Appendix H

Working with phpMyAdmin

(Note: this appendix is also available as a handout on the textbook Website.

In **Chapter 14** you learned how to develop PHP code designed to connect to, and work with, **MySQL** databases. This is necessary when your Web application needs to interact with a database to meet a requirement, but what about your own need to work with databases as a developer? How can you issue MySQL commands directly, without coding queries in PHP?

phpMyAdmin is a freely distributed, Web-based interface to your **MySQL** and **MariaDB** databases, that provides a complete MySQL management environment. phpMyAdmin allows you to: create, configure, and drop databases, tables, views, and indexes; execute SQL queries and other statements; manage users and privileges; perform back ups and other house-keeping; and much more.

phpMyAdmin is included in your **xampp** distribution and can be accessed under your **http://localhost** URL. If you use a Web hosting site, your service package will almost certainly include phpAdmin, allowing you to work with your remote databases.

The following tutorial is just intended to introduce the phpMyAdmin interface. For a comprehensive overview and documentation see:

```
https://www.phpmyadmin.net/
```

Before You Start

Before you start this tutorial you should have already worked through **Chapter 14**, **Connecting to a Database — Working with MySQL**, so that you are familiar with some basic MySQL queries and have already created a user account (**wbip** with password **wbip123**), as well as two database tables, named **personnel** and **timesheet**, in the default **test** database.

Connecting to phpMyAdmin

First start your Web server and MySql if these are not already running. Open a Web browser and use the following URL to connect to phpMyAdmin:

```
http://localhost/phpmyadmin
```

This opens a Web page that displays the home page of the phpMyAdmin interface. On the left you will see a list of available databases. These should include the test database that you worked in Chapter 14, and should include 2 tables, named **personnel** and **timesheet**.

At the top of the main window you will see a row of tabs that provide different options. Let's examine your **test** database: click the **Databases** tab. You will see a list of databases. For now you should only work with your test database, and any other databases that you create yourself.

Click **test** to choose this database. Notice the new set of tabs at the top of the page that give you options to work with the database and its content. The **Structure** tab is open and the page lists the **personnel** and **timesheet** tables that are included in the test database.

Click the **personnel** table. You are now viewing a page under the **Browse** tab that displays a listing of the rows in this table. Note that this page allows you to **edit**, **copy**, or **delete** individual rows and fields, **export** any number of rows, **print** rows, etc.

Issuing SQL Commands

The **SQL** tab provides a page that allows you to submit SQL queries. Click the SQL tab and type the following query in the query box:

```
SELECT * from personnel
```

Now press the **Go** button and your query will be executed. You should see the results of your query Since your query requested **all** of the fields of **all** rows in the personnel table this is the same listing that you saw under the **Browse** tab except that the number of rows that were returned is indicated. Once again you have options to work with any or all of these rows and fields.

Let's try a more specific query, such as the following:

```
SELECT firstName, lastName FROM personnel WHERE jobTitle
='accountant' ORDER BY lastName
```

This time only two rows are displayed, and only the content of the **firstName** and **lastName** fields are included, ordered by lastName.

You can run any of the queries that you learned in Chapter 14, including queries to create. configure, and drop databases and tables, insert, update and delete records, etc.

Using the phpMyAdmin Interface

You can also perform many of these operations with no need to issue SQL commands. For example to use an online form to conduct the last query, click the **Search** tab, type **accountant** in the value field of **jobTitle**, and, under options, select **firstName** and **lastName**.

Similarly the **Insert** tab allows you to add new records, and the **Privileges** tab allows you to add new users, modify the privileges of existing users, and more. Go to the **Export** tab to **export** your tables or query results in a number of different formats, including **SQL**, **CSV** (plain text with comma separated values), **CSV for Excel**, JSON, **Open Document**, **Open Document text**, **PDF**, **XML**, etc. Go to the **Import** tab to **import** records from one of these formats.

This is just a brief introduction to phpMyAdmin and describes some basic operations. Check the textbook Web site for any additional material.