PHP Piscine

Day 02

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Summary:
This document is the day02's subject for the PHP Piscine.

Contents

Chapter I

Foreword

"I realized the moment I fell into the fissure, that the book would not be destroyed as I had planned. It continued falling into that starry expanse, of which I had only a fleeting glimpse. I have tried to speculate where it might have landed, and I must admit however, such conjecture is futile. Still, questions about whose hands might one day hold my Book are unsettling to me. I know my apprehensions might never be allayed... and so I close, realizing that perhaps the ending has not yet been written."

Chapter II

General Instructions

- Only this page will serve as reference; do not trust rumors.

- Watch out! This document could potentially change up to an hour before submission.

- Only the work submitted on the repository will be accounted for during peer-2-peer correction.

- As when you did C Piscine, your exercises will be corrected by your peers AND/OR by Moulinette.

- Moulinette is very meticulous and strict in its evaluation of your work. It is entirely automated and there is no way to negotiate with it. So if you want to avoid bad surprises, be as thorough as possible.

- Using a forbidden function is considered cheating. Cheaters get -42, and this grade is non-negotiable.

- These exercises are carefully laid out by order of difficulty - from easiest to hardest. We will not take into account a successfully completed harder exercise if an easier one is not perfectly functional.

- You cannot leave any additional file in your repository than those specified in the subject.

- Got a question? Ask your peer on the right. Otherwise, try your peer on the left.

- Your reference guide is called `Google / the Internet / http://www.php.net / ...`.

- Think of discussing on the Forum. The solution to your problem is probably there already. Otherwise you will start the conversation.

- Examine the examples thoroughly. They could very well call for details that are not explicitly mentioned in the subject . . .

- By Odin, by Thor ! Use your brain !!!

Chapter III

Exercise 00 : Another World

■	Exercise 00

Another World
Turn-in directory : *ex00/*
Files to turn in : `another_world.php`
Allowed functions : `The whole standard PHP library especially regexp`
Notes : `n/a`

I do not know where I landed. I just woke up, I'm lying in the grass and I see the sky above the treetops. I'm lost. The Book is near me. It could have been worse; I could find myself leaning on my desk appearing suddenly in the middle of a gigantic pool inhabited by a kraken. Fortunately this is not the case. I began to explore around. This world is different. The relation with the surrounding space is very strange. Sometimes we make a single step, but in reality we made of eight. I started to lose the habit of slowing down. Everywhere there were varied combinations of normal space and strange spaces, I decided to set a single normal space. The book seems to dedicate a whole chapter, using the terms ' ' and '\t', to respectively designate natural spaces and strange spaces.

```
$> ./another_world.php "This    sentence   contains spaces and    some     tabulations"
This sentence contains spaces and some tabulations
$> ./another_world.php
$> ./another_world.php "  This arg   is     used  " "but not this   one"
This arg is used
$>
```

Note: I have found a kind of rocky promontory. I'm on an island! I d' not know how I got there or how I'll get out of it. But tomorrow is another day.

Chapter IV

Exercise 01 : One more time

	Exercise 01
Autre Temps	

Turn-in directory : *ex*01/
Files to turn in : `one_more_time.php`
Allowed functions : `The whole standard PHP library and lot of regexp`
Notes : `n/a`

A new day, still stuck on this damn island. Besides, what day are we exactly? Time does not have the same meaning here obviously. I notice, flipping the book that some inscriptions could correspond to dates. I will try to decipher them. Midday: this is it! I found it. These inscriptions are systematically of the following form:

Day_of_the_week Number_of_day Month Year Hours:Minutes:Seconds

The day of the week is complete, full, sometimes with a uppercase at the beginning, and in French. The day's number is always 1 or 2 characters. The month is expressed in words, sometimes also with a capital letter at the beginning, and always in French. The year consists of 4 digits. Finally, hours, minutes and seconds are all of 2 figures. There are 4 spaces to separate 5 pieces. I will now be able to identify more easily if some passages correspond to dates, and convert them to a more rational mode and more readable for me: the number of seconds past since January 1, 1970.

```
$> ./one_more_time.php "Mardi 12 Novembre 2013 12:02:21"
1384254141
$> ./one_more_time.php "Mercreday 1stJuily 99"
Wrong Format
$> ./one_more_time.php
$>
```

Note: I have never encountered well formatted dates that are incoherent.

Chapter V

Exercice 02 : The magnifying glass

	Exercise 02

The magnifying glass
Turn-in directory : *ex02/*
Files to turn in : `magnifying_glass.php`
Allowed functions : `The whole standard PHP library`
Notes : `n/a`

This morning, examining the binding of the book, I noticed a small recess. Inside I gently pulled out a small magnifying glass. She was really very special. At first I thought she did not grow. But by trying it on several pages, I noticed that it only grew links to other pages of the Book, by simply putting the upper case! I had to see this process each page one by one.

```
$> cat > page.html
<html><head><title>Nice page</title></head>
<body>Hello World <a href=http://cyan.com title="a link">This is a link</a>
<br /><a href=http://www.riven.com> And this too <img src=wrong.image title="And also this"></a>
</body></html>
^D
$> ./loupe.php page.html > new_page.html
$> cat new_page.html
<html><head><title>Nice page</title></head>
<body>Hello World <a href=http://cyan.com title="A LINK">THIS IS A LINK</a>
<br /><a href=http://www.riven.com> AND THIS TOO <img src=wrong.image title="AND ALSO THIS"></a>
</body></html>
$>
```

Chapter VI

Exercise 03 : Who are you ?

