

Chapter 20

Applets

■ Multiple Choice

- 1) HTML stands for:
 - (a) Hyperlink Making Language
 - (b) Hyper Markup Language
 - (c) Hypertext Markup Language
 - (d) Homepage Markup LanguageAnswer: C

- 2) The HTML tag used to insert a horizontal line on a page is:
 - (a) <h1>
 - (b) <href>
 - (c) <hr>
 - (d)
Answer: C

- 3) The HTML tag that allows you to display text in the browser's title bar is:
 - (a) <title>
 - (b) <center>
 - (c) <hr>
 - (d)
Answer: A

- 4) An HTML comment is delimited by:
 - (a) <// />
 - (b) <!-- -->
 - (c) <?-- -->
 - (d) <!- ->Answer: B

- 5) URL stands for:
- (a) Unified Resource Locator
 - (b) Uniform Reader Locator
 - (c) Uniform Resource Locator
 - (d) Uniform Resource Language

Answer: C

- 6) Java _____ were intended to be run over the Internet.
- (a) applications
 - (b) applets
 - (c) both A and B
 - (d) none of the above

Answer: B

- 7) To use the JApplet class, you must import the _____ package.
- (a) java.awt
 - (b) java.lang
 - (c) java.util
 - (d) javax.swing

Answer: D

- 8) Applets do not normally have constructors. The _____ method performs the initialization of instance variables.
- (a) setJMenuBar()
 - (b) init()
 - (c) paint()
 - (d) close()

Answer: B

- 9) The class _____ converts a digital picture to an icon for us in an applet.
- (a) ImageIcon
 - (b) JAppletIcon
 - (c) IconImage
 - (d) IconJApplet

Answer: A

- 10) When you place an applet in an HTML document, you give the name of the _____ file for the applet.
- (a) .java
 - (b) .class
 - (c) both A & B
 - (d) none of the above
- Answer: B

■ True/False

- 1) The terms HTML document and HTML page mean the same thing.
Answer: True
- 2) HTML is part of the Java language.
Answer: False
- 3) The purpose of the address tag is to contain the e-mail address for contacting the document's maintainer as well as the date that the document was last modified.
Answer: True
- 4) HTML is case sensitive.
Answer: False
- 5) Images can be embedded within HTML pages.
Answer: True
- 6) HTML is a high-level language.
Answer: False
- 7) An applet class is normally defined as a derived class of the class JApplet.
Answer: True
- 8) Applets normally do not contain a main method.
Answer: True
- 9) Applets do not support JMenus.
Answer: False
- 10) An applet is embedded within an HTML document by adding a reference to a valid class file within the <applet></applet> tag.
Answer: True

■ Short Answer/Essay

- 1) Create an HTML block that will display “Absolute Java” in the largest standard heading.
Answer: `<h1>Absolute Java</h1>`
- 2) Write an HTML comment containing the phrase “This is a comment.”
Answer: `<!--This is a comment -->`
- 3) Write an HTML statement to create a hyperlink to www.java.sun.com. The link should read “Java Doc”.
Answer: `Java Doc`
- 4) Write a complete Java applet that displays the phrase “Welcome to my world!” in the center of the applet.
Answer:

```
import javax.swing.JApplet;

import javax.swing.JLabel;

import java.awt.Container;

import java.awt.BorderLayout;

public class myApplet extends JApplet

{

    public void init()

    {

        Container contentPane = getContentPane();

        contentPane.setLayout(new BorderLayout());

    }

}
```

```
JLabel label = new JLabel("Welcome to my world!");

contentPane.add(label, BorderLayout.CENTER);

    }

}
```

- 5) Create an HTML page for the applet created in number 4 above (the class file is named myApplet.class).

Answer:

```
<html>

<head>

<title>World Applet</title>

</head>

<body>

<applet code="myApplet.class" width=400, height=300></applet>

</body>

</html>
```

- 6) What are the steps for converting a Swing application to an Applet?
- 1) Replace extends JFrame with extends Applet.
 - 2) Remove the main method.
 - 3) Replace the constructor with a no-parameter method named init. The body of init can be the same as the body of the constructor.
 - 4) Delete any invocation of super.
 - 5) Delete any method invocations that serve to program the close-window button , such as the setDefaultCloseOperation of the JFrame class.
 - 6) Delete any invocation of setTitle.

7) Delete any invocation of setSize.