

Figure 5-10
Summary of Database
Administration Tasks

Category	Database Administration Task	Description
Development	Create and staff DBA function	Size of DBA group depends on size and complexity of database. Groups range from one part-time person to small group.
	Form steering committee	Consists of representatives of all user groups. Forum for community-wide discussions and decisions.
	Specify requirements	Ensure that all appropriate user input is considered.
	Validate data model	Check data model for accuracy and completeness.
	Evaluate application design	Verify that all necessary forms, reports, queries, and applications are developed. Validate design and usability of application components.
Operation	Manage processing rights and responsibilities	Determine processing rights/restrictions on each table and column.
	Manage security	Add and delete users and user groups as necessary; ensure that security system works.
	Track problems and manage resolution	Develop system to record and manage resolution of problems.
	Monitor database performance	Provide expertise/solutions for performance improvements.
	Manage DBMS	Evaluate new features and functions.
	Monitor backup procedures	Verify that database backup procedures are followed.
	Conduct training	Ensure that users and operations personnel know and understand recovery procedures.
Backup and Recovery	Manage recovery	Manage recovery process.
	Set up request tracking system	Develop system to record and prioritize requests for change.
Adaptation	Manage configuration change	Manage impact of database structure changes on applications and users.

For important databases, most organizations dedicate one or more employees to the role of **database administration**. Figure 5-10 summarizes the major responsibilities for this function. You will learn more about this topic if you take a database management course.

Q4 How Do Database Applications Make Databases More Useful?

A **database application** is a collection of forms, reports, queries, and application programs that process a database. A database may have one or more applications, and each application may have one or more users. Figure 5-11 shows three applications used at GearUp. Buyers use the first one to schedule events; operations personnel use the second to set up the graphics and auction terms and screens; and accounting personnel use the third to process event financial results. These applications have different purposes, features, and functions, but they all process the same GearUp event database.

What Are Forms, Reports, and Queries?

Figure 5-2 shows a typical database application data entry **form**, and Figure 5-12 shows a typical **report**. Data entry forms are used to read, insert, modify, and delete data. Reports show data in a structured context.