

```
1 package interfacePractice;
2
3 interface BikeParts {
4     String MAKE = "Oracle Bikes";
5     String getHandleBars();
6     void setHandleBars(String newValue);
7     String getTyres();
8     void setTyres(String newValue);
9     String getSeatType();
10    void setSeatType(String newValue);
11 }
12 interface MountainParts {
13     String TERRAIN = "off_road";
14     String getSuspension();
15     void setSuspension(String newValue);
16     String getType();
17     void setType(String newValue);
18 }
19 interface RoadParts {
20     String TERRAIN = "track_racing";
21     String getTyreWidth();
22     void setTyreWidth(String newValue);
23     String getPostHeight();
24     void setPostHeight(String newValue);
25 }
26 class Bike implements BikeParts {
27     private String handleBars;
28     private String tyres;
29     private String seatType;
30
31     @Override
32     public String getHandleBars() {
33         return handleBars;
34     }
35 }
```

```
36  @Override
37  public void setHandleBars(String newValue) {
38      this.handleBars = newValue;
39  }
40
41  @Override
42  public String getTyres() {
43      return tyres;
44  }
45
46  @Override
47  public void setTyres(String newValue) {
48      this.tyres = newValue;
49  }
50
51  @Override
52  public String getSeatType() {
53      return seatType;
54  }
55
56  @Override
57  public void setSeatType(String newValue) {
58      this.seatType = newValue;
59  }
60 }
61 class MountainBike extends Bike implements MountainParts {
62     private String suspension;
63     private String type;
64
65     @Override
66     public String getSuspension() {
67         return suspension;
68     }
69
70     @Override
71     public void setSuspension(String newValue) {
72         this.suspension = newValue;
73     }
```

```
74
75     @Override
76     public String getType() {
77         return type;
78     }
79
80     @Override
81     public void setType(String newValue) {
82         this.type = newValue;
83     }
84 }
85 class RoadBike extends Bike implements RoadParts {
86     private String tyreWidth;
87     private String postHeight;
88
89     @Override
90     public String getTyreWidth() {
91         return tyreWidth;
92     }
93
94     @Override
95     public void setTyreWidth(String newValue) {
96         this.tyreWidth = newValue;
97     }
98
99     @Override
100    public String getPostHeight() {
101        return postHeight;
102    }
103
104    @Override
105    public void setPostHeight(String newValue) {
106        this.postHeight = newValue;
107    }
108 }
109 public class BikeDriver {
110     public static void main(String[] args) {
111         Bike bike = new Bike();
```

```
112 MountainBike mountainBike = new MountainBike();
113 RoadBike roadBike = new RoadBike();
114
115 bike.setHandleBars("Drop Bars");
116 bike.setTyres("Mountain Tyres");
117 bike.setSeatType("Comfortable Seat");
118
119 mountainBike.setHandleBars("Flat Bars");
120 mountainBike.setTyres("Knobby Tyres");
121 mountainBike.setSeatType("Racing Seat");
122 mountainBike.setSuspension("Full Suspension");
123 mountainBike.setType("Trail Bike");
124
125 roadBike.setHandleBars("Drop Bars");
126 roadBike.setTyres("Thin Tyres");
127 roadBike.setSeatType("Comfortable Seat");
128 roadBike.setTyreWidth("23mm");
129 roadBike.setPostHeight("22");
130 System.out.println("Initial RoadBike Post Height: " + roadBike.getPostHeight());
131 roadBike.setPostHeight("20");
132 System.out.println("Updated RoadBike Post Height: " + roadBike.getPostHeight());
133 }
134 }
135
```

Problems Javadoc Declaration Console × Coverage Error Log

terminated> BikeDriver [Java Application] C:\Users\harin\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_22.0.1.v20240426-1149\jre\bin\javaw.

Initial RoadBike Post Height: 22

Updated RoadBike Post Height: 20