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# Practices for Secure Software Report

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## Document Revision History

| **Version** | **Date** | **Author** | **Comments** |
| --- | --- | --- | --- |
| **1.0** | **3/2/2025** | **Alexis Prazak** |  |

## Client



## Developer

Alexis A. Prazak

## Algorithm Cipher

1. Provide a brief, high-level overview of the encryption algorithm cipher.
2. Discuss the hash functions and bit levels of the cipher.
3. Explain the use of random numbers, symmetric versus non-symmetric keys, and so on.
4. Describe the history and current state of encryption algorithms.

## Certificate Generation

A screenshot of a computer

AI-generated content may be incorrect.

**A screenshot of a computer

AI-generated content may be incorrect.**

## Deploy Cipher

Insert a screenshot below of the checksum verification.

[Insert screenshots here.]

## Secure Communications

Insert a screenshot below of the web browser that shows a secure webpage.

[Insert screenshots here.]

## Secondary Testing

Insert screenshots below of the refactored code executed without errors and the dependency-check report.

[Insert screenshots here.]

## Functional Testing

Insert a screenshot below of the refactored code executed without errors.

[Insert screenshots here.]

## Summary

Discuss how the code has been refactored and complies with security testing protocols. In the summary of your practices for secure software report, be certain to address the following items:

1. Refer to the vulnerability assessment process flow diagram in the Supporting Materials section. Highlight the areas of security that you addressed by refactoring the code.
2. Discuss your process for adding layers of security to the software application.

## Industry Standard Best Practices

Explain how you applied industry standard best practices for secure coding to mitigate known security vulnerabilities. Be sure to address the following items:

1. Explain how you used industry standard best practices to maintain the software application’s existing security.
2. Explain the value of applying industry standard best practices for secure coding to the company’s overall well-being.