

USER

Zone 1 User - Frontend

Threats

- Unauthorized Access
 - XSS Attacks
 - CSRF Attacks

Measures

- JWT
- Rate Limiting
- CSP Headers
- CSRF Tokens

FRONTEND

Zone 2 Frontend - Backend

Threats

- API Key Exposure
- Data Interception
- DoS Attacks

Measures

- Env Variables
 - TLS 1.3
- Rate Limiting

BACKEND

MQTT BROKER

Zone 4 Backend - MQTT

Threats

- Message Tampering
- Unauthorized Access

Measures

- Message Signing
- Access Control

Zone 3 Backend - Database

Threats

- SQL Injection
- Data Breach

Measures

- Parameterized Queries
- Encryption at Rest

DATABASE



DEVICES

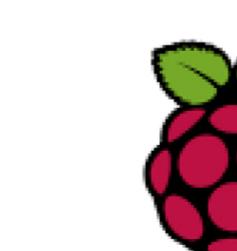
Zone 5 MQTT - Devices

Threats

- Device Hijacking
- Data Exposure

Measures

- Device Certificates
- Encrypted Storage



Raspberry Pi

LOCALHOST