

SMART INDIA HACKATHON 2024

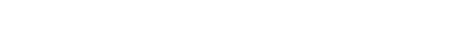
- Problem Statement ID 1684
- Problem Statement Title- Agent-less

Windows System Vulnerability and Network

Scanner

- Theme- Blockchain & Cybersecurity
- PS Category- Software
- Team ID-
- Team Name (Registered on portal)







Agent-less Windows System Vulnerability and Network Scanner

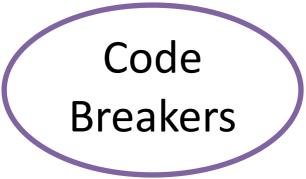
Detailed explanation of the proposed solution

- Our solution is an agent-less vulnerability and network scanner for Windows OS, using blockchain, cybersecurity, and AI/ML technologies.
- It leverages native tools like WMI and PowerShell to perform system and network-level vulnerability assessments by analyzing configurations, user accounts, firewall rules, and open ports.
- It integrates with threat intelligence databases like ExploitDB and CVE to identify known vulnerabilities and provide remediation steps.
- Using blockchain for secure logging ensures tamper-proof records, while AI/ML models perform anomaly detection and risk prediction to improve detection accuracy.
- The findings are compiled into a comprehensive PDF/HTML report with mitigation strategies, offering a smart, secure, and innovative solution for system security.

How it addresses the problem

- Addresses Vulnerabilities: Identifies outdated or misconfigured Windows systems to prevent security risks.
- Agent-less Deployment: No installation needed, reducing complexity and minimizing attack surfaces.
- **Proactive Security**: Maps system and network vulnerabilities to help users secure their systems.
- Automated Reporting: Ensures continuous monitoring and quick remediation of vulnerabilities.







Innovation and uniqueness of the solution

- •Agent-less Approach: Operates without requiring an agent, reducing system overhead and integrating seamlessly with native tools like PowerShell and WMI.
- •Blockchain Integration: Ensures tamper-proof, immutable logging of scans, enhancing data integrity in cybersecurity.
- •AV/EDR Friendly: Complements existing AV and EDR tools, working alongside them for comprehensive security coverage.
- •AI/ML and Threat Intelligence: Uses AI/ML for anomaly detection and integrates threat intelligence for real-time vulnerability identification and patching.
- •Comprehensive Scanning: Provides system and network assessments with automated reports for easy remediation.