1 **import** edu.sjcny.gpv1.\*;

2 **import** java.awt.\*;

3 **import** javax.swing.\*;

4

5 **public** **class** ThrowingExceptions **extends** DrawableAdapter

6 { **static** ThrowingExceptions ge = **new** ThrowingExceptions ();

7 **static** GameBoard gb = **new** GameBoard(ge, "THROWING EXCEPTIONS");

8 **static** BoxedSnowman2 s1;

9 **static** String message = "";

10

11 **public** **static** **void** main(String[] args)

12 { String s;

13 **boolean** correctXY = false;

14 **int** x, y;

15

16 **while**(correctXY == **false**) **//x or y is not valid**

17 { s = JOptionPane.showInputDialog("enter the snowman's " +

18 "X coordinate");

19 x = Integer.parseInt(s);

20 s = JOptionPane.showInputDialog("enter the snowman's " +

21 "Y coordinate");

22 y = Integer.parseInt(s);

23

24 **try**

25 {

26 s1 = **new** BoxedSnowman2(x, y, Color.BLUE); **//exception produced?**

27 correctXY = **true**;

28 } //end try

29 **catch**(RuntimeException e)

30 {

31 JOptionPane.showMessageDialog(**null**, e.getMessage());

32 } **//end catch**

33 } **//end while**

34

35 showGameBoard(gb);

36 }

37

38 **public** **void** draw(Graphics g)

39 {

40 g.setColor(Color.BLACK);

41 g.setFont(**new** Font("Arial", Font.BOLD, 18));

42 g.drawString(message, 120, 50);

43 s1.show(g);

44 }

45

46 **public** **void** keyStruck(**char** key)

47 { **int** newX, newY;

48 message = "";

49

50 **try**

51 {

52 **switch** (key)

53 {

54 **case** 'L':

55 {

56 newX = s1.getX() - 2;

57 s1.setX(newX); **//could cause an exception**

58 **break**;

59 }

60 **case** 'R':

61 {

62 newX = s1.getX() + 2;

63 s1.setX(newX); **//could cause an exception**

64 **break**;

65 }

66 **case** 'U':

67 {

68 newY = s1.getY() - 2;

69 s1.setY(newY); **//could cause an exception**

70 **break**;

71 }

72 **case** 'D':

73 {

74 newY = s1.getY() + 2;

75 s1.setY(newY); **//could cause an exception**

76 }

77 }

78 } **// end try**

79 **catch**(RuntimeException e)

80 {

81 message = e.getMessage();

82 } **//end catch**

83 }

84 }

**Figure 10.15 The application ThrowingExceptions.**