1. Record Nr. UNINA9910783400003321 Autore Huseby Sverre H Titolo Innocent code [[electronic resource]]: a security wake-up call for Web programmers / / Sverre H. Huseby New York, : John Wiley & Sons, c2004 Pubbl/distr/stampa **ISBN** 1-280-27073-X 9786610270736 0-470-85747-1 Descrizione fisica 1 online resource (248 p.) Disciplina 005.8 Soggetti Computer security Computer networks - Security measures World Wide Web - Security measures Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references (p. 209-219) and index. Nota di contenuto Contents; Foreword; Acknowledgments; Introduction; 0.1 The Rules; 0.2 The Examples; 0.3 The Chapters; 0.4 What is Not in This Book?; 0.5 A Note from the Author; 0.6 Feedback; 1 The Basics; 1.1 HTTP; 1.1.1 Requests and responses; 1.1.2 The Referer header; 1.1.3 Caching; 1.1.4 Cookies; 1.2 Sessions; 1.2.1 Session hijacking; 1.3 HTTPS; 1.4 Summary: 1.5 Do You Want to Know More?: 2 Passing Data to Subsystems; 2.1 SQL Injection; 2.1.1 Examples, examples and then some; 2.1.2 Using error messages to fetch information; 2.1.3 Avoiding SQL injection: 2.2 Shell Command Injection: 2.2.1 Examples 2.2.2 Avoiding shell command injection 2.3 Talking to Programs Written in C/C++; 2.3.1 Example; 2.4 The Evil Eval; 2.5 Solving Metacharacter Problems: 2.5.1 Multi-level interpretation: 2.5.2 Architecture: 2.5.3 Defense in depth; 2.6 Summary; 3 User Input; 3.1 What is Input Anyway?; 3.1.1 The invisible security barrier; 3.1.2 Language peculiarities: totally unexpected input; 3.2 Validating Input; 3.2.1 Whitelisting vs. blacklisting; 3.3 Handling Invalid Input; 3.3.1 Logging; 3.4 The Dangers of Client-side Validation; 3.5 Authorization Problems;

3.5.1 Indirect access to data

3.5.2 Passing too much to the client3.5.3 Missing authorization tests;

3.5.4 Authorization by obscurity; 3.6 Protecting server-generated input; 3.7 Summary; 4 Output Handling: The Cross-site Scripting Problem; 4.1 Examples; 4.1.1 Session hijacking; 4.1.2 Text modification; 4.1.3 Socially engineered Cross-site Scripting; 4.1.4 Theft of passwords; 4.1.5 Too short for scripts?; 4.2 The Problem; 4.3 The Solution; 4.3.1 HTML encoding; 4.3.2 Selective tag filtering; 4.3.3 Program design; 4.4 Browser Character Sets; 4.5 Summary; 4.6 Do You Want to Know More?; 5 Web Trojans; 5.1 Examples 5.2 The Problem5.3 A Solution; 5.4 Summary; 6 Passwords and Other Secrets; 6.1 Crypto-Stuff; 6.1.1 Symmetric encryption; 6.1.2 Asymmetric encryption; 6.1.3 Message digests; 6.1.4 Digital signatures; 6.1.5 Public key certificates; 6.2 Password-based Authentication; 6.2.1 On clear-text passwords; 6.2.2 Lost passwords; 6.2.3 Cracking hashed passwords; 6.2.4 Remember me?; 6.3 Secret Identifiers; 6.4 Secret Leakage: 6.4.1 GET request leakage: 6.4.2 Missing encryption: 6.5 Availability of Server-side Code; 6.5.1 Insecure file names; 6.5.2 System software bugs; 6.6 Summary 6.7 Do You Want to Know More?7 Enemies of Secure Code; 7.1 Ignorance; 7.2 Mess; 7.3 Deadlines; 7.4 Salesmen; 7.5 Closing Remarks; 7.6 Do You Want to Know More?; 8 Summary of Rules for Secure Coding: Appendix A: Bugs in the Web Server: Appendix B: Packet Sniffing; B.1 Teach Yourself TCP/IP in Four Minutes; B.2 Sniffing the Packets; B.3 Man-In-The-Middle Attacks; B.4 MITM with HTTPS; B.5 Summary: B.6 Do You Want to Know More?: Appendix C: Sending HTML Formatted E-mails with a Forged Sender Address; Appendix D: More Information; D.1 Mailing Lists; D.2 OWASP; Acronyms; References; Index: A: B: C D

Sommario/riassunto

This concise and practical book shows where code vulnerabilities liewithout delving into the specifics of each system architecture, programming or scripting language, or application-and how best to fix themBased on real-world situations taken from the author's experiences of tracking coding mistakes at major financial institutionsCovers SQL injection attacks, cross-site scripting, data manipulation in order to bypass authorization, and other attacks that work because of missing pieces of codeShows developers how to change their mindset from Web site construction to Web sit