SAFE-IN-SOUL
(WOMEN SAFETY DEVICE)

1. INTRODUCTION

Women are the backbone of our economy primarily shaping the future of our country. They often work across ethnic, religious, political, and cultural divides to promote liberty. We all are aware of *importance of women safety*, but we must analyzed that they should be properly protected. Women are not as physically fit as men, in an emergency situation a helping hand would be assistance for them. The best way to curtail your probability of becoming a victim of violent crime (robbery, sexual assault, rape, domestic violence) is to recognize, defense and look up resources to help you out of hazardous situation.

Late-Night Shifts: Many IT jobs require employees to work late-night shifts or irregular hours. This can expose women to safety risks, especially when commuting to and from work during off-peak hours or in poorly lit area. *Physical Assault:* Women walking alone in unfamiliar or poorly lit areas may be at a higher risk of physical assault, including mugging, robbery, or sexual assault.

Harassment and Catcalling: Street harassment, such as verbal abuse, catcalling, or unwanted advances, is distressingly common for women walking alone, and it can create a hostile and uncomfortable environment. *Dark or Isolated Areas:* Poorly lit streets, alleys, or parks can be breeding grounds for criminal activity. Women may feel vulnerable and at risk in such areas.

Lack of Security: The absence of visible security personnel or law enforcement officers in the vicinity can heighten feelings of insecurity for women walking alone. *Inadequate Public Transportation:* Public transportation options may be limited or less frequent during late nights, forcing women to wait in deserted areas, making them susceptible to safety risks.

Fear of Kidnapping or Abduction: Women may have genuine concerns about the possibility of being kidnapped or abducted while walking alone in unfamiliar areas, especially if there have been recent incidents in the region. *Peer Pressure and Judgment:* Some women may fear judgment or criticism for being out late at night, which can deter them from seeking help or reporting incidents when they feel unsafe. *Limited Communication:* In areas with poor cellphone reception or when a phone is out of battery, women may have limited means of communication or calling for help in case of an emergency.

Unfamiliar Surroundings: Women walking alone in unknown areas may face challenges in navigating their way and may be more susceptible to getting lost, which can increase their vulnerability.

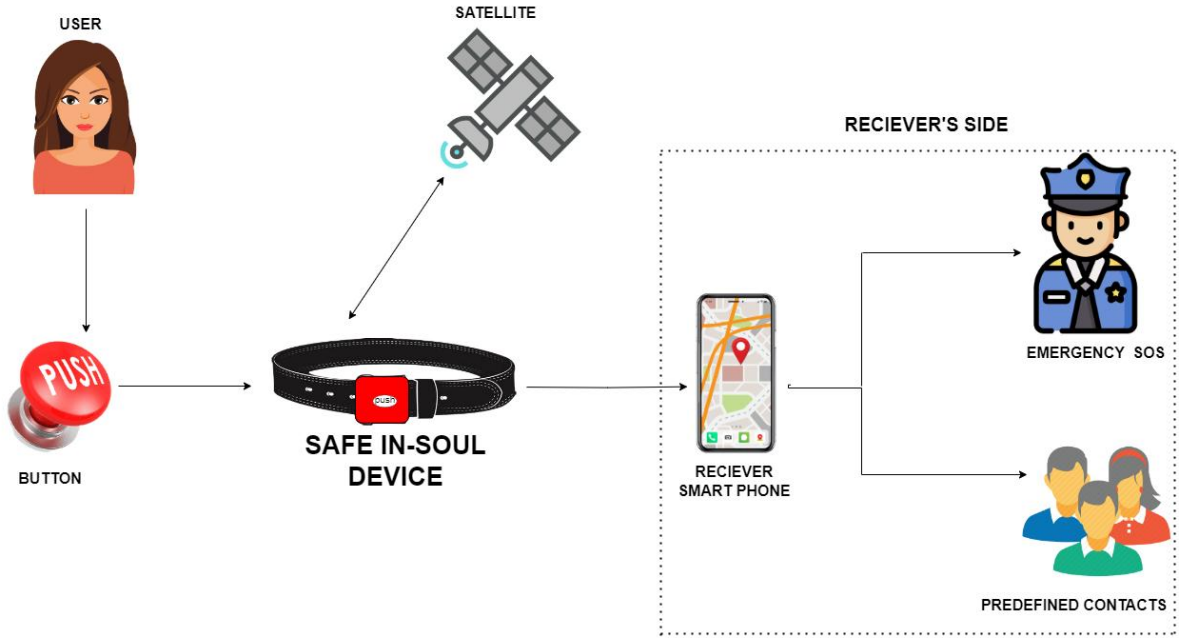
The project presents a wearable safety device for women using the Arduino. **The purpose of this device is to safeguarding women in the event they might face any danger.** The switch in the device work for sending manual alerts in case of emergency and computer vision techniques have made it possible to develop systems that can overcome these challenges and accurately detect polyps in real-time.

