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Auditorium Power Control and Fire Detection System

Prof. S. D. Lavange¹, Miss. Tejal Patil², Miss. Vaishnavi Barhate³ Miss. Anisha Talole⁴, Miss. Tejal Girhe⁵, Miss. Sakshi Ingle⁶

Professor, Department of Electrical Engineering¹
Students, Department of Electrical Engineering²⁻⁶
Dr. V. B. Kolte College of Engineering, Malkapur, India

Abstract: The Auditorium Power Control and Fire Detection System is a microcontroller-based project designed to automate power management and enhance safety within auditoriums and large halls. The system integrates sensors to monitor temperature and smoke levels in real-time, ensuring efficient energy use and quick detection of fire hazards. When abnormal conditions such as excessive heat or smoke are detected, the system automatically disconnects the power supply and triggers an alarm to alert occupants. Under normal conditions, it intelligently controls lighting and electrical loads to optimize energy consumption. This project combines automation, safety, and energy efficiency into a single platform using components such as Arduino, temperature and smoke sensors, relays, and buzzers. It demonstrates a cost-effective solution for modern auditorium management and can be further expanded with IoT-based remote monitoring and alert systems for improved reliability and response time.

Keywords: Arduino, Temp. Sesensor, Relay, Buzzer etc







