Installing and using MAMP

About

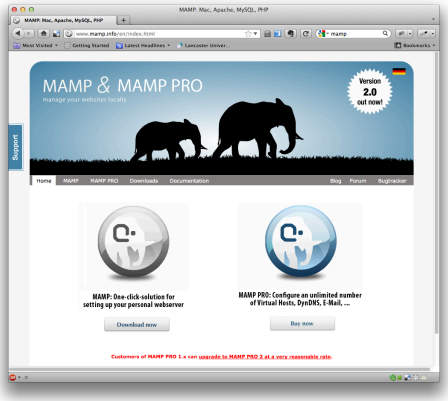
This document explains how to install and use the MAMP package (specifically for students using an Apple Mac).

What is MAMP

MAMP is a single package or distribution of the server side applications mySQL, Apache and PHP specifically for the Mac platform (which is where the acronym MAMP is derived from). Mac OS X comes with preinstalled versions of these servers, but MAMP comes in a single download with a simple interface for controlling the servers, which is very useful for development work. MAMP installs in its own (self contained) folder or directory and does not conflict with the built in versions.

Downloading and installing MAMP

Download the latest version of MAMP from http://www.mamp.info (figure 1) - there are currently two options available. MAMP is the free version; MAMP Pro has to be paid for and includes various services that won't be needed for the work in ITB or Web Scripting.



MAMP comes as in a compressed ZIP archive (figure 2) – extract the MAMP package

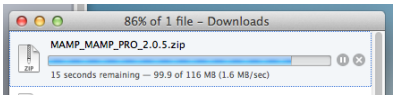


Figure 2

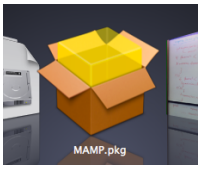


Figure 3

Click MAMP.pkg to start the install (figure 3) – follow the steps to place the distribution in your Applications folder.

Running MAMP

MAMP installs as a folder (figure 4) rather than as a single 'icon' in the Applications folder, to start the distribution look for the MAMP icon (figure 5).

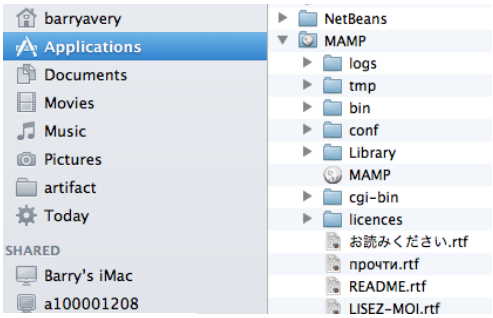


Figure 4

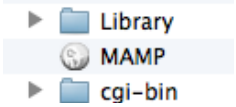


Figure 5

MAMP uses traffic light indicators to show that the servers are working – click “Start Servers” to get both the Apache and the MySQL server running (figure 6).

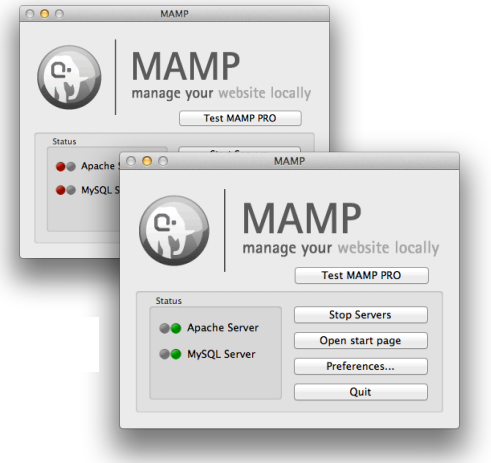


Figure 6

Depending on your configuration, MAMP may start your default web browser to show you the initial startup page. If it doesn’t come up, either click on “Open start page” or navigate to *http://localhost:8888/MAMP/* (figure 7)

Figure 7

MAMP is a collection of server side services so there is no (one) single interface for PHP, Apache and MySQL. The best way to administer and use mySQL is through the phpMyAdmin application. This is available from the startup page in the tab across the top (figure 8).

Figure 8

Databases are listed down the column on the left, activities that you can perform are shown in tabs across the top (figure 9).

Hint: Before you do anything else – you must **always** either select a database from the column on the left (or create a new one).

