

Solutions to Quick Check Questions

2

Java Programming Basics

2.1 The First Java Application



Quick Check

1. Which of the following are invalid identifiers?

- | | |
|--------------|----------------------|
| a. one | e. hello |
| b. my Window | f. JAVA |
| c. 1234 | g. hello,there |
| d. acct122 | h. DecafeLattePlease |

***b** (no space is allowed), **c** (the first character cannot be a digit), and **g** (no comma is allowed)*

2. What's wrong with the following code?

```
MainWindow mainWindow();  
mainWindow.show();
```

MainWindow object mainWindow is not created. The syntax for the object declaration is wrong.

3. Is there anything wrong with the following declarations?

```
mainWindow      MainWindow;  
Account, Customer  account, customer;
```

The correct syntax is a class name followed by object names. In the first declaration, the object name came first. It should be in reverse. In the second declaration, two class names were listed. It can only have one. The correct version is

```
MainWindow  mainWindow;  
Account     account;  
Customer    customer;
```

4. Which of the following statements is valid?

- a. `mainWindow.setVisible("true");`
- b. `mainWindow.setVisible(true);`

b

2.2 Program Components



Quick Check

1. Name three components of a Java program.

Comments, import statements, and class declarations.

2. Locate three program components in the FunTime program from Chapter 1.

Comment

```
/*  
    Program FunTime  
  
    The program will allow you to draw a picture by  
    dragging a mouse (move the mouse while holding the left mouse  
    button down; hold the button on Mac). To erase the picture and  
    start over, click the right mouse button (command-click on Mac).  
*/
```

import Statement

```
import javabook.*;
```

Class Declaration

```
class FunTime  
{  
  
    public static void main(String[ ] args)  
    {  
        SketchPad        doodleBoard;  
        doodleBoard = new SketchPad();  
        doodleBoard.setVisible( true );  
    }  
}
```

3. Compare FunTime and MyFirstApplication and list the similarities and differences.

Structurally, they are identical in that both include a header comment, one import statement, and one class declaration. The main difference is that one program uses a SketchPad object while the other uses a MainWindow object.

2.3 Edit–Compile–Run Cycle

No Quick Check Questions.

2.4 The javabook Package

No Quick Check Questions.

2.5 Sample Program: Displaying Messages

No Quick Check Questions.

2.6 The First Java Applet



Quick Check

1. How are an applet viewer and a web browser different?

An applet viewer is a specialized class for running applets. It ignores all HTML tags except for the APPLET tag. A web browser is a general purpose program for displaying HTML files. Newer web browsers are capable of processing the APPLET tag by running the applet within the displayed web page.

2. Which class is the main class of an applet?

AppletViewer

3. Which method of the Graphics class do you use to draw a rectangle?

drawRect

4. What is the purpose of the APPLET tag in an HTML file?

To indicate the applet to be executed. It is also possible to specify the amount of screen space for the applet to occupy and other parameters the applet may need.