

ITMD 462/562

Web Site Application Development

Lecture 9

Fall 2015 – October 28, 2015

Tonight's Agenda

- Authentication Demo (Basic use of password functions)
- Database Demos PDO

Basic Authentication

- Use the php password functions if you are using 5.5.
- Store something in the session if authentication is good. Typically username.
- Check that session variable each page load. If it doesn't exist than send to the login page.
- Logout button should destroy the session or unset the value.

Password Hashing

- Never store plain text passwords in your database
- Use hashing and salt to store a one-way encrypted password.
- PHP 5.5 has dedicated password hashing functions – use them
- PHP < 5.5 you need to use the crypt functions
- When the user supplies their password from a web form hash it again and then compare the hashes.
- To keep someone persistently logged in store something like their login name in a session variable.

Password Hashing

- <http://php.net/manual/en/faq.passwords.php>
 - <http://php.net/manual/en/book.password.php>
 - <http://php.net/manual/en/function.crypt.php>
 - <http://www.formget.com/login-form-in-php/>
 - <http://stackoverflow.com/questions/1243150/php-sessions-to-authenticate-user-on-login-form>
-
- Let's look at some of these examples

PHP PDO

- We will be looking at using PHP PDO tonight.
- We will first focus on SQLite because of ease of use.
- MySql is similar. Some DDL commands may be different. You need to look up the specific database api you are using.
- Let's do live demos

PHP PDO Resources

- <http://php.net/manual/en/book.pdo.php>
- <http://php.net/manual/en/ref.pdo-sqlite.php>
- <http://php.net/manual/en/ref.pdo-sqlite.connection.php>
- <http://code.tutsplus.com/tutorials/why-you-should-be-using-phps-pdo-for-database-access--net-12059>
- <http://codular.com/php-pdo-how-to>
- http://wiki.hashphp.org/PDO_Tutorial_for_MySQL_Developers
- <http://www.phpro.org/tutorials/Introduction-to-PHP-PDO.html>
- <http://www.if-not-true-then-false.com/2012/php-pdo-sqlite3-example/>

Assignments

Reading

- If you have not taken those courses you need to read/watch one or more of the following tutorials
 - <https://www.codeschool.com/courses/try-sql>
 - <http://www.w3schools.com/sql/default.asp>
 - <http://www.tutorialspoint.com/sql/>
- Read PHP PDO Tutorial
 - <http://code.tutsplus.com/tutorials/php-database-access-are-you-doing-it-correctly--net-25338>
- Attempt to create a SQLite Database and MySQL database using the database management applications we discussed in class.
- Good PHP resource -> http://wiki.hashphp.org/Main_Page

Assignments

- Assignment 2 is up and due this Sunday Nov 8 11:59 Chicago time.
- It should be very easy so there will be **NO EXTENSIONS**.
- Basically convert from serialized data files to SQLite PDO database for storage.
- Graduate students need to have very basic authentication