Java 12-Week Boot Camp
Week 5: JDBC Summary

PCWorkshops

Java Taster Course For Java Beginners
Including practical, illustrative coding examples

By: Sarah Barnard

2/3/2021

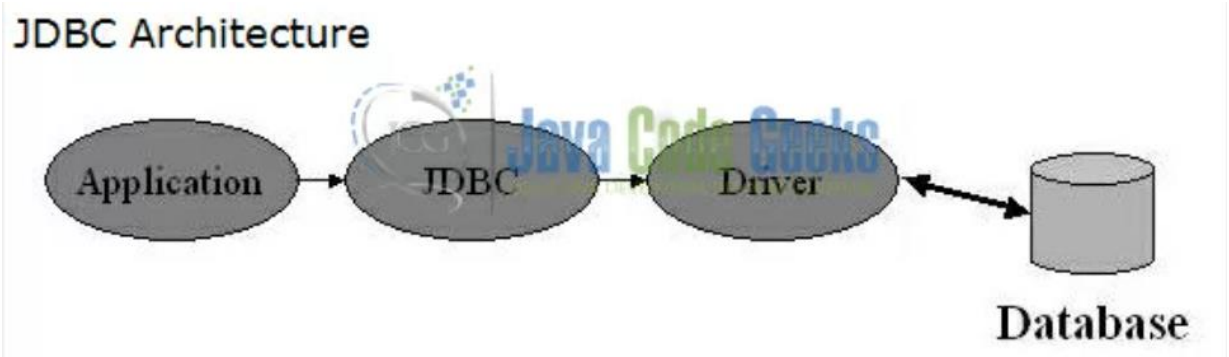
Copyright © 20201 Sarah Barnard, in assignment for PCW Courses Ltd., registered in England and Wales No. 0999078

