1 **import** javafx.scene.canvas.Canvas;

2 **import** javafx.scene.canvas.GraphicsContext;

3 **import** javafx.scene.paint.Color;

4

5 **public** **class** SnowmanOnACanvas

6 {

7 **private** **int** x, y;

8 **private** Color hatColor;

9 **private** Canvas canvas;

10

11 public SnowmanOnACanvas(int intialX, int intialY, Color hatColor)

12 {

13 this.x = intialX;

14 this.y = intialY;

15 this.hatColor = hatColor;

16 draw();

17 }

18

19 **public** **int** getX()

20 {

21 **return** x;

22 }

23

24 **public** **void** setX(int newX)

25 {

26 x = newX;

27 canvas.setLayoutX(x);

28 }

29

30 **public** **int** getY()

31 {

32 **return** y;

33 }

34

35 **public** **void** setY(int newY)

36 {

37 y = newY;

38 canvas.setLayoutY(y);

39 }

40

41 **public** Canvas getCanvas()

42 {

43 **return** canvas;

44 }

45

46 **public** **void** draw()

47 {

48 canvas = **new** Canvas(40, 90); //Width and height of the canvas

49 canvas.setLayoutX(x); //X position of the Canvas' upper left corner (UL)

50 canvas.setLayoutY(y); //Y

51

52 GraphicsContext brush = canvas.getGraphicsContext2D();

53 brush.setFill(Color.WHITE);

54 brush.setStroke(Color.BLACK);

55 brush.fillOval(0, 51, 37, 37); //Body’s xUL, yUL, w, h

56 brush.strokeOval(0, 49, 38, 37);

57 brush.fillOval(9, 32, 18, 18); //Head

58 brush.strokeOval(9, 32, 21, 19);

59 brush.setFill(hatColor);

60 brush.fillRect(10, 28, 20, 6); //Hat brim

61 brush.fillRect(14, 17, 12, 15); //hat

62 }

63 }

**Figure 11.22**

The class SnowmanOnACanvas.