Cam Vault: AI-Powered Home Security

Cam Vault is an Al-powered home security system designed to protect your home from theft, fire, and unauthorized access.

TEAM:-BLINKERS



Problem: Home Security Threats

Theft

Traditional security systems are often reactive, leaving homes vulnerable to theft.

Fire

Early detection and response are crucial for mitigating fire damage and saving lives.

Unauthorized Vault Access

Protecting your home and family from unwanted intruders is paramount.



Cam Vault Solution



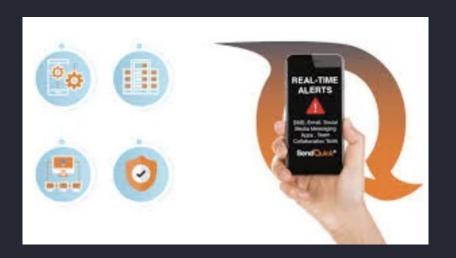
Motion Detection

Al-powered motion detection identifies potential threats



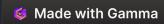
Image Capture

The system captures images for visual confirmation of threats.

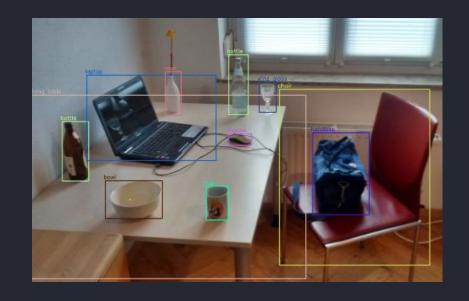


Real-Time Alerts

Instant notifications are sent to users for prompt action.



Key Features



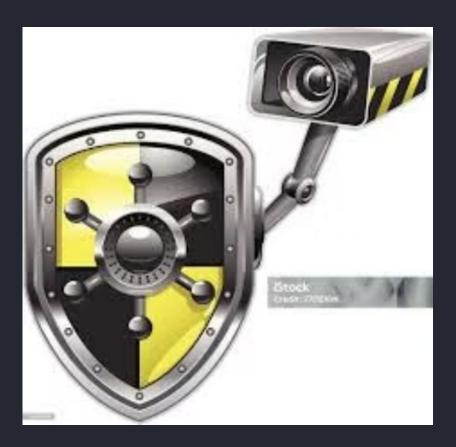
YOLO Object Detection

Recognizes objects and faces for accurate threat assessment.



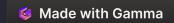
Fire Detection

Monitors the light frequency prevent fires.

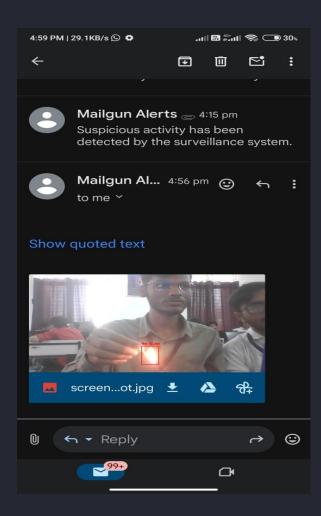


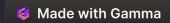
Vault Monitoring

Protects valuable assets by monitoring access to secure areas.



Alert sended when suspicious activity detected





Technology Stack

Frontend

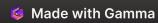
Tkinter (GUI) for a user-friendly interface.

AI/ML Models

YOLO, Gemini API for object detection and analysis.

Backend

PyMongo (Database) for storing data and user information.





Future Scope



Smart Home Compatibility

Cam Vault aims to integrate seamlessly with existing smart home systems, allowing users to manage their security alongside other home automation features



IoT Integration Plans

IoT integration will allow Cam Vault to connect with various smart devices, creating a more cohesive security ecosystem.



Enhanced Cloud Storage Solutions

Future enhancements will include expanded cloud storage options for security footage, providing more capacity and accessibility





Conclusion

Cam Vault combines Al-powered technology and secure infrastructure to provide a comprehensive home security solution for modern homeowners.