Java 12 Weeks Boot Camp

Week 5 – JDBC

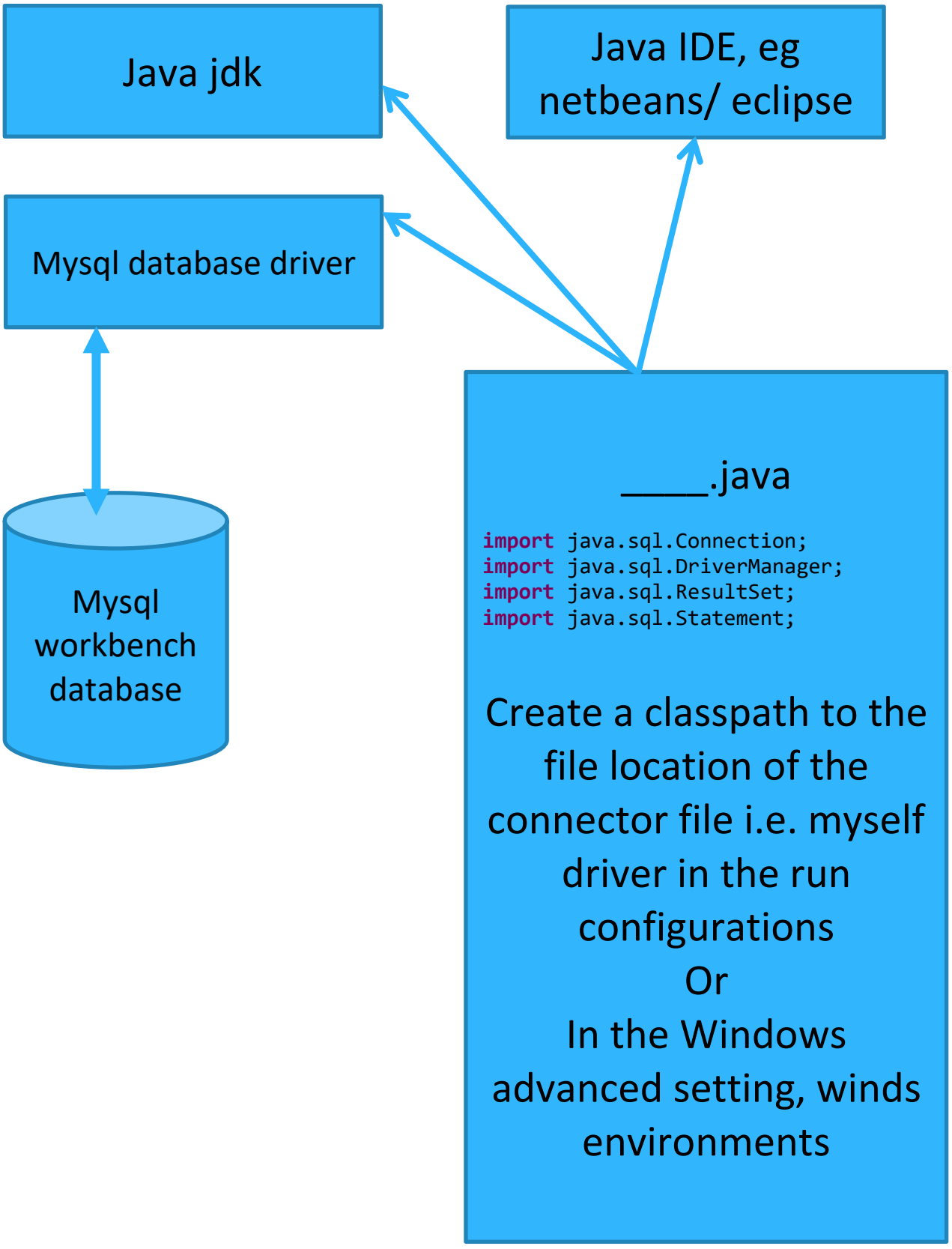
Summary

JDBC



JDBC Driver Download:

Database	JDBC Driver Provider	JAR file name	Download
MySQL	*Oracle Corporation*	mysql-connector-java-VERSION.jar	Download JDBC Driver for MySQL
SQL Server	*Microsoft Corporation*	sqljdbc41.jar, sqljdbc42.jar	Download JDBC Driver for SQL Server
Oracle	*Oracle Corporation*	ojdbc6.jar, ojdbc7.jar, ojdbc8.jar	Download JDBC Driver for Oracle (login required)
PostgreSQL	*The PostgreSQL Global Development Group*	postgresql-VERSION.jar	Download JDBC Driver for PostgreSQL
Apache Derby	*Apache Software Foundation*	derby.jar, derbyclient.jar	Download JDBC Driver for Apache Derby
SQLite	*Xerial.org*	sqlite-jdbc-VERSION.jar	Download JDBC Driver for SQLite
Microsoft Access	*UCanAccess.com*	ucanaccess-VERSION.jar	Download JDBC Driver for Microsoft Access


Java jdk
Java IDE, eg netbeans/ eclipse
Mysql database driver
Mysql workbench database
_____.java
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;
Create a classpath to the file location of the connector file i.e. myself driver in the run configurations
Or
In the Windows advanced setting, winds environments

Java file template

```
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.Statement;

public class exDBInsert {
	static final String JDBC_DRIVER = "com.mysql.jdbc.Driver"; // connection id
	 // mysql database name: javabootcamp, find pw and username
	 // in the mysql database workbench interface
	static final String DB_URL = "jdbc:mysql://localhost/javabootcamp";
	static final String USER = "pwd";
	static final String PASS = "";

	public static void main(String[] args) {
		Connection conn = null;
		Statement stmt = null;

		try{
		// connect
		     Class.forName("com.mysql.jdbc.Driver");
		     conn = DriverManager.getConnection(DB_URL,USER,PASS);
		     stmt = conn.createStatement();  //can be in it's own try/catch

		    // what to do
		    // valid sql statement
		    // ddl and dml sql commands
		    String sql
	= "insert into  movieProgram (moviename, price ) values ('rocky', 15)" ;
		    stmt.executeUpdate(sql);
		    sql="update movieProgram set price=2 where moviename='rocky', ";
		    stmt.executeUpdate(sql);
		    sql = "delete from movieProgram where moviename ='rocky' " ;
		    stmt.executeUpdate(sql);

		    // select sql commands
		    sql = "SELECT moviename, price FROM movieProgram";
		   ResultSet rs = stmt.executeQuery(sql);
		    while(rs.next()) {
		       String mName = rs.getString("moviename");
		                    // field names in the brackets
		      double price = rs.getDouble("price");
		      System.out.println("MovieName: " + mName + " " + price) ;
		     }

		 // close
		 stmt.close();
		 conn.close();
		 }catch(Exception e){
		     System.out.println("Error found"); //user friendly message
		     // e.printStackTrace(); // will print error msg for debugging
		 }

	}

}
```