JDBC Pools

**If any of the database steps do not work for you, redo the installation lab (Week 1 Lab 1).**

## Initial Database Setup

### Step 1

Create an empty MySQL database called “NotesDB”. Do **one** of the following:

* In a command shell, type:
  1. cd c:\Program Files\MySQL\MySQL Server 5.6\bin\
  2. mysql -u root –p
     + enter password: password
  3. create database NotesDB;
  4. exit
* Open SQLyog
  1. Create a new connection
     + Address: localhost
     + Username: root
     + Password: password
  2. Right-click on root@localhost and create a database called “NotesDB”

### Step 2a

Database connections are time consuming. Instead, we use a pool of connections and retrieve a connection from the pool.

1. Go to the admin console for Glassfish.
2. Under Resources -> JDBC -> JDBC Connection Pools, click on “New”.
   * Pool name: NotesPool
   * Resource Type: javax.sql.ConnectionPoolDataSource
   * Database Driver Vender: MySql
3. Next
4. Under “Additional Properties” edit the following name/value pairs. Leave the others as defaults
   * User: root
   * Password: password
   * URL: jdbc:mysql://localhost:3306/NotesDB
   * Url: jdbc:mysql://localhost:3306/NotesDB
5. Finish

### Step 2b

In Glassfish admin console, add a JDBC Resource

* JNDI Name: jdbc/NotesDB
* Pool: NotesPool

In your connection class, you will use the JNDI name.

InitialContext ic = new InitialContext();

dataSource = (DataSource)ic.lookup("jdbc/NotesDB");

### Step 3

Add a database connection in NetBeans

1. Under the Services tab, right-click and choose “New Connection”
2. Choose “MySQL” Driver and click Next
3. Enter the following values:
   * Host: localhost
   * Database: notesdb
   * Port: 3306
   * User Name: root
   * Password: password
   * Remember password: checked
4. Next
5. Next
6. Input connection name: NotesDB
7. Finish