Spring MVC Tutorial – Contact List Application

Step 14: Creating the Database

SOFTWARE GUILD

Step 14: Creating the Database

Overview

In Step 14, we will create a database (in MySQL) to hold our Contact data. This step assumes that you have successfully installed MySQL on your local machine, that you have sufficient rights to create databases and tables, and that you have completed all previous steps in this tutorial.

Database Design

The database for this application is very simple: it consists of one table called **contacts** with four columns:

Column	Type	Null	Default	Extra
contact_id	int(11)	No		auto_increment
first_name	varchar(50)	No		
last_name	varchar(50)	No		
company	varchar(50)	No		
phone	varchar(10)	Yes	NULL	
email	varchar(50)	No		

Database SQL Creation Script

The following SQL script creates the **contacts** table:

```sql
-- phpMyAdmin SQL Dump
-- version 4.0.6deb1
-- http://www.phpmyadmin.net
--
-- Host: localhost
-- Generation Time: Feb 24, 2014 at 07:27 PM
-- Server version: 5.5.35-0ubuntu0.13.10.2
-- PHP Version: 5.5.3-1ubuntu2.1


SET SQL_MODE = "NO_AUTO_VALUE_ON_ZERO";
SET time_zone = "+00:00";


/*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
/*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
/*!40101 SET NAMES utf8 */;


--
-- Database: `contact_list`
--

-- --------------------------------------------------------


--
-- Table structure for table `contacts`
--

CREATE TABLE IF NOT EXISTS `contacts` (
  `contact_id` int(11) NOT NULL AUTO_INCREMENT,
  `first_name` varchar(50) NOT NULL,
  `last_name` varchar(50) NOT NULL,
  `company` varchar(50) NOT NULL,
  `phone` varchar(10) DEFAULT NULL,
  `email` varchar(50) NOT NULL,
  PRIMARY KEY (`contact_id`)
) ENGINE=InnoDB  DEFAULT CHARSET=latin1 AUTO_INCREMENT=23 ;

/*!40101 SET CHARACTER_SET_CLIENT=@OLD_CHARACTER_SET_CLIENT */;
/*!40101 SET CHARACTER_SET_RESULTS=@OLD_CHARACTER_SET_RESULTS */;
/*!40101 SET COLLATION_CONNECTION=@OLD_COLLATION_CONNECTION */;
```
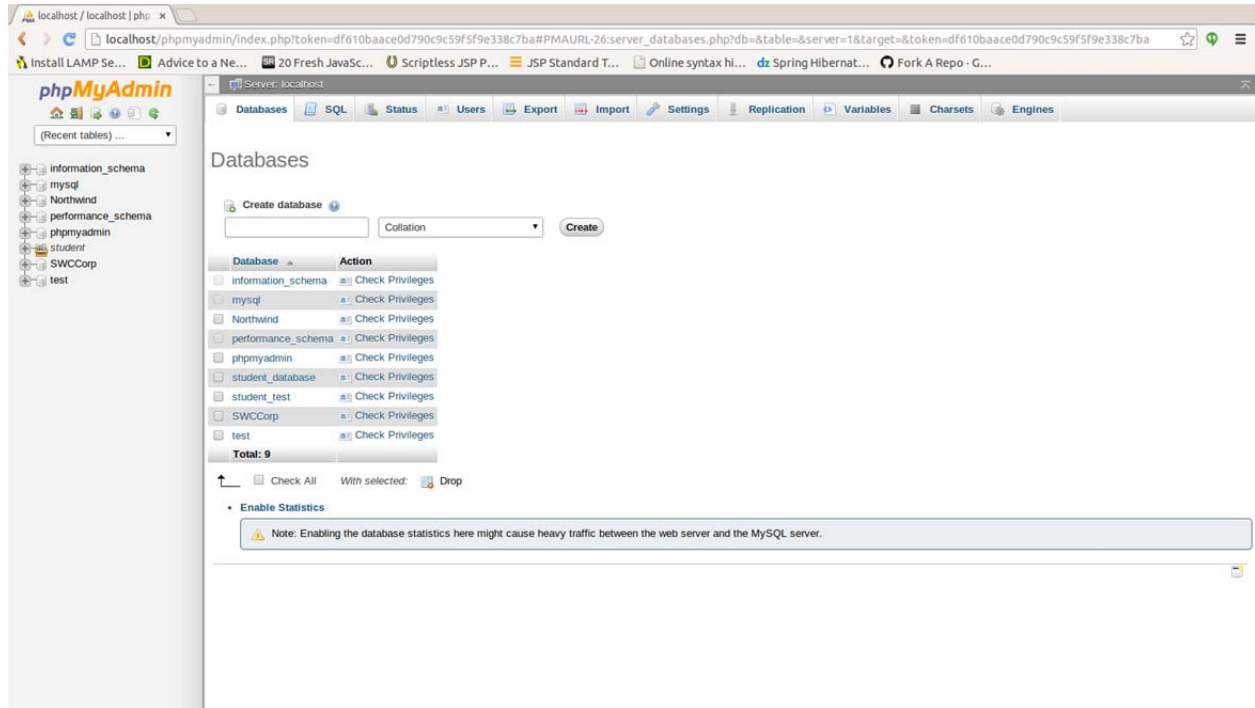
Creating the Databases (dev and test)