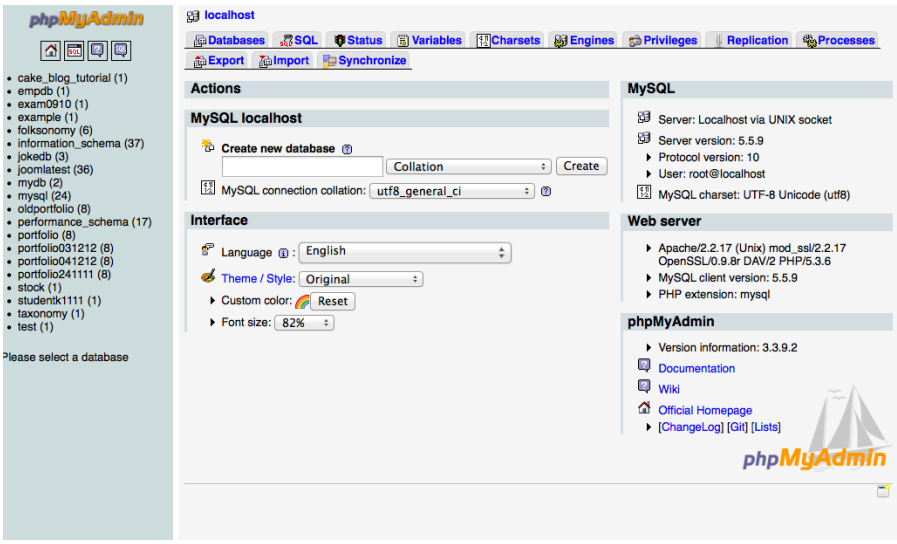


Figure 9

Using MySQL to create and use databases

The employee database is used in various SQL notes – these steps show how to create the *employee* database, with its EMP, DEPT and GRADE tables.

From the 'front' page use the *Create new database* option to create a database called *employee*

You can always return to the 'front' page by clicking on the *localhost* link at the top of any page (figure 10).

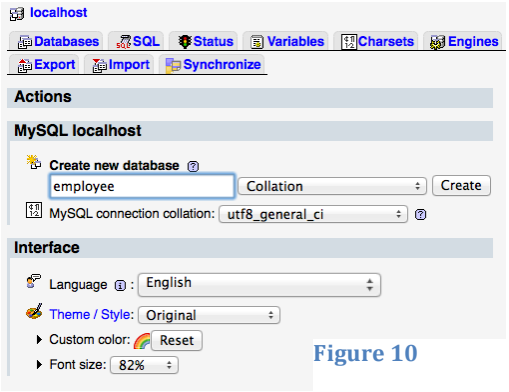


Figure 10

You should then be taken into the empty database employee. Note how the tabs change to show the different actions that you can perform on the *employee* database (figure 11)

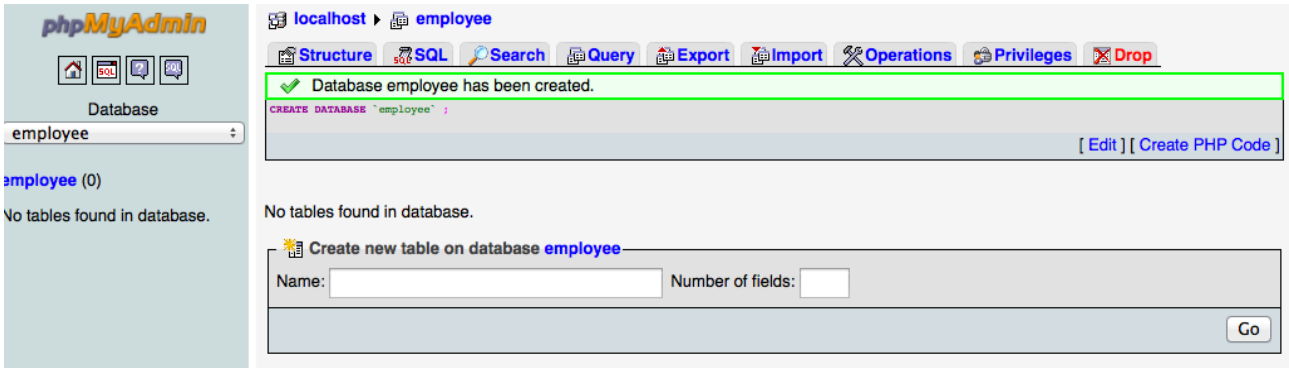


Figure 11

The key here is to remember that you should always select the database you wish to work with in the column on the left before attempting to run any queries, otherwise you won't have the correct tabs/functionality across the top of the page (figure 12).

