Created by Colin Watson

Version WebApp-1.20-EN (Classic)

OWASP Snakes and Ladders

- Web Applications -

Snakes and Ladders is an educational application security awareness game. This version is all about web applications, with the OWASP Top Ten Proactive Controls as ladders, and the well-known OWASP Top Ten Most Critical Risks as snakes. Thank you to the leaders and other contributors of those two projects.

OWASP Top Ten Proactive Controls (v3 2018)

The OWASP Top Ten Proactive Controls is a list of security techniques that should be included in every software development project.

C1 Define Security Requirements
C2 Leverage Security Frameworks and Libraries
C3 Secure Database Access
C4 Encode and Escape Data
C5 Validate All Inputs
C6 Implement Digital Identity
C7 Enforce Access Controls
C8 Protect Data Everywhere
C9 Implement Security Logging and Monitoring
C10 Handle All Errors and Exceptions

https://www.owasp.org/index.php/OWASP_Proactive_Controls

OWASP Top Ten Risks (2017)

The OWASP Top Ten represents a broad consensus about what the most critical web application security flaws are.

A1 Injection
A2 Broken Authentication
A3 Sensitive Data Exposure
A4 XML External Entities (XXE)
A5 Broken Access Control
A6 Security Misconfiguration
A7 Cross-Site Scripting (XSS)
A8 Insecure Deserialization
A9 Using Components with Known Vulnerabilities
A10 Insufficient Logging & Monitoring

https://www.owasp.org/index.php/TopTen

The source file for this sheet, sheets on other application security topics, various language versions, and further information about the OWASP Snakes and Ladders project can be found on the OWASP website at https://www.owasp.org/index.php/OWASP_Snakes_and_Ladders

Background

Snakes and Ladders is a popular board game, imported into Great Britain by the Victorians based on a game from Asia. The original game showed the effects of good and evil, or virtues and vices. The game is known as Chutes and Ladders in some parts of the Americas. In this OWASP version, the virtuous behaviours are secure coding practices (the proactive controls) and the vices are application security risks.

Warning

OWASP Snakes and Ladders is meant to be used by software programmers, big and small. This paper game sheet is not harmful, but if you choose to use your own plastic or wooden die and counters, those might have a choking risk for children under 4 years old.

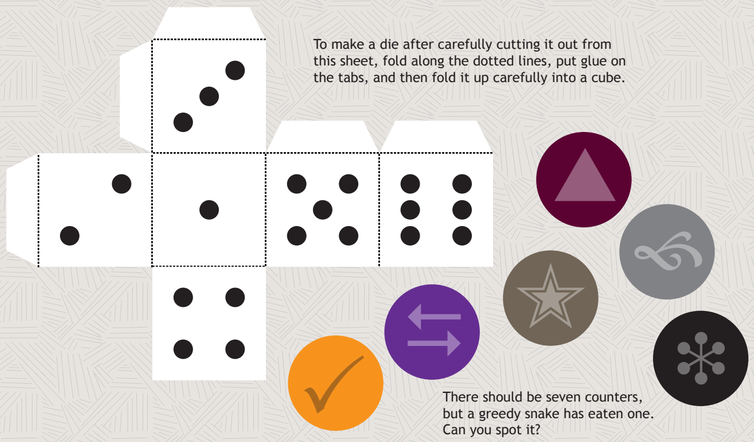
Rules

This game is for 2-6 players. Give each player a coloured counter (marker). To begin, each player should throw the die to determine who plays first; the highest can lead. Put all the player's counters onto the first square labelled "Start 1". In turn, each player rolls the die and moves their counter by the number of squares indicated on the die.

At the end of the move, if a player's counter is at the bottom end of a ladder, the counter must be moved up the ladder to the square at its higher end. Conversely, if the player's counter is located at the mouth of a snake, the counter must be moved down to the end of the snake's tail.

The first player to reach "100" at the top left wins.

No die or counters? Cut the shapes out below use the coloured circles as counters for each player. Alternatively write a computer program to simulate a six-sided die, or use a random number generator app on your phone or computer to create integers between 1 and 6. Check how random it is though!



To make a die after carefully cutting it out from this sheet, fold along the dotted lines, put glue on the tabs, and then fold it up carefully into a cube.

There should be seven counters, but a greedy snake has eaten one. Can you spot it?

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