## **Preface**

MySQL, launched in 1995, has become the most popular open source database system. The popularity of MySQL and phpMyAdmin has allowed many non-IT specialists to build dynamic websites with a MySQL backend. This book is a short but complete guide showing beginners how to design good data structures for MySQL. It teaches how to plan the data structure and how to implement it physically using MySQL's model.

## **What This Book Covers**

Chapter 1 introduces the concept of MySQL, and discusses MySQL's growing popularity and its impact as a powerful tool. This chapter gives us a brief overview of the relational models and Codd's rules, which are required for designing purposes. A brief introduction to our case study — "car dealer" is provided at the end.

Chapter 2 shows how to deal with the raw data information that comes from the users or other sources, and the techniques that can help us build a comprehensive data collection. Also, this chapter covers the exact limits of the analyzed system, how one should gather documents, and interview activities for our case study.

Chapter 3 emphasises on transforming the data elements gathered in the collection process into a cohesive set of column names. The concept of data naming is also discussed in this chapter.

*Chapter 4* provides the technique of grouping column names into tables. Rules for table layout, the concepts such as primary key, unique key, data redundancy, and data dependency are covered in this chapter.

Chapter 5 presents various techniques for improving our data structure in terms of security, performance, and documentation. The final data structure for the car dealer's case study is provided at the end.