Whatever is in any way beautiful hath its source of beauty in itself; and is complete in itself; praise forms no part of it.
—Marcus Aurelius Antoninus

There is something in a face, An air, and a peculiar grace, Which boldest painters cannot trace.
—William Somerville

Cato said the best way to keep good acts in memory was to refresh them with new.
—Francis Bacon

I never forget a face, but in your case I’ll make an exception.
—Groucho Marx

Objectives
In this chapter you’ll learn:

- To access databases from JSF applications.
- The basic principles and advantages of Ajax technology.
- To use Ajax in a JSF web app.
Self-Review Exercise

30.1 Fill in the blanks in each of the following statements.

a) Ajax is an acronym for __________.
   ANS: Asynchronous JavaScript and XML.

b) A(n) __________ allows the server to manage a limited number of database connections and share them among requests.
   ANS: connection pool.

c) __________ is a technology for locating application components (such as databases) in a distributed application.
   ANS: JNDI (Java Naming and Directory Interface).

d) A(n) __________ enables a web application to obtain a Connection to a database.
   ANS: DataSource.

e) The annotation __________ can be used to inject a DataSource object into a managed bean.
   ANS: @Resource.

f) A(n) __________ element displays a collection of objects in tabular format.
   ANS: h:dataTable.

g) An h:commandButton’s __________ attribute can specify the name of another page in the web app that should be returned to the client.
   ANS: action.

h) To specify headers or footers for the columns in h:dataTables, use __________ elements nested with their name attributes set to __________ and __________, respectively.
   ANS: f:facet, "header", "footer".

i) __________ separates the user interaction portion of an application from its server interaction, enabling both to proceed asynchronously in parallel.
   ANS: Ajax.

j) __________ help make web applications more responsive, making them feel more like desktop applications.
   ANS: partial page updates.

k) The f:ajax element’s __________ attribute specifies a space-separated list of element ids—the values of these elements are submitted as part of the Ajax request.
   ANS: execute.

l) The f:ajax element’s __________ attribute specifies a space-separated list of element ids for the elements that should be updated via partial page updates.
   ANS: render.

Exercises

NOTE: Solutions to the programming exercises are located in the ch30solutions folder. Each exercise has its own folder named Ex30_## where ## is a two-digit number representing the exercise number. For example, exercise 30.3’s solution is located in the folder Ex30_03.
Chapter 30  JavaServer™ Faces Web Apps: Part 2