2. OBJECTIVE

- The device "Safe In-Soul" consists of system that ensures immediate alerts in case women is harassed or thinks is in trouble.
- By ensuring real-time messaging and live tracking for her location immediate action can be taken to prevent crime against women.
- The device will be used for protect the women without the help of mobile phones and immediately protect the women

3. PROPOSED METHODLOGY

3.1 ARCHITECTURE



3.2 ARCHITECTURE PROCESS

- In case of an emergency, the user can trigger by pressing a panic button.
- The device gets the real-time location from the satellite with the help of GPS.
- It immediately sends alert message to the Emergency SOS and pre-defined contacts along with the user's location with help GSM .
- The system also features a web interface that enables the contact can track the user's location and receive alerts in real-time.

3.3 REAL- TIME PICTURES

Women can wear this safety belt wherever they choose, whether it's on their **wrist, arm, leg, abdomen, or thigh.**This safety belt can be designed to be extremely small and lightweight, allowing it can be worn inside dress,thereby hidden from strangers

3.4 ADVANTAGES

- It **doesn't depend** on the mobile phones.
- It is a wearable device that can be structured as **belt** and **wear inside the dress**.
- It's a more **compact** and **portable** device.
- If the device is not continuously getting signals for more than two hours it can send that current real-time location.
- Women can wear this safety belt wherever they choose, whether it's on their **wrist, arm, leg, abdomen, or thigh.**
- This safety belt can be designed to be extremely small and lightweight, allowing it can be worn inside dress,thereby hidden from strangers

4. WORK PLAN

4.1 Month 1: Project Initiation and Planning

Define the project objectives and scope, assemble the project team, conduct initial market research.

4.2 Month 2: Concept Development and Prototyping

Finalize the safety device concept, Begin prototype development, Identify the necessary technology.

4.3 Month 3: Prototype Refinement

Iteration of the prototype based on user feedback, Finalize the device prototype, Begin initial testing safety features.

4.4 Month 4: Technology Integration and Testing

Integrate GPS,alarms and connectivity features,Conducting in-depth testing safety features, Develop a user-friendly interface.

4.5 Month 5: User Testing and Project Deployment

Start user testing and Implement improvements based on user feedback finally deploy our project.

5. BUDGET

Product	Specification	Quantity	Amount
Mini nano Arduino	ATmega628	1	4200
Mini GPS	NEO 6M	1	3300
Mini GSM	SIM 800L	1	2900
Lithium iron battery	-	1	820
Charging port	-	1	1500
Vibrator & wires	5V	Required	1100
Push button	-	1	280
Belt & box	Portable	1	920
		Total	**15,020**

6. OUTCOMES

- Women can be easily protected from harassment and violence.
- Their lives can be saved, and they can made to feel safe through this device.
- Women's safety can be increased through the use of this device.
- **Enhanced Personal Safety:** The primary outcome is the improved personal safety of women. The device provides them with a tool to alert others or authorities in case of emergencies, reducing their vulnerability to physical harm or harassment.
- **Immediate Assistance:** The safety belt device can facilitate quick and immediate assistance in distress situations. It can send alerts to pre-defined contacts or authorities, ensuring that help arrives promptly.
- **Location Tracking:** Many safety belt devices incorporate GPS technology, allowing for real-time location tracking. This feature assists in pinpointing the user's location, making it easier for rescue teams to reach them.

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