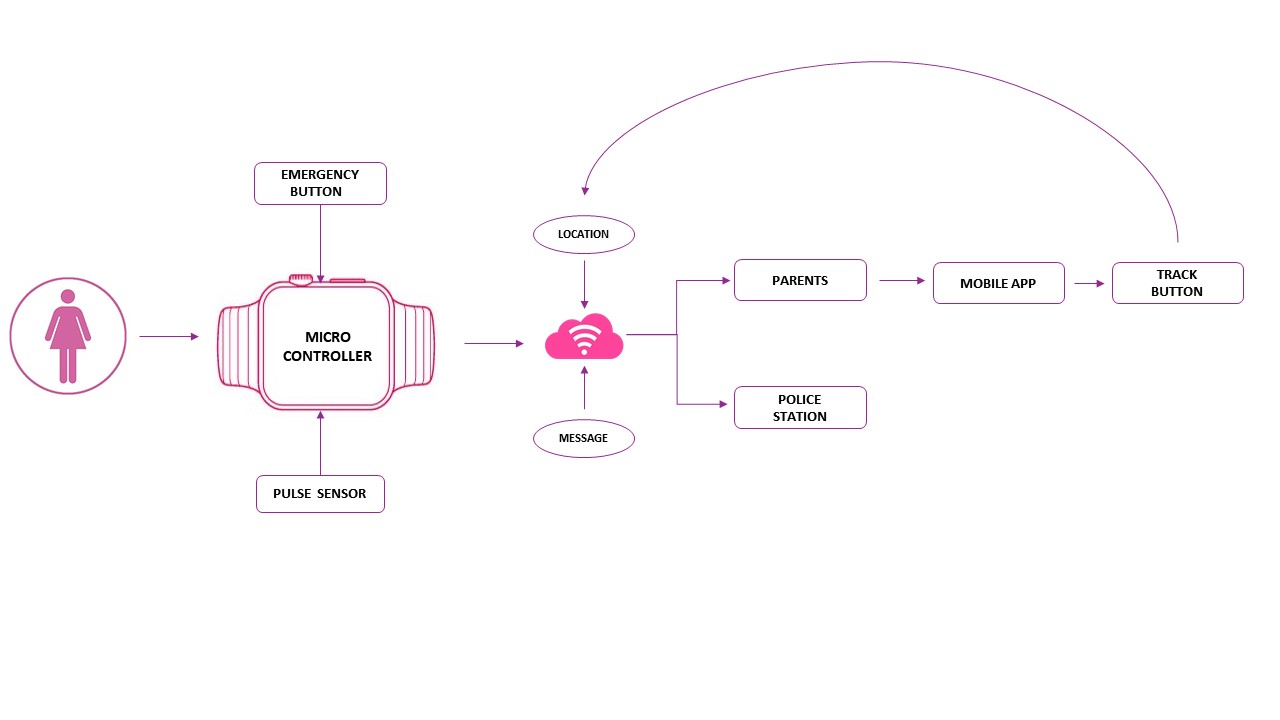
**Innovative features**:

* Our device Enabled with Internet of things technology and Communicates with the area police station through an SMS embed with the victim's Location in a Shortest path.
* It also monitors the physical condition of the victim, Generally, if any mishap occurs or in urgent situation the physical state of the human body suddenly get abnormal like aberrant pulse rate and temperature. During Such abnormal condition, the emergency indication will forward to the area police station and parents respectively through notifications and SMS.
* The Location is shared without the GPS module.
* Parents will be provided with a Special app in which by pressing the track option they can get through the exact location of the victim**.**

**Abstract**:

           A survey by United Nations ‘WOMEN’ has found out that 35 percent of women in the world experience physical and/or sexual intimate partner violence or sexual violence by a non-partner at some point of their lives. However, some national studies show that 75 percent of women in a country experience such violence. Also, a survey conducted by the Thompson Reuters Foundation has produced a shocking result that India is the world’s most dangerous country for women. According to our insight, the inability of the victim to inform regarding the mishap and the delayed response for it are the main causes for the harassments carried out against women and girls. So, our project is based on IoT and aims to lend a hand towards providing women and girls the ability to inform someone, their parents and a Police Officer, to be precise, regarding the injustice performed against them, which in turn would pave way in establishing effective measures of safety to them. We have used an application that suits our need to implement the idea of providing security for women. We aim to obtain the location of the victim, if a button in the device is pressed or the heart rate of the victim becomes abnormal and notify it to their parents and a police officer of their area through mail and normal message notifications, which could be made possible by making the parents and the officer to install the application in their mobile phones. Also, parents could keep track of the location of the girl once in a while by simply pressing the button in their app. They will be provided with an authentication code individually once they register in the app. To find out the location of the victim, we have used a microcontroller with in-built Wi-fi without a GPS module. The controller embedded with the code in it, which is wearable, will fetch the location of the victim and send it to the mail and phone numbers specified in the code. Since one authentication code from one phone will be able to receive notifications from several controllers, we developed the idea of notifying the location to an officer, which we believe will prove useful in preventing the mishap from happening. The requirements are that the parents and the concerned officer have to install the application and register in it to get an authentication code and the woman should connect the controller to her mobile phone hotspot. Once it is done, they will receive notifications during the crisis and the parents can know the whereabouts of the individual, once in a while. It is also possible to add a camera to the device which would prove much more useful by not only informing the problem but also by identifying the accused. Till now, larger size controllers like Arduino boards have been used to identify the location, which has failed to make them portable and they are costlier too. But, our design is smaller in size, less costly and also more efficient than those used previously in this process. We hope that, if this device becomes accessible to every woman, it would surely prove useful in saving them before any mishap occurs. Since multiple boards can be operated with the same authentication code, this project can be implemented over a large scale.

**Block Diagram:**

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