How I learned to test without sleep

From coping to exploiting
A definition of testing

“Testing is the process of evaluating a product by learning about it through exploration and experimentation, which includes: questioning, study, modeling, observation and inference, output checking, etc.”

(Michael Bolton & James Bach)
Why “without sleep”?
The obvious solution...
Preparation
Preparing for it by building muscle memory
Preparing for it by building muscle memory
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http://www.testing-challenges.org

http://weekendtesting.com

http://www.softwaretestingworldcup.com
Coping
Coping by cheat sheets

Test Heuristics Cheat Sheet

Data Type Attacks & Web Tests

Data Type Attacks

Paths/Files

- Long Name (>255 chars)
- Special Characters in Name (space * ? / \ | < > , . ( ) [ ] { } ; : ' " @ # $ ^ &)
- Non-Existing
- Already Exists
- No Space
- Minimal Space
- Write-Protected
- Unavailable
- Locked
- On Remote Machine
- Corrupted

Time and Date

- Timeouts
- Time Difference between Machines
- Crossing Time Zones
- Leap Days
- Always Invalid Days (Feb 30, Sept 31)
- Feb 29 in Non-Leap Years
- Different Formats (June 5, 2001; 06/05/2001; 06/05/01; 06-05-01; 6/5/2001 12:34)
- Daylight Savings Changeover
- Reset Clock Backward or Forward

Numbers

- 0 • 32768 \(2^{15}\) • 32769 \(2^{15} + 1\) • 65536 \(2^{16}\) • 65537 \(2^{16} + 1\) • 2147483648 \(2^{31}\) • 2147483649 \(2^{31} + 1\) • 4294967296 \(2^{32}\) • 4294967297 \(2^{32} + 1\) • Scientific Notation (1E-16)
- Negative
- Floating Point/Decimal (0.0001)
- With Commas (1,234,567)
- European Style (1,234,567,89)
- All the Above in Calculations

Strings

- Long (255, 256, 257, 1000, 1024, 2000, 2048 or more characters)
- Accented Chars (âââãçèéèèíôôôôõ, etc.)
- Asian Chars (…)
- Common Delimiters and Special Characters (" ‘ | / \ ; ; & < > ^ * ? Tab)
- Leave Blank
- Single Space
- Multiple Spaces
- Leading Spaces
- End-of-Line Characters (^M)
- SQL Injection (‘*select * from customer ‘)
- With All Actions (Entering, Searching, Updating, etc.)

“Test heuristics cheat sheet” by Elisabeth Hendrickson, Dale Emery und James Lyndsay

Coping by cheat sheets

“Web Application Security Testing Cheat Sheet” from OWASP

https://www.owasp.org/index.php/Web_Application_Security_Testing_Cheat_Sheet
Coping by mnemonics

**PACO**
Portrait, Audio, Communication, Overlay

**SFDIPO**T (San Francisco Depot)
Structure, Function, Data, Integrations, Platform, Operations, Time

**CIDTESTD** (Kid Tested)
Customers, Information, Developer relations, Team, Equipment & Tools, Schedule, Test Items, Deliverables
Coping by re-testing

Feature: Nullable Exception if upper/lower case of file names changes

Description:
- Import a file
- Change the upper/lowercasing of the file or directory on the hard disk
- Restart the import from the import history
  => Nullable Exception, Import aborts
Exploiting it
Exploiting it by usability testing
Exploiting it by doing reviews
But in the end...
...just try to get some sleep!
Your questions are welcome!

Please rate this talk at www.eclipsecon.org

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