**PROJECT PROPOSAL**

**1. Project Title: - Crypto-Jacking Detection Tool**

* **Project Aim:** - Develop a robust tool capable of detecting crypto-jacking activities in computer systems, networks, and web applications. The tool will identify unauthorized cryptocurrency mining processes, mitigate the associated risks, and ensure optimal system performance and security.
* **Main parts of project:** - User Interface, Process Monitoring, Network traffic analysis, Scanning and injection Detection, Comprehensive Reporting.

# 2. Project Scope: -

# 1. Crypto-jacking Detection:

# Identify unauthorized CPU or GPU utilization caused by cryptocurrency mining. Detect malicious JavaScript code embedded in web pages.

# 2. Performance and Security Monitoring:

# Ensure minimal system performance degradation by managing crypto-jacking threats. Prevent sensitive information leakage through mining activities.

# 3. Scalability and Versatility:

# Design the tool to handle individual systems, enterprise networks, and cloud environments.

# 4. User Education and Awareness:

# Incorporate alert mechanisms and educational resources to help users identify and prevent crypto-jacking threats.

# 5.Compliance and Security:

# Adhere to industry standards and privacy laws in data handling and threat analysis.

# 6. Continuous Updates:

# Regularly update detection algorithms and threat intelligence databases to adapt to emerging crypto-jacking methods.

# 3. Requirements :-

# Hardware Requirements:

# Processor: Modern multi-core processor with virtualization support.

# Memory (RAM): Minimum 4 GB (8 GB recommended).

# Storage: 10 GB for installation and logs.

# Network Interface: Stable internet connection.

# Software Requirements:

# Windows 10/11.

# Programming Languages and Libraries:

# Python 3.x (main programming language).

# Libraries: pyQt5 , socket , psutil , subprocess , time , threading etc.

# Database: SQLite, MySQL, or PostgreSQL (optional).

# Development Tools: PyCharm, Visual Studio Code.

### **STUDENTS DETAILS**

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| **Name** | **UID** | **Signature** |
| Rishi | 21BCS11879 |  |
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**APPROVAL AND AUTHORITY TO PROCEED**

We approve the project as described above, and authorize the team to proceed.

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| **Name** | **Employee ID** | **Signature(With Date)** |
| Ms. Gurpreet Kaur | E16578 |  |