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

2

3 **public class** PowerBoat **extends** Boat

4 {

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

6

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

8 Color color, **int** horsePower)

9 {

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

11 **this**.horsePower = horsePower;

12 }

13 @Override

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

15 {

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

17 **return** hullPrice + horsePower \* 3;

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 shaft

29 g.fillOval(getX() - 13, getY() + getLength()/7 , 30, 4);

30 g.setColor(Color.GRAY); //draw the propeller

31 g.fillOval(getX() - 20, getY() + getLength()/7, 20, 6);

32 g.fillOval(getX() - 13, getY() + getLength()/7 - 7, 6, 20);

33 }

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

35 {

36 **return** super.toString() + ", Horsepower: " + horsePower;

37 }

38 }

**Figure 8.22 The child class PowerBoat.**