1 **import** java.awt.\*;

2

3 **public** **class** SailBoatV4 **extends** Boat

4 {

5 **private** **int** sailArea; **//extended (additional) data member**

6

7 **public** SailBoatV4(**int** x, **int** y, **int** length,

8 Color color, **int** sailArea)

9 {

10 **super**(x, y, length, color);

11 **this**.sailArea = sailArea;

12 }

13 @Override

14  **public int** calculatePrice() **//overrides parent method**

15 {

16 **int** hullPrice = **super**.calculatePrice();

17 **return** hullPrice + sailArea \* 2;

18 }

19 @Override

20 **public** **void** show(Graphics g) **//overrides parent method**

21 {

22 **int**[] xSail = {getX() + getLength()/2, getX(),

23 getX() + getLength()/2};

24 **int**[] ySail = {getY() - getLength()/2, getY() - getLength()/8,

25 getY() - getLength()/8};

26

27 **super**.show(g);

28 g.setColor(Color.BLACK); //draw the mast

29 g.fillRect(getX() + getLength()/2, getY() - getLength()/2, 3,

30 getLength()/2);

31 g.setColor(Color.WHITE); //draw the sail

32 g.fillPolygon(xSail, ySail, xSail.length);

33 }

34 **public** String toString() **//overrides parent method**

35 {

36 **return** super.toString() + ", Sail Area: " + sailArea;

37 }

38 }

**Figure 8.21 The child class SailBoatV4.**