

Class 06: PHP and MySQL for dynamic content

What is MySQL?
How to create a MySQL database
Working with cPanel, Pentangle and phpMyAdmin
Creating a database
Adding structure to a database
Adding data to a database
Querying a database
Formatting and printing data with PHP
Building a simple application with PHP and MySQL
Types of notation

References

PHP and MySQL for Dynamic Web Sites 5th Ed. by Larry Ullman
Head First PHP & MySQL by Lynn Beighley and Michael Morrison
PHP Solutions: Dynamic Web Design Made Easy 2nd Ed. by David Powers

Homework

Read: Chapters 4, 5 and 9 of PHP and MySQL for Dynamic Web Sites
OR Chapters 10 - 14 of PHP Solutions: Dynamic Web Design Made Easy

You may not need to use a database just yet but your web hosting account will allow you to create a few, so do experiment. Try to create a simple news system as demonstrated in this week's presentation. Databases can easily be deleted (dropped), so a test database can be removed at a later date.

Note: be very careful not to delete your main database, currently used to store your course blog. You cannot undelete a database!

PHP scripts for connecting to databases and running queries can vary a lot in their syntax – there are many ways of doing it. The *standard* notation in this week's presentation is the same as used in Larry Ullman's book but you may use any method you feel comfortable with (Standard, OO or PDO) but standard notation is probably easier to understand for the beginner. It's also worth pointing out that you should avoid the old **mysql** methods and use the newer **mysqli** instead because they are more efficient and more secure (the "i" stands for improved). The standard mysqli notation for connecting to a database is:

```
$conn = new mysqli('localhost', $db_user, $db_password,  
$db_name) or die ('Cannot open database');
```

The News Application

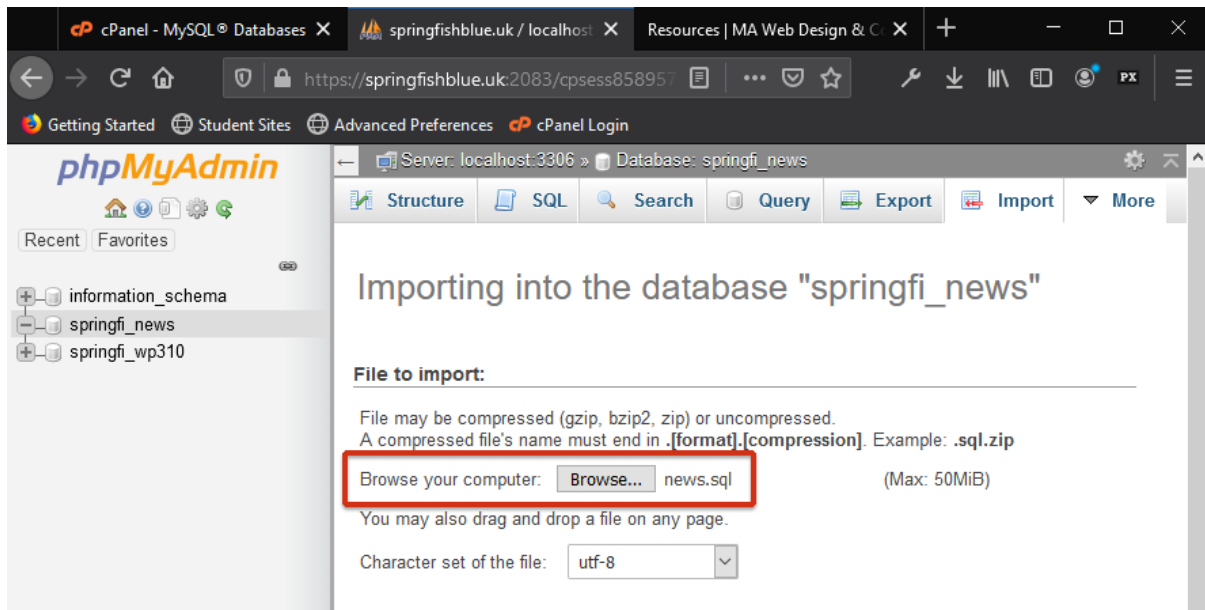
The [example news application](#) can be downloaded if you'd like to give it a try.

Create a database and a user in cPanel (note the names and the password). Then import **news.sql** using phpMyAdmin. This will add a news table to the database, including the structure and some sample data.

Upload all files (except **news.sql**) to a folder on your server called "news".

Edit **index.php** to add the database name, username and password to the PHP script.

Visit the news folder in your browser and see the application working.



Try inserting some new data using phpMyAdmin to see how the application updates the news page.

Remember, PHP scripts will only work once uploaded to the web server. They will not work on your local computer, so get used to testing your websites live on the server.