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1  /*
2      Chapter 3      Body Mass Assignment
3      Programmer:    Mike Brown
4      Date:          March 26, 2009
5      Program Name:   BodyMassApplet.java
6      Purpose:        Calculate the BMI of Sun Fitnesses Customers
7
8  */
9
10 import java.applet.*;
11 import java.awt.*;
12 import java.awt.event.*;
13
14 public class BodyMassApplet extends Applet implements ActionListener
15 {
16     //declare variables
17     Image logo; //declare an image object
18     int inches, pounds;
19     double meters, kilograms, index;
20
21     //construct components
22     Label companyLabel = new Label ("The Sun Fitness Center Body Mass
23     Index Calculator");
24     Label heightLabel = new Label("Enter your height to the nearest inch:
25     ");
26     TextField heightField = new TextField(10);
27     Label weightLabel = new Label("Enter your weight to the nearest pound:
28     ");
29     TextField weightField = new TextField(10);
30     Button calcButton = new Button("Calculate");
31     Label outputLabel = new Label("Click the Calculate button to see your
32     body mass index.");
33
34     public void init()
35     {
36         setForeground(Color.red);
37         add(companyLabel);
38         add(heightLabel);
39         add(heightField);
40         add(weightLabel);
41         add(weightField);
42         add(calcButton);
43         calcButton.addActionListener(this);
44         add(outputLabel);
45         logo = getImage(getDocumentBase(), "logo.gif");
46     }
47
48     public void actionPerformed(ActionEvent e)
49     {
50         inches = Integer.parseInt(heightField.getText());
51         pounds = Integer.parseInt(weightField.getText());
52         meters = inches / 39.36;
53         kilograms = pounds / 2.2;
54         index = kilograms / Math.pow(meters, 2);
55         outputLabel.setText("Your Body Mass Index is " + Math.round(
56         index) + ".");
57     }
58
59     public void paint(Graphics g)
60     {
61         g.drawImage(logo,125,160,this);
62     }
63 }
```

