**Auflistung der in „Chess Online“ auffindbaren CWEs**

Nachfolgend werden alle entdeckten CWEs im Programm „Chess Online mit einer kurzen Begründung für das Auftreten aufgezählt. Einrückungen stellen eine Eltern-Kind-Beziehung der CWEs dar, wobei Kind-CWEs nur bei einem Elternteil aufgezählt werden. Die Untergliederung entspricht der Aufteilung nach Forschungskonzepten („Research Concepts“) der MITRE Corporation. CWEs der Klasse „Pillar“, welche die oberste Gliederungsebene darstellen, sind **fett** geschrieben, während CWEs mit Kind-CWEs unterstrichen sind. Grüne CWEs wurden in der schwachen Version entdeckt und anschließend in der starken Version behoben. Alle CWEs mit detaillierten Informationen lassen sich auf der Website der Common Weakness Enumeration nachschlagen.

CWE-Website: (<https://cwe.mitre.org/>) [aufgerufen am 2.1.2023]

**Gefundene CWE: 106**

**Davon behoben: 49 (≈ 46,2%)**

**CWE-284: Improper Access Control**

CWE-287: Improper Authentication

CWE-1390: Weak Authentication

CWE-262: Not Using Password Aging

CWE-290: Authentication Bypass by Spoofing

CWE-294: Authentication Bypass by Capture-replay

CWE-307: Improper Restriction of Excessive Authentication Attempts

CWE-308: Use of Single-factor Authentication

CWE-309: Use of Password System for Primary Authentication

CWE-522: Insufficiently Protected Credentials

CWE-256: Plaintext Storage of a Password

CWE-257: Storing Passwords in a Recoverable Format

CWE-523: Unprotected Transport of Credentials

CWE-549: Missing Password Field Masking

CWE-1391: Use of Weak Credentials

CWE-521: Weak Password Requirements

CWE-798: Use of Hard-coded Credentials

CWE-259: Use of Hard-coded Password

CWE-923: Improper Restriction of Communication Channel to Intended Endpoints

CWE-300: Channel Accessible by Non-Endpoint

**CWE-664: Improper Control of a Resource Through its Lifetime**

CWE-1329: Reliance on Component That is Not Updateable

CWE-1277: Firmware Not Updateable

CWE-221: Information Loss or Omission

CWE-223: Omission of Security-relevant Information

CWE-778: Insufficient Logging

CWE-400: Uncontrolled Resource Consumption

CWE-770: Allocation of Resources Without Limits or Throttling

CWE-405: Asymmetric Resource Consumption (Amplification)

CWE-1050: Excessive Platform Resource Consumption within a Loop

CWE-1072: Data Resource Access without Use of Connection Pooling

CWE-1084: Invokable Control Element with Excessive File or Data Access Operations

CWE-1176: Inefficient CPU Computation

CWE-1046: Creation of Immutable Text Using String Concatenation

CWE-1067: Excessive Execution of Sequential Searches of Data Resource

CWE-406: Insufficient Control of Network Message Volume (Network Amplification)

CWE-410: Insufficient Resource Pool

CWE-662: Improper Synchronization

CWE-667: Improper Locking

CWE-413: Improper Resource Locking

CWE-591: Sensitive Data Storage in Improperly Locked Memory

CWE-820: Missing Synchronization

CWE-668: Exposure of Resource to Wrong Sphere

CWE-200: Exposure of Sensitive Information to an Unauthorized Actor

CWE-203: Observable Discrepancy

CWE-208: Observable Timing Discrepancy

CWE-359: Exposure of Private Personal Information to an Unauthorized Actor

CWE-538: Insertion of Sensitive Information into Externally-Accessible File or Directory

CWE-540: Inclusion of Sensitive Information in Source Code

CWE-913: Improper Control of Dynamically-Managed Code Resources

CWE-502: Deserialization of Untrusted Data

CWE-922: Insecure Storage of Sensitive Information

CWE-312: Cleartext Storage of Sensitive Information

**CWE-691: Insufficient Control Flow Management**

CWE-362: Concurrent Execution using Shared Resource with Improper Synchronization ('Race Condition')

CWE-366: Race Condition within a Thread

CWE-431: Missing Handler

CWE-674: Uncontrolled Recursion

CWE-705: Incorrect Control Flow Scoping

CWE-248: Uncaught Exception

CWE-799: Improper Control of Interaction Frequency

CWE-834: Excessive Iteration

CWE-94: Improper Control of Generation of Code ('Code Injection')

**CWE-693: Protection Mechanism Failure**

CWE-311: Missing Encryption of Sensitive Data

CWE-319: Cleartext Transmission of Sensitive Information

CWE-330: Use of Insufficiently Random Values

CWE-1241: Use of Predictable Algorithm in Random Number Generator

CWE-331: Insufficient Entropy

CWE-334: Small Space of Random Values

CWE-338: Use of Cryptographically Weak Pseudo-Random Number Generator (PRNG)

CWE-345: Insufficient Verification of Data Authenticity

CWE-1293: Missing Source Correlation of Multiple Independent Data

CWE-353: Missing Support for Integrity Check

CWE-354: Improper Validation of Integrity Check Value

CWE-924: Improper Enforcement of Message Integrity During Transmission in a Communication Channel

CWE-358: Improperly Implemented Security Check for Standard

CWE-654: Reliance on a Single Factor in a Security Decision

**CWE-707: Improper Neutralization**

CWE-138: Improper Neutralization of Special Elements

CWE-149: Improper Neutralization of Quoting Syntax

CWE-151: Improper Neutralization of Comment Delimiters

CWE-159: Improper Handling of Invalid Use of Special Elements

CWE-167: Improper Handling of Additional Special Element

CWE-162: Improper Neutralization of Trailing Special Elements

CWE-790: Improper Filtering of Special Elements

CWE-20: Improper Input Validation

CWE-1286: Improper Validation of Syntactic Correctness of Input

CWE-74: Improper Neutralization of Special Elements in Output Used by a Downstream Component ('Injection')

CWE-75: Failure to Sanitize Special Elements into a Different Plane (Special Element Injection)

CWE-77: Improper Neutralization of Special Elements used in a Command ('Command Injection')

CWE-943: Improper Neutralization of Special Elements in Data Query Logic

CWE-89: Improper Neutralization of Special Elements used in an SQL Command ('SQL Injection')

**CWE-710: Improper Adherence to Coding Standards**

CWE-1041: Use of Redundant Code

CWE-1059: Insufficient Technical Documentation

CWE-1118: Insufficient Documentation of Error Handling Techniques

CWE-1076: Insufficient Adherence to Expected Conventions

CWE-1078: Inappropriate Source Code Style or Formatting

CWE-1099: Inconsistent Naming Conventions for Identifiers

CWE-1120: Excessive Code Complexity

CWE-1047: Modules with Circular Dependencies

CWE-1060: Excessive Number of Inefficient Server-Side Data Accesses

CWE-1064: Invokable Control Element with Signature Containing an Excessive Number of Parameters

CWE-1080: Source Code File with Excessive Number of Lines of Code

CWE-1124: Excessively Deep Nesting