

## **IoT Device Security Scanner – A Tool to Check Vulnerabilities in IoT Devices**

The **IoT Device Security Scanner** is a **web-based tool that scans IoT devices for vulnerabilities and security weaknesses**. As IoT devices become more widespread, securing them from cyber threats is crucial.

### **Key Features:**

- **Network Scanning & Device Discovery** – Detects all connected IoT devices on a network.
- **Vulnerability Assessment** – Identifies open ports, weak passwords, and outdated firmware.
- **Risk Scoring & Report Generation** – Provides a detailed security score and recommendations.
- **Real-Time Threat Alerts** – Detects anomalies in IoT device communication and reports security threats.
- **Cloud & Edge Security** – Integrates with cloud IoT platforms (AWS IoT, Google Cloud IoT) for additional security insights.

The tool is developed using **Flask/Django, Nmap for network scanning, and Python-based vulnerability detection models**. This project ensures **IoT security by identifying potential cyber threats and helping users take preventive measures**.