INTERNET PROTECTING SYSTEM

PROJECT PHASE-I REPORT

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BONAFIDE CERTIFICATE

Certified that this project report **“INTERNET PROTECTING SYSTEM THROUGH NETWORKING”** is the bonafide work of **ROHIT D (714021104085), ROKESH VARMA V (714021104086) , SANJAY S (714021104091) and SHREYAS S (714021104101)** who carried out the project work under my supervision.

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ABSTRACT

The Internet Protection System (IPS) stands as a robust security solution designed to deliver unparalleled stealth, insightful network analysis, and formidable protection in today’s intricate digital landscape. By addressing the paramount needs for anonymity, visibility, and resilient security, IPS integrates three potent features: IP ghosting, port scanning, and vulnerability scanning. The IP Ghosting tool facilitates anonymous browsing by effectively concealing users’ IP addresses and geographic locations, thereby safeguarding them against tracking, surveillance, and potential cyber threats, and ensuring their digital footprint remains hidden. Complementing this, the Port Scanner meticulously examines network ports to identify open or vulnerable points, enabling users to detect and mitigate potential security risks, optimize network configurations, and enhance overall system performance and resilience. Additionally, the Vulnerability Scanning component conducts thorough assessments of software and hardware infrastructures to uncover weaknesses that could be exploited by malicious actors, providing actionable insights for timely remediation, and strengthening of defenses. Together, these features empower users with unprecedented control over their online presence, comprehensive network awareness, and proactive threat mitigation capabilities, ensuring a secure, efficient, and invisible digital experience in an ever-evolving cyber threat landscape.

LIST OF ABBREVATIONS

API	Application Programming Interface
AWS	Amazon Web Service
CVE	Common Vulnerabilities and Exposures
DDOS	Distributed Denial of services
DNS	Domain Name System
FTPS	File Transfer Protocol Secure
HTTP	Hypertext Transfer Protocol
IOT	Internet of Things
IP	Internet Protocol
CC	Cyber Cloak
Nmap	Network Mapper
OpenSSL	Open Secure Socket Layer
Open VAS	Open Vulnerability Assessment System
OS	Operating System
PKI	Public Key Infrastructure
RSF	Random Survival Forests
SSH	Secure Shell
SSL/TLS	Secure Socket Layer / Transport Layer Security
TOR Network	The Union Router Network

LIST OF FIGURES