![icon]	Exercise 03

Who are you ?
Turn-in directory : *ex03/*
Files to turn in : `who.php`
Allowed functions : `No use of system call 'who'`
Notes : `n/a`

I am not alone! There are people on this island! I got proof this morning following a footprint in the forest area. I found myself nose to nose with a strange individual, who seemed also amazed by this meeting like me. I asked him who he was, but I only got snippets of words like "utmp" and other elusive grunts. Afraid, he left quickly. Perhaps it will take time but soon, I will know where we are and why I'm here. I noted in the Book, each of my meetings.

```
$> ./who.php
boulon   console   Mar 25 09:08
boulon   ttys001   Mar 25 10:24
boulon   ttys002   Mar 25 10:48
boulon   ttys003   Mar 25 16:30
$> who
boulon   console   Mar 25 09:08
boulon   ttys001   Mar 25 10:24
boulon   ttys002   Mar 25 10:48
boulon   ttys003   Mar 25 16:30
$>
```

Note: I think it's me. I mean, I mean, I think the person I met was me. But in a different temporal and spatial dimension. What a disappointment! I am beginning to lose all hope to leave this place.

Chapter VII

Exercise 04 : Photo booklet

	Exercise 04	
	Photo booklet	
Turn-in directory : *ex04/*		
Files to turn in : `photos.php`		
Allowed functions : `The whole standard PHP library and curl`		
Notes : `n/a`		

I tried to make some drawings on the blank pages at the end of the Book but it was useless. Only the words could remain, my sketches disappeared in less time than it took me to draw them. That's when I started to dedicate a page to a precise description of a particular location on the island, that, the unpredictable happens. Soon as I wrote the place name as title, that, a whole set of pictures of the place came to fill the page. This book takes pictures! I was able to list all interests of the points of my new home. This book is decidedly surprising!

```
$> ls
photos.php
$> ./photos.php "http://www.42.fr"
$> ls
photos.php
www.42.fr/
$> ls www.42.fr/
logo42-site.gif
$>
```

Note: I realize nevertheless that the pictures are not taken at random. It's only when there is, in a place, a form of tag characterized by 3 letters I, M and G, that the picture is taken.

Chapter VIII

Exercise 05 : In the D(e)nial

	Exercise 05
	In the D(e)nial
Turn-in directory : *ex05/*	
Files to turn in : `denial.php`	
Allowed functions : `The whole standard PHP library`	
Notes : `n/a`	

I can't take it anymore. I'm dreaming since too long. I have to wake up. This island can only exist in my imagination. A so strange and tortured place can't be real. I don't want to open the book anymore, I don't want to do anymore puzzle. The latest: everything I wrote to remember of my real life was found mixed between the same three pages. I had to continually re-order my ideas, only to remember the name and surname of my friends. At the price of a long and laborious effort, I was able by means of a unique identifier, deceive the Book and regroup the scattered information. By writing "display the name of login XXX", the Book finds me the information sought.

```
$> ./denial.php data.csv pseudo
Enter your command: echo $name['miawallace']."\n";
Naline
Enter your command: ^D
$> ./denial.php data.csv
$> ./denial.php invalid_file login
$> ./denial.php data.csv invalid_header_key
```

```
$> ./denial.php data.csv surname
Enter your command: echo $surname['Nestor']." ".$last_name['Nestor']." is a beautiful name\n";
Nestor Derire is a beautiful name
Enter your command: echo $IP['Sarah']."\n";
10.252.33.76
Enter your command: print_r(explode(".", $IP['Xavier'])); echo "\n";
Array
(
    [0] => 172
    [1] => 20
    [2] => 45
    [3] => 200
)

Enter your command: toto titi tutu
PHP Parse error:  syntax error, unexpected T_STRING in [....]
Enter your command: ^D
$>
```

Note: Are they really are my friends? I can no longer put a face to these names. Everything vanishes, everything escapes me...

Chapter IX

Exercise 06 : The Parchment

	Exercise 06
	The Parchment
Turn-in directory : *ex06/*	
Files to turn in : `srt.php`	
Allowed functions : `The whole standard PHP library`	
Notes : `n/a`	

I found a sort of parchment yesterday on what I call the northern coast of the island; near a large crevasse which I cannot even see the bottom. This should rejoice me to know that there is or there have been others like me here. I'm too depressed and I really paid attention only this morning. It consists of incomprehensible text snippets interspersed with precise time stamps (I know how to recognize it now). There is however inconsistencies. Some hours are not in order. I am not sure to really want to solve this new puzzle, yet...

```
$> cat > test.srt
1
00:01:15,308 --> 00:01:16,717
This

2
00:01:21,473 --> 00:01:23,614
test

3
00:01:19,750 --> 00:01:21,373
a

4
00:01:16,817 --> 00:01:19,650
is
^D
```
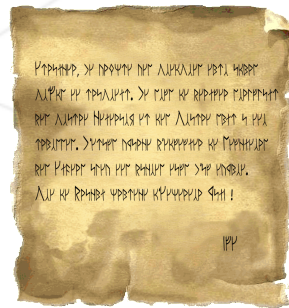
```
$> ./srt.php test.srt
1
00:01:15,308 --> 00:01:16,717
This

2
00:01:16,817 --> 00:01:19,650
is

3
00:01:19,750 --> 00:01:21,373
a

4
00:01:21,473 --> 00:01:23,614
test
$>
```

Note: I returned to the crevasse. I understand now. I decoded the parchment, everything is clear now. There is nothing else to do, either for the Book, nor me.

Chapter X

Postamble

"I realized at the same moment that was I falling into the crevasse, that the Book would not 12 destroying itself as I had planned. It continue to fall into this starry expanse, I only had a fleeting image. I tried to imagine where it could have landed; I must however admit that such questions are futile. Still, I keep wondering in whose hands my book will fall one day. I know my fears will perhaps never be appeased ... That's why I closed, realizing that the end has perhaps not yet been written."