Assignment 1 (NF, minor subject)

Due: Friday 04.11.2016; 14:00h (1 Week)

Goals

These exercises will...

- Show you the differences between the HTTP GET and POST methods
- Make you grow fonder with server-side scripting with PHP (potentially)
- Teach you the value of string and array functions in PHP

Task 1: What's the Problem here?   Difficulty: Easy

Take a look at this PHP script. It shows a number of flaws, e.g. in terms of security.

```php
<!DOCTYPE html>
<html>
<head lang="en">
    <meta charset="UTF-8">
    <title>What's wrong here?</title>
</head>
<body>

<?php
function loginUser($email,$password){ //imagine valid login routine }

if($_POST['submit']){
    loginUser($_POST['email'],$_POST['password']);
}
else{ ?>
<form>
    <label>
        Email:  <input type="email">
    </label>
    <label>
        Password: <input type="password">
    </label>
    <input type="submit" />
</form>
<?php } ?>
</body>
</html>
```

Write a brief explanation and put it as .txt file in the folder 'task1'.

Task 2: Sffuhle my Wrods!   Difficulty: Medium

The human brain is able to easily read scrambled text. Take this example:

> Aoccdrnig to rscheearch at Cmabrigde Uinervtisy, it deosn't mttaer in waht
> oredr the ltteers in a wrod are, the olny iprmoetnt tihng is taht the frist and lsat
> ltteer be at the rghit pclae. The rset can be a toatl mses and you can sitll raed it
> wouthit a porbelm. Tihs is bcuseae the huamn mnid deos not raed ervey lteter
> by istlef, but the wrod as a wlohe.

The key is to keep the first and last letter of each word and shuffle what is in between.

Your task is to create a web-page that can scramble any text like this. The page should have a form with a textarea and a submit button. After submitting the form via POST, the scrambled text should be displayed (see screenshot below).

Use PHP, i.e. server-side code, to complete this task. Make use of string and array functions to find a nice solution.

```
According to a researcher at Cambridge University, it
doesn't matter in what order the letters in a word are,
the only important thing is that the first and last
letter be at the right place. The rest can be a total
mess and you can still read it without problem. This is
because the human mind does not read every letter by
itself but the word as a whole.
```

```
[ Scramble! ]
```

Output:

Aoccdrnig to rscheearch at Cmabrigde Uinervtisy, it deosn't mttaer in waht
oredr the ltteers in a wrod are, the olny iprmoetnt tihng is taht the frist and lsat
ltteer be at the rghit pclae. The rset can be a toatl mses and you can sitll raed it
wouthit a porbelm. Tihs is bcuseae the huamn mnid deos not raed ervey lteter
by istlef, but the wrod as a wlohe.

Put all your code files into the folder 'task2'.

Submission

Please turn in your solution via UniWorX as a ZIP archive. You can form groups of up to three people.

We encourage you to sign up for our Slack Team! All you need is a CIP account and an email address that ends in "@cip.ifi.lmu.de". Ask us if you don't know how to get them.

If you have questions or comments before the submission, please contact one of the tutors. They are on Slack: @tobi.seitz, @peterjuras and @thomas-weber. Remember, that they also want to enjoy their weekends ☺

It also makes a lot of sense to ask the question in our #mmn-ws1617 channel. Maybe fellow students can offer help or benefit from the answers, too!