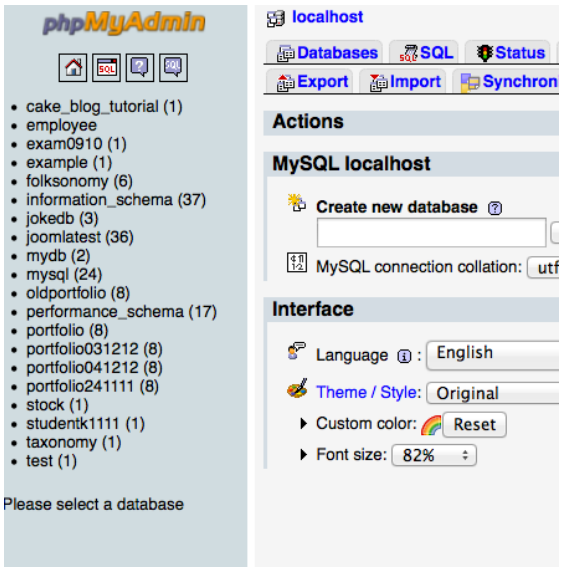


Figure 12

Creating the EMP, DEPT and GRADE tables

Rather than using the interface to create tables and insert records, we can run a batch set of SQL statements to set the tables up.

Download the zip file at the bottom of this page and extract the text file inside

http://www.barryavery.com/blog/2009/10/24/relational-databases-session-1/

This file contains SQL statements to *create* and *insert* the three tables used in the examples (figure 13)

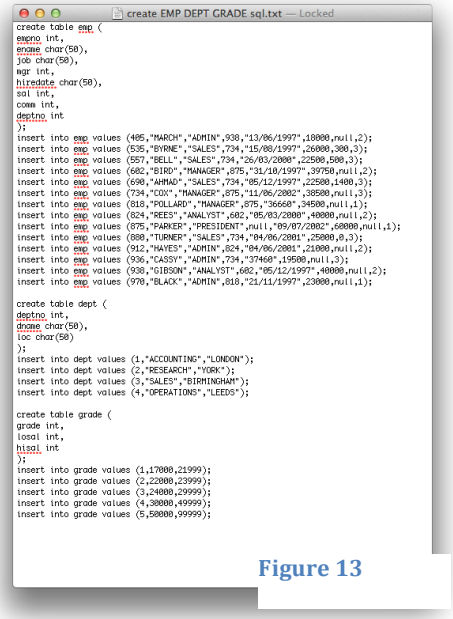


Figure 13

In phpMyAdmin, click on the SQL tab and copy/paste in all the SQL commands from the text file. Click the *Go* button to execute the statements (figure 14) - note that you should have previously selected the *employee* database for this to work.

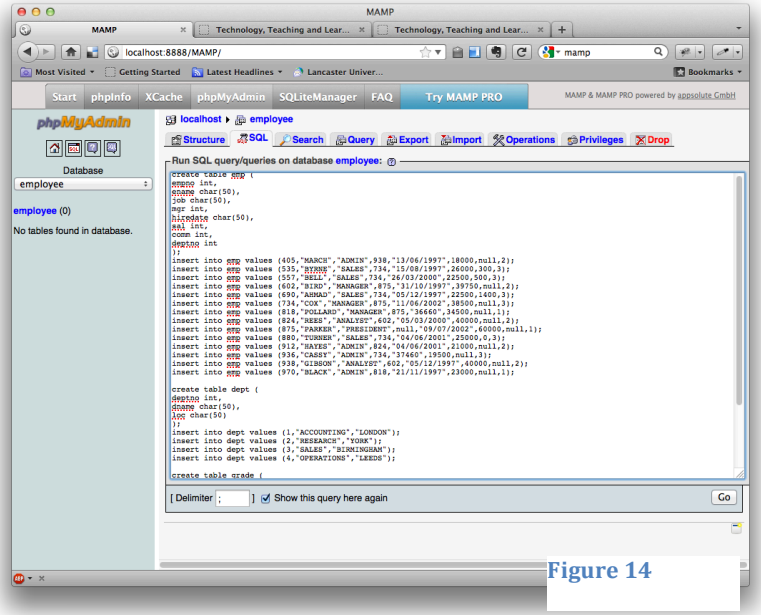


Figure 14

If this has worked correctly you should have three tables (and data) shown in the column on the left (figure 15).