We need to create two databases (one for dev and one for test) and then run the creation script against each.

1. Log into phpmyadmin and click on the **Databases** tab.

2. Type contact_list in the **Create database** textbox and click the **Create** button.

3. Type contact_list_test in the **Create database** textbox and click the **Create** button. Both contact_list and contact_list_test should now appear in the list of databases.

4. Click on contact_list and then click the **SQL** tab:
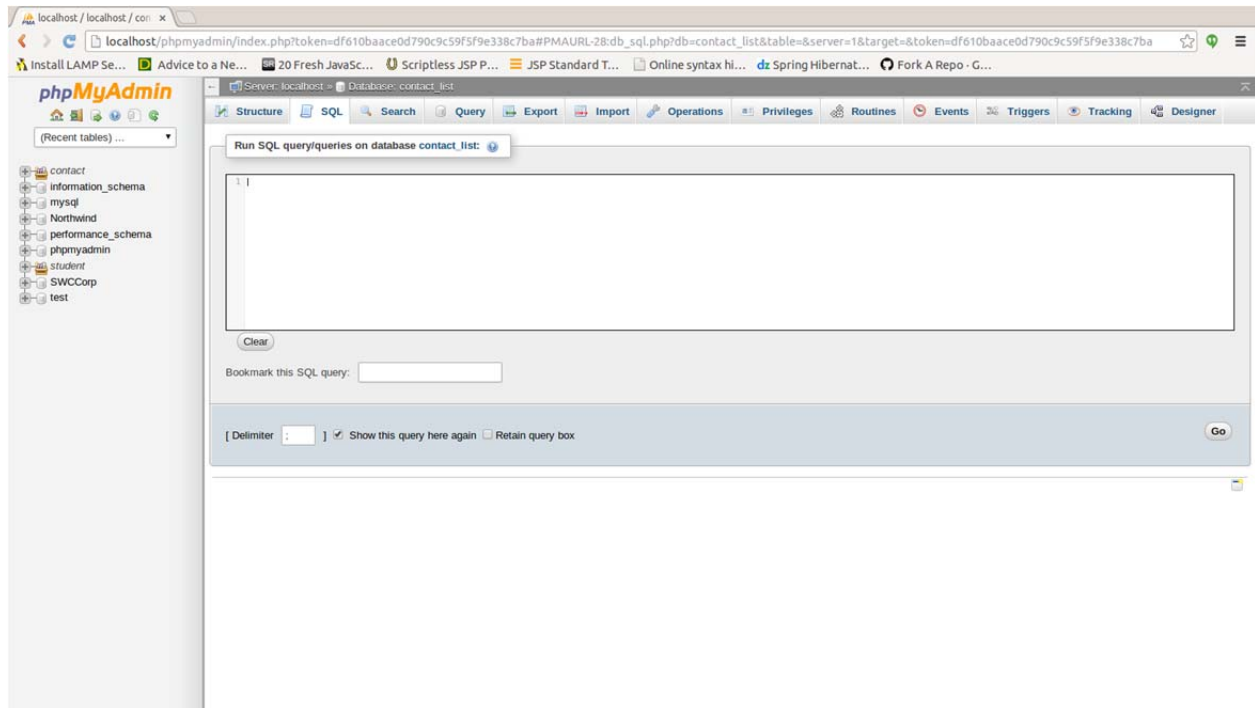
5. Copy the creation script (above) and paste it into the SQL window. Click the **Go** button. This will create the contacts table in the contact_list database.

6. Click on the **Home** icon in the upper left of the screen and then click on the **Databases** tab. This will list all of the databases on the server.

7. Click contact_list_test and then click the **SQL** tab.

8. Now copy the creation script (above), paste it into the SQL window, and click the **Go** button (just as you did for contact_list). This will create the contacts table in the contact_list_test database.

Wrap-up

This concludes Step 14 of the tutorial. You should have both contact_list and contact_list_test databases created on your MySQL server and each database should have a contacts table. In the next step of the tutorial, we will create and configure a DAO to create, retrieve, update, and delete data from the database.