

PIC 40A: Homework 7 (due 6/2 at 5pm)

Like on previous homeworks, it is important that you meet the following requirements.

- You must upload your files to **Gradescope** before the deadline.
- You must upload your files to the **PIC server** in the appropriate directory before the deadline.
- Both submissions must be **identical** (down to the character).
Never make changes to the PIC server submission after the deadline.
(We can see when a file was last modified.)
- You must tell us (me and the grader) your **PIC username**.
- You must **validate** your HTML using <https://validator.w3.org/>.
Ideally, with PHP, you should check that, after removing the PHP parts, the remaining HTML validates.

In this assignment you will submit eight files...

1. `README.txt`. This will contain your PIC username.

2. `login.php` and `h_password.txt`.

These are completely new files that you will create in this homework.

3. `welcome.php` and `shut_the_box.php`.

These files will build upon the `welcome.html` and `shut_the_box.html` that you submitted on a previous homework.

4. `welcome.js`. This is a file you made on a previous homework with one minor alteration.

5. `username.js` and `shut_the_box.js`. These are files that you made on a previous homework.

As mentioned above, you should submit all files to Gradescope before the deadline.

You should also submit the files to the PIC server. Save them in the directory

`/net/laguna/???...??/your_username/public_html/HW7`

(in the folder HW7 within `public_html`). **You'll also need to create a folder called "sessions" with 755 permissions.** We should all be able to test your live webpage at

www.pic.ucla.edu/~your_username/HW7

Now, I am just left to tell you what I want these files to achieve. Go over the page for that!

login.php and h_password.txt

Here's a screenshot of what my login.php looks like.

Welcome! Ready to play "Shut The Box"?

Login

In order to play you need the password.

If you know it, please enter it below and login.

Password:	<input type="text"/>	<input type="button" value="Login"/>
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So, in terms of the HTML...

- The tab should be titled "Shut The Box".
- You should have a header displaying a heading "Welcome! Ready to play "Shut The Box"?"
- You should have a section with a heading saying "Login".
- The section should have a paragraph saying "In order to play you need the password."
- The section should have a paragraph saying "If you know it, please enter it below and login."
- There should be a `<fieldset>` element containing a `<label>` element and two `<input>` elements. The `<label>` element should be associated with the first `<input>` element. These elements will allow a user to submit a password.
- There should be a footer with copyright information.

In terms of the PHP...

- You should use a web form (with method set to `POST`) for the password submission.
- The correct password should be: `Immutable`
 - A hashed version of the password should be stored in `h_password.txt`.
 - If the correct password is submitted, a PHP session with the name `shutTheBox` should record the user as being `loggedin`, and the user should be redirected to `welcome.php`.
 - If an incorrect password is submitted, a PHP session with the name `shutTheBox` should record the user as **not** `loggedin`, the user should stay on the same page and see a message saying `Invalid password!`.

The other files

- Copy your previous homework submission `welcome.html` and rename it as `welcome.php`. Then use PHP sessions so that if a user is not logged in, they are redirected back to `login.php`.
- Copy and paste `username.js` without any changes.
- Copy and paste your previous homework submission `welcome.js`. A few characters need editing to be consistent with using `php` file extensions instead of `html` file extensions.
- Copy your previous homework submission `shut_the_box.html` and rename it as `shut_the_box.php`. Then
 - use PHP sessions so that if a user is not logged in, they are redirected back to `login.php`;
 - use PHP cookies so that if a user is logged in but has not specified a username, they are redirected back to `welcome.php`;
 - use PHP and two `for` loops to make your box selection table more elegantly.
- Copy and paste `shut_the_box.js` without any changes.

Check everything works correctly. All we're left to do now (in future assignments) is to handle the scores and make your website look pretty!

Grading

One point for each of the following...

- PHP sessions are named correctly and password submissions are appropriately hashed.
- Before logging in, `welcome.php` and `shut_the_box.php` redirect to `login.php`.
- An incorrect password submission on `login.php` results in staying on the page and seeing the message `Invalid password!`.
- A correct password submission on `login.php` results in being redirected to `welcome.php`.
- After logging in, `welcome.php` is accessible via its URL in another tab.
- After logging in but before specifying a username, `shut_the_box.php` redirects to `welcome.php`.
- Submitting a valid username on `welcome.php` redirects you to `shut_the_box.php`.
- After logging in and specifying a username, `shut_the_box.php` is accessible in another tab.
- After logging in, entering an incorrect password at `login.php` results in being logged out, so that `welcome.php` and `shut_the_box.php` redirect to `login.php` again.
- `shut_the_box.php` uses PHP and two `for` loops to make the box selection table elegantly.