

1. Start the VM (but no need to log in to it)
2. Open an ssh connection to the VM:
`ssh -p 27222 -l csc_user localhost`
3. Go to <http://cern.ch/csc-security>
4. Log in with your *csc_user* account
5. Enter the number + both names

Please tell me your name(s):

6. Follow instructions from the “Download” section
 - **Download**
Exercises for download and installation instructions
7. Check if <http://localhost:27280/movies> works

Exercises

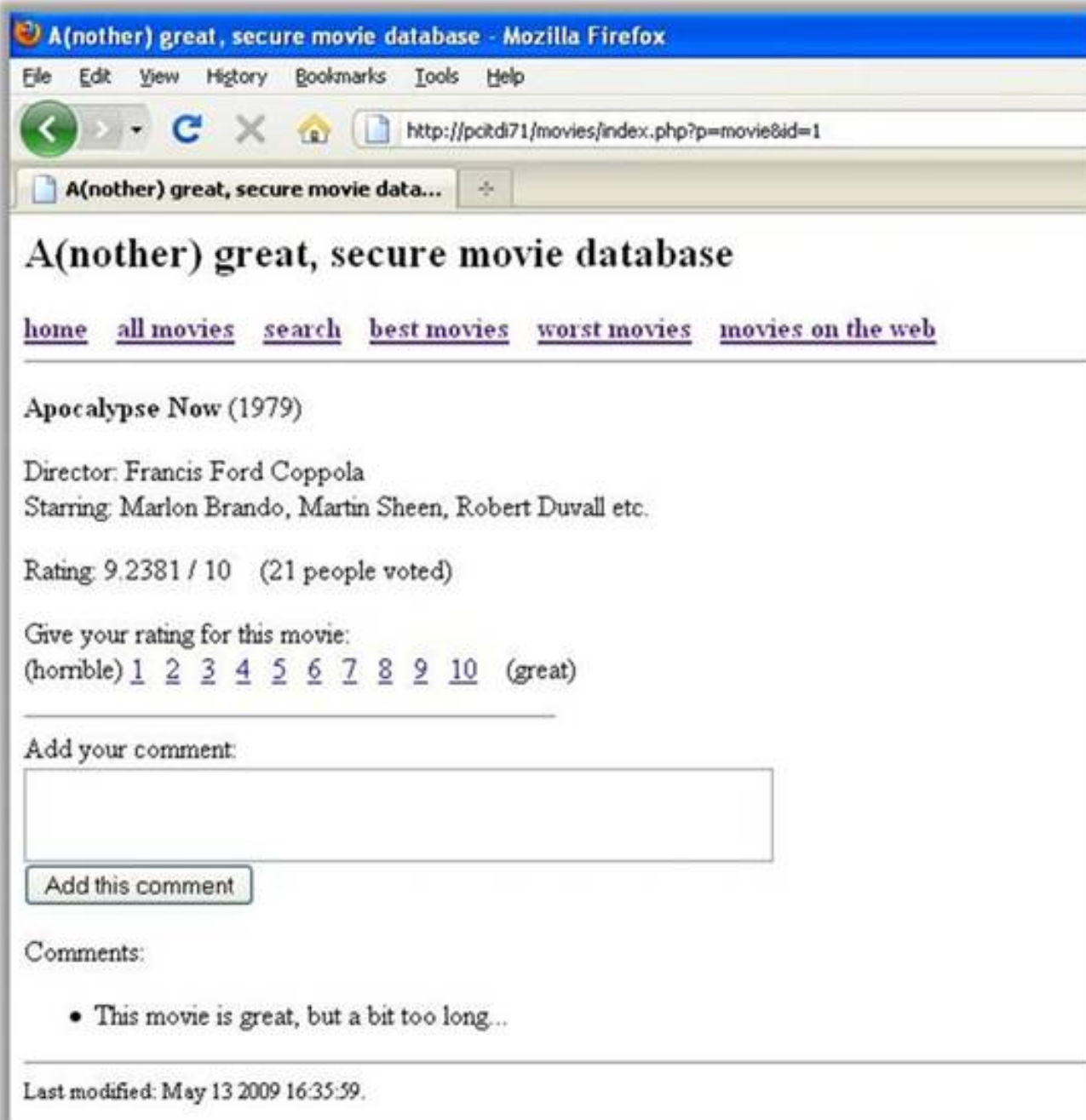
Software security

Exercises

- Small pieces of code in C, Java, shell, PHP, HTML/JS

sample	C		bash	Java	PHP					HTML
#1	#1	#2	#1	#1	#1					#1
					question 1	question 2	question 3	question 4	question 5	

- Find security vulnerabilities
- Exploit them
(as an external attacker, without changing the code)
- Correct them
- Any order – start with your programming language
- HTML exercise is an extra challenge



A screenshot of a Mozilla Firefox browser window displaying a web page titled "A(nother) great, secure movie database". The browser's address bar shows the URL "http://pcitd71/movies/index.php?p=movie&id=1". The page content includes a navigation menu with links for "home", "all movies", "search", "best movies", "worst movies", and "movies on the web". The main content area features the movie title "Apocalypse Now (1979)", the director "Francis Ford Coppola", and the cast "Starring: Marlon Brando, Martin Sheen, Robert Duvall etc.". It also displays a rating of "9.2381 / 10 (21 people voted)" and a rating scale from 1 to 10, with "10" selected. Below the rating is a comment form with a text input field and a button labeled "Add this comment". A single comment is listed: "• This movie is great, but a bit too long...". At the bottom of the page, it says "Last modified: May 13 2009 16:35:59."

PHP

PHP exercise is a sample Web application
“Movie database”

- play with it a bit, to see what it can do
- 6 sub-questions about different vulnerabilities
=> because Web applications are often vulnerable
- **even if you don't know PHP, try it** – it's easy
(and you may need it one day)

Hints, solutions, answers

If you don't know how to proceed, **see the hint**

If you are still stuck, **see the solution**

Start with the **sample exercise** to see how hints and solutions work

When **providing answers**:

- try different things
- call me if you are sure that you have a good answer, but docs don't accept it

After providing a correct answer => **read the solution**
(you may still learn something interesting!)

Source code tools

... for C/C++, PHP, Java...

Try them!

The goal

- **Complete at least 3 exercises**
 - displaying hints and even solutions is OK
 - the more exercises completed the better
- **Competition**: which team solves most (all?) exercises?
 - (without seeing solutions)
- But the main goal is TO LEARN
- BTW, don't try to hack machines of your colleagues



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