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

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

3 import java.io.\*;

4

5 **public** class SerializingObjects **extends** DrawableAdapter

6 {

7 **static** SerializingObjects ge = **new** SerializingObjects();

8 **static** GameBoard gb = **new** GameBoard(ge, "SERIALIZING OBJECTS");

9 **static** RowBoatV2 rb;

10 **static** SailBoatV4 sb;

11 **static** PowerBoat pb;

12 **static** Boat[] inventory = new Boat[9];

13

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

15 {

16 **for**(**int** i = 0; i < 3; i++)

17 {

18 rb = **new** RowBoatV2(10 + i \* 130, 75, 120, Color.YELLOW, i \* 2 + 2);

19 sb = **new** SailBoatV4(10 + i \* 170, 250, 110 + i \* 15, Color.GREEN,

20 200 + i \* 20);

21 pb = **new** PowerBoat(20 + i \* 160, 350, 120 + i \* 15, Color.MAGENTA,

22 400);

23 inventory[i \* 3] = rb;

24 inventory[i \* 3 + 1] = sb;

25 inventory[i \* 3 + 2] = pb;

26 }

27

28 showGameBoard(gb);

29 }

30

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

32 {

33 **for**(**int** i = 0; i < 9; i++)

34 {

35 if(inventory[i] != null)

36 {

37 inventory[i].show(g);

38 }

39 }

40 }

41

42 **public** **void** upButton() **//delete the RAM based inventory**

43 {

44 **for**(**int** i = 0; i < 9; i++)

45 {

46 inventory[i] = null;

47 }

48 }

49 **public** **void** rightButton() **//output inventory to the file**

50 {

51 **try**

52 { FileOutputStream fos = new FileOutputStream("Inventory");

53 ObjectOutputStream outFile = **new** ObjectOutputStream(fos);

54

55 **for**(**int** i = 0; i < 9; i++)

56 {

57 **if**(inventory[i] != **null**)

58 {

59 outFile.writeObject(inventory[i]);

60 }

61 }

62 outFile.close();

63 }

64 **catch**(IOException e)

65 {

66 }

67 }

68

69 **public** **void** leftButton() **//input inventory from the file**

70 {

71 **try**

72 { FileInputStream fis = **new** FileInputStream("Inventory ");

73 ObjectInputStream inFile = **new** ObjectInputStream(fis);

74

75 **for**(**int** i = 0; i < 9; i++)

76 {

77 inventory[i] = (Boat) inFile.readObject();

78 }

79 inFile.close();

80 }

81 **catch**(IOException e)

82 {

83 }

84 **catch**(ClassNotFoundException e)

85 {

86 }

87 }

88 }

**Figure 8.44 The application SerializingObjects.**