

# AST & SCA Report

**Repository:** pnkjshahare/AICodeReview

**Pull Request:** #40

**Generated:** 2025-12-09 11:15 UTC

## SCA - Dependency Vulnerabilities

No dependency files found. SCA scan skipped.

## AST - Code Vulnerabilities

December 9th 2025, 11:15:20 am (UTC+00:00)  
Source C:\Users\panka\AppData\Local\Temp\sast\_69be72a1-228c-4be1-bbc2-2a0a62efc0c7

## Snyk Code Report

**H** 0 high issues    **M** 0 medium issues    **L** 8 low issues

SCAN COVERAGE

.cs files: 1 .java files: 1 .js files: 2 .java files: 1

### L Use of Hardcoded Credentials

Fix Analysis

SNYK-CODE | CWE-798 | NoHardcodedCredentials/test

Do not hardcode credentials in code. Found hardcoded credential used in password variable declaration.

Found in: **SecurityTest.cs** (line : 12)

#### ↓ Data Flow

12:37  
private string dbPassword = "password123";  
SOURCE 0

12:24  
private string dbPassword = "password123";  
SINK 1

### L Use of Hardcoded Credentials

## Fix Analysis

SNYK-CODE | CWE-798 | NoHardcodedCredentials/test

Do not hardcode credentials in code. Found hardcoded credential used in secret key variable declaration.

Found in: [SecurityTest.cs \(line : 13\)](#)

### Data Flow

13:33

```
private string apiKey = "AKIA123456SECRETKEY";
```

SOURCE 0

13:24

```
private string apiKey = "AKIA123456SECRETKEY";
```

SINK 1



## Hardcoded Non-Cryptographic Secret

### Fix Analysis

SNYK-CODE | CWE-547 | HardcodedNonCryptoSecret/test

Avoid hardcoding values that are meant to be secret. Found a hardcoded string used in here.

Found in: [security-test.js \(line : 46\)](#)

### Data Flow

security-test.js

46:17

```
const API KEY = "sk test 1234567890abcdef"; // ☐ Hardcoded secret
```

SOURCE 0

46:7

```
const API KEY = "sk test 1234567890abcdef"; // ☐ Hardcoded secret
```

SINK 1



## Hardcoded Secret

### Fix Analysis

SNYK-CODE | CWE-547 | HardcodedSecret/test

Hardcoded value is used as a cipher key (in crypto.createCipher). Generate the value with a

cryptographically strong random number generator and do not hardcode it in source code.

Found in: [security-test.js](#) (line : 36)

## Data Flow

36:53

```
const cipher = crypto.createCipher("aes-128-ecb", "weakkey"); // ☐ ECB mode insecure
```

 0

36:18

```
const cipher = crypto.createCipher("aes-128-ecb", "weakkey"); // ☐ ECB mode insecure
```

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## Use of Insecure ECB Mode Encryption

Fix Analysis

SNYK-CODE | CWE-327 | InsecureECB/test

Electronic Code Book (aes-128-ecb) mode should not be used (in crypto.createCipher), because it exposes frequency of symbols in your plaintext. Consider using other modes (e.g. Galois/Counter mode).

Found in: [security-test.js](#) (line : 36)

## Data Flow

36:38

```
const cipher = crypto.createCipher("aes-128-ecb", "weakkey"); // ☐ ECB mode insecure
```

 0

36:18

```
const cipher = crypto.createCipher("aes-128-ecb", "weakkey"); // ☐ ECB mode insecure
```

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## Use of Password Hash With Insufficient Computational Effort

Fix Analysis

SNYK-CODE | CWE-916 | InsecureHash/test

crypto.createHash hash (used in crypto.createHash) is insecure. Consider changing it to a secure hashing algorithm.

Found in: [security-test.js](#) (line : 31)

## Data Flow

31:10

```
return crypto.createHash("md5").update(pwd).digest("hex"); // ☐ Weak hash
```

SOURCE 0



31:10

```
return crypto.createHash("md5").update(pwd).digest("hex"); // ☐ Weak hash
```

SINK 1



## Use of Hardcoded Passwords

Fix Analysis

SNYK-CODE | CWE-798,CWE-259 | NoHardcodedPasswords/test

Do not hardcode passwords in code. Found hardcoded password used in PASSWORD.

Found in: **security-test.js** (line : 3)



### Data Flow

3:7

```
const PASSWORD = "P@ssw0rd123"; // ☐ Hardcoded password
```

SOURCE SINK 0



## Use of Password Hash With Insufficient Computational Effort

Fix Analysis

SNYK-CODE | CWE-916 | InsecureHash/test

The MD5 hash (used by global::System.Security.Cryptography.MD5.Create) is insecure. Consider changing it to a secure hash algorithm.

Found in: **SecurityTest.cs** (line : 24)



### Data Flow

SecurityTest.cs

24:29

```
using var md5 = MD5.Create();
```

SOURCE SINK 0

