

Women's Safety Device Using GPS and GSM Module

Jadhav Gauri Ashutosh¹, Mane Sandhya Bhim², Mr. Chavan A.Y³

^{1,2} Students, Diploma in Computer Engineering

³ Lecturer, Diploma in Computer Engineering

Vishweshwarayya Institute of Engineering and Technology, Almala, Maharashtra, India

Abstract: *This project, titled "Women Safety Device using GPS and GSM Modules," involves the design and development of a portable security system that helps ensure the safety of women in emergency situations. The system uses integrated modules such as a GPS module for location tracking and a GSM module for sending alert messages to predefined contacts. The working principle is based on a microcontroller-based system where, when the emergency button is pressed, the device immediately captures the user's location using GPS and sends an SMS alert through the GSM network to family members or authorities.*

The main objective of this project is to develop a reliable, low-cost, and easy-to-use safety device that provides immediate assistance during dangerous situations. The device helps reduce response time by quickly sharing the real-time location of the user. Compared to traditional safety methods, this system offers faster communication and better location accuracy. The design and implementation of this project demonstrate how embedded systems and wireless communication technologies can be effectively used to improve personal safety and emergency response systems.

In addition, the proposed system aims to increase confidence and security for women in public places, workplaces, and during travel. With the increasing use of embedded systems and wireless communication technologies, this project demonstrates how modern technology can be effectively used to address social safety issues..

Keywords: Women Safety, GPS Tracking, GSM Communication, Emergency Alert System, Embedded System

