Java Programming

5-3: Deploying an Application

Practice Activities

Lesson Objectives:

- Describe the concept of packages
- Describe how to deploy an application
- Describe a complete Java application that includes a database back end

Vocabulary:

Identify the vocabulary word for each definition below.

	The process of getting your program ready and available for any user to run the program independent of an IDE.
	Files that describes how your application/applet should be launched.
	Files can be displayed in a web browser as web pages.
	A java system with a client and a server.
	A java system with a client, a server, and a database.
	A collection of java classes organized together.
	A java version of zip files.

Try It/Solve It:

1. Take the following java code and place it into a package named **greeting** in Eclipse:

```
public class MyName {
       private String name = "Jane";

       public String getName() {
         return name;
       }//end method getName

       public void setName(String name) {
          this.name = name;
       }//end method setName

       public void sayHello() {
         System.out.println("Hi" + this.name);
       }//end method sayHello
}//end class MyName
```

2. Create a new package called converse in the same project and then create a class called Hello. You need to use the sayHello method from your MyName class.

   a) What do you need to include in your java program to get this to work?

   b) Show your completed code.

3. You want to be able to change the name and then display the new name from within the Hello class.

   a) How could you call the setName in a program before displaying the new name (Bob) to screen without using an import statement for the package?

   b) Show your completed code.

4. Using the following example create a runnable JAR file using Eclipse.

   Example Steps

   a) In Eclipse create a new Java Project named dice.

   b) In this project create a package also named dice.

   c) In this package create a class named Random.

   d) Add the following code to the Random class:

```
package dice;

import javax.swing.JOptionPane;

public class Random {

	public static void main(String[] args) {
	   int rollOfDice;
	   String output;

	   // generate a random number between 1 and 6 inclusive
	   rollOfDice = (int) (Math.random() * 6) + 1;
	   //create a String message for the output window
	   output = "You rolled a  " + rollOfDice;

	   // print message using a window
	   JOptionPane.showMessageDialog(null, output, "Random Number Demo",
	                                 JOptionPane.INFORMATION_MESSAGE);

	   System.exit(0);
	}//end method main
}//end class Random
```

   a) Save and run your code.

   b) Now create a runnable JAR file and test that it runs outside the IDE!

   c) Detail the steps taken to create the runnable JAR file!