In this section we describe a sample database called **School Management System (SMS)**, which serves to illustrate the basic ER model concepts and their use in schema design. We list the data requirements for the database here, and then create its conceptual schema step by step as we introduce the modeling concepts for the ER model. The SMS database keeps track of **Teachers, Students** and their **fees** and **grading**. Suppose that after the requirements and analysis phase, the database designer provides the following description of the miniworld \_ the part of the SMS that will be represented in the database:

* The SMS is divided into **Students** and **Teachers**, having unique name, unique ID, unique CNIC or bay-form number, cell phone number address and remaining information.
* Students are directly interacted with Teachers, teachers conduct **exams** and teaches different **subjects**. There are different **section** and **classes** which are managed in too.
* For students **fee structure** is designed in which fine, charges and discount type is tackled.
* Students are promoted in next classes according to their results and positions are given according to **grades** so their record is saved, which can be fetched according to students, class, section, subject or teacher.