```java
package club.westcs.OOPNotes;

import java.util.Random;

public class VikingShip {
//Plan: A ship that has a random sized crew, cannon balls, and a captain.
    //If the ship loses all crew, or the captain, or all cannon balls it sinks.

    //Attributes
    private Viking captain;
    private Viking[] crew;
    private int cannonBalls;
    private boolean floating;
    private Random rand;

    //Constructor
    public VikingShip() {
        rand = new Random();
        System.out.println("A new ship is created. Name its captain...");
        captain = new Viking();
        crew = setCrew();
        cannonBalls = rand.nextInt(26) + 25;
        floating = true;
    }

    //Methods

    public Viking[] getCrew() {
        return crew;
    }

    public Viking[] setCrew() {
        Viking[] randCrew = new Viking[rand.nextInt(4) + 2];
        String[] names = {"Gor" , "Sven" , "Wroth" , "Leif", "Jack", "Pete", "Morgoth", "Noah"};
        for(int i = 0; i < randCrew.length; i++) {
            randCrew[i] = new Viking(names[rand.nextInt(names.length)]);
        }
        return randCrew;
```

```java
39          }
40
41⊖      public int getCannonBalls() {
42              return cannonBalls;
43          }
44
45⊖      public void setCannonBalls(int cannonBalls) {
46              this.cannonBalls -= cannonBalls;
47          }
48
49⊖      public boolean isFloating() {
50              return floating;
51          }
52
53⊖      public void setFloating() {
54              if(this.floating && (this.captain.isAlive() == false || crewDead() || this.cannonBalls <= 0)) {
55                  System.out.println(this.captain.getName() + "'s ship has sunk.");
56                  this.floating = false;
57              }
58          }
59
60⊖      private boolean crewDead() {
61              for(int i = 0; i < this.crew.length; i++) {
62                  if(this.crew[i].isAlive()) {
63                      return false;
64                  }
65              }
66              return true;
67          }
68
69⊖      public Viking getCaptain() {
70              return captain;
71          }
72
73⊖      public void attack(VikingShip target) {
74              System.out.println(this.captain.getName() + "'s ship has fired on " + target.getCaptain().getName()+ "'s ship.");
75              setCannonBalls(rand.nextInt(2) + 1);
76              if(rand.nextBoolean()) {
77                  hitCaptain(target);
78                  hitCrew(target);
79              }
80              else {
81                  System.out.println("Miss.");
82              }
83              setFloating();
84              target.setFloating();
85          }
86
87⊖      private void hitCrew(VikingShip target) {
88              for(int i = 0; i < target.getCrew().length; i++) {
89                  if(rand.nextBoolean()) {
90                      target.getCrew()[i].loseAWeapon();
91                  }
92              }
93          }
94
95⊖      private void hitCaptain(VikingShip target) {
96              if(rand.nextInt(4) == 0) {
97                  System.out.println(target.getCaptain().getName() + " has been hit.");
98                  target.getCaptain().loseAWeapon();
99              }
100         }
101
102
103
104 }
105
```