You can use the SQL tab to run any SQL statement (or series of statements separated by ';').

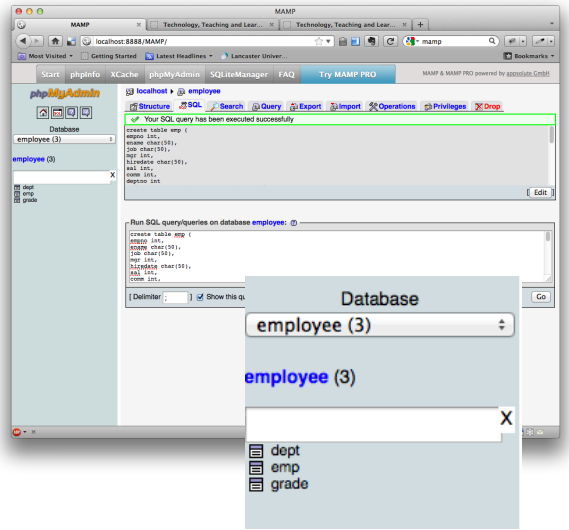
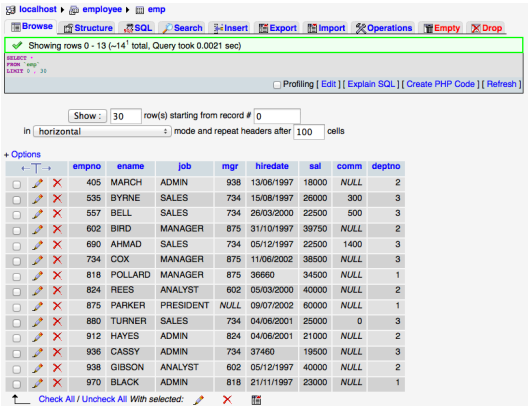


Figure 15

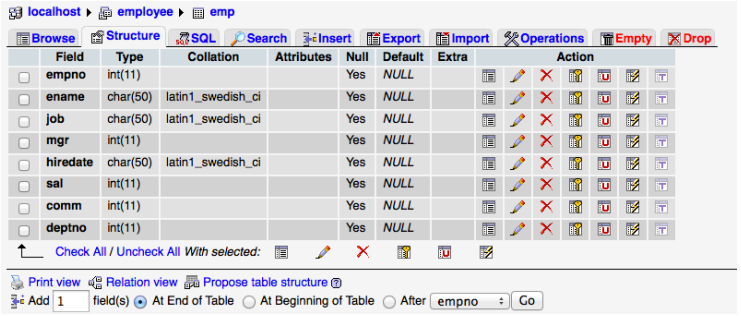
Other parts of the interface

Click on a table name (in the column on the left) to be able perform the following actions

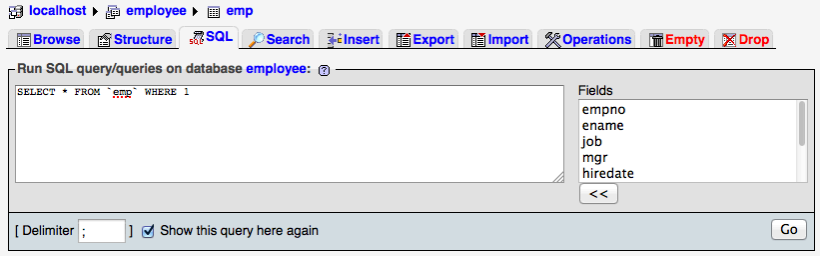
Browse a table's data



See a table's structure



Run SQL statements (not just on the selected table but on any table)



You can also *Insert* rows (records), *Export* or *Import* a table's data in a variety of formats, *Empty* a table (i.e. delete all the rows) or *Drop* a table (remove the table entirely).

For learning and using SQL – the most important functionality comes from the SQL panel