**Cyber Security Tasks & Instructions — CodeAlpha**

**🖥️ Cyber Security — Internship Overview**

This internship program offers hands-on experience in cybersecurity principles and practices. CodeAlpha is a leading software development company dedicated to building secure and resilient systems. The internship equips students with skills to identify vulnerabilities, implement security measures, and conduct risk assessments. Interns will learn about network security, ethical hacking, encryption, and threat detection, gaining practical exposure through real-world projects. Expert mentorship and a collaborative environment will prepare interns to contribute effectively to organizational security.

### **🎁 Internship Perks**

* Internship Offer Letter
* Completion Certificate (QR Verified)
* Unique ID Certificate
* Letter of Recommendation (based on performance)
* Job Opportunities / Placement Support
* Resume Building Support

### **📌 Instructions for Interns**

1. Share your internship status on **LinkedIn**, tagging **@CodeAlpha**.
2. Complete the **assigned projects** within the mentioned time frame.
3. Upload your complete source code to **GitHub** in a repository named:  
    CodeAlpha\_ProjectName
4. Post a **video explanation** of your project on LinkedIn with GitHub repo link.
5. Submit your completed task using the **Submission Form**.
6. **Complete any 1 out of the 2 tasks** listed below (from your domain).

### **📱 Cyber Security Task List**

*(Complete any 1 of the following tasks)*

**✅ TASK 1: Secure Coding Review**

* **Select a programming language and application** to audit.
* Perform a **code review to identify security vulnerabilities**.
* Use tools like **static analyzers** or manual inspection methods.
* Provide **recommendations and best practices** for secure coding.
* Document findings and suggest **remediation steps** for safer code.

#### **✅ TASK 2: Network Intrusion Detection System**

* Set up a **network-based intrusion detection system** using tools like Snort or Suricata.
* 2. **Configure rules and alerts** to detect suspicious or malicious activity.
* 3. Monitor network traffic continuously for **potential threats**.
* 4. Implement **response mechanisms** for detected intrusions.
* 5. Optionally, **visualize detected attacks** using dashboards or graphs.

### **🚨 Important Note**

To be eligible for the internship certificate, participants must complete the **first task**.  
📌 **Submission of the *first task* is compulsory.** If the first task is not submitted, certificate generation may not be possible.

Please complete and submit your first task carefully using the official submission form.

### **📤 Submission Details**

A submission form will be shared in your respective **WhatsApp group**. You are required to submit your completed task only through that form. Please follow the instructions mentioned in the form carefully to ensure your submission is accepted.

### **📞 Contact Information**

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