JAVA & Database Connectivity

Implementation of the JAVA Database Connectivity Advanced Programming Interface

Johnny Earnest
Union University
What is the JDBC API?

- JAVA Classes
- Interfacing with Multiple Databases
Useful Scenarios:

- Company Mergers
- Multiple OS platform environments
- Datawarehousing
- Database Porting
Why use JAVA & JDBC?

- Platform Independent
- One Applet for many users
- Additional connections made easy
- Strong industry support

**** The Java Bandwagon ****
How does JAVA do it?

- Driver Manager
- Database Driver for each database
- Establish connection
- SQL Statement
- Process Results
The four types of drivers:

1) JDBC/ODBC Bridge
2) Native-API Partly Java
3) Net-Protocol All Java
4) Native-Protocol All Java
JDBC/ODBC Bridge

Java JDBC Application/Applet
JDBC Driver Manager
JDBC/ODBC Bridge
ODBC Driver Manager
ODBC Data Access Middleware

ORACLE INFORMIX SYBASE
Native-API Partly-Java
Net-Protocol All-Java
Native-Protocol All-Java
Establish A Connection !!!

Connection con = DriverManager.getConnection(
    "jdbc:mysql://acm.org/acm.m.db", "login", "password");
Statement stmt = con.createStatement();
ResultSet result = stmt.executeQuery("SELECT name, dept, title FROM Emp table");
while (result.next()) {
    String x = getString("name");
    int y = getInt("dept");
    int z = getInt("title");
}
Wrappin’ it up

- Connecting Multiple Databases
- Portable
- Easy to use
- An Applet a day.....
  Keeps the command prompt away !!
Resources Used

Java Database Programming with JDBC

Sun Microsystems
http://www.javasoft.com/

White Paper: Deploying Java and JDBC