

```
1 import java.util.*;
2 /**
3  * This class builds rooms for the Game.
4  *
5  * @author Ben Parsell
6  * @version 1.0.0 (11/19/2015)
7  */
8 public class Room
9 {
10     /** Describes the room */
11     private String roomDescription;
12
13     /** Item in the room */
14     private Item optionalItem;
15
16     /** ArrayList for rooms */
17     private HashMap <String, Room> neighbors;
18
19     /*****
20      * Default Constructor for Room
21      *
22      * @param pDescription variable to describe room
23      *****/
24     public Room(String pDescription) {
25         // Initialize instance variable
26         this.roomDescription = pDescription;
27
28         // Creates hashmap for neighbors
29         neighbors = new HashMap<String, Room>();
30     }
31
32
33     /*****
34      * Overloaded Constuctor
35      *
36      * @param pDescription variable to describe room
37      * @param pItem variable for item in the room
38      *****/
39     public Room(String pDescription, Item pItem) {
40         // Initialize instance variables
41         this.roomDescription = pDescription;
42         this.optionalItem = pItem;
43
44         // Creates hashmap for neighbors
45         neighbors = new HashMap <String, Room> ();
46     }
47
48
49     /*****
```

```
50      * Method to add an item into the game
51      *
52      * @param i variable for the item in the room
53      *****/
54      public void addItem(Item i) {
55          this.optionalItem = i;
56      }
57
58
59      /*****
60      * Method to check if player has an item
61      *
62      * @return returns true or false depending on null
63      * value
64      *****/
65      public boolean hasItem() {
66          // Check for if room has an item
67          if(optionalItem != null) {
68              return true;
69          } else {
70              return false;
71          }
72      }
73
74
75      /*****
76      * Method to get the description of the room
77      *
78      * @return roomDescription describes room
79      *****/
80      public String getDescription() {
81          return roomDescription;
82      }
83
84      /*****
85      * Method to get an item in the Room
86      *
87      * @return optionalItem item within the room
88      *****/
89      public Item getItem() {
90          return optionalItem;
91      }
92
93
94      /*****
95      * Method to view neighboring rooms
96      *
97      * @return value for neighboring rooms
98      *****/
```

```
99     public HashMap getNeighbors() {
100         return neighbors;
101     }
102
103
104     /*****
105      * Method to add a neighboring room
106      *
107      * @param direction value for direction to move
108      * @param r value for room name
109      *****/
110     public void addNeighbor(String direction, Room r) {
111         // Adds neighbor to room r, in that direction
112         this.neighbors.put(direction, r);
113     }
114
115
116     /*****
117      * Finds neighbor in given direction
118      *
119      * @param direction value for direction to move
120      *****/
121     public Room getNeighbor(String direction) {
122         // Create new room to find neighbor
123         Room neighbor = this.neighbors.get(direction);
124         return neighbor;
125     }
126
127
128     /*****
129      * Method removes an item from the room
130      *
131      * @return optionalItem item within the room
132      *****/
133     public Item removeItem() {
134         // Set item in room to null, to delete
135         this.optionalItem = null;
136         return optionalItem;
137     }
138
139
140     /*****
141      * Method to retrieve the full description of a room
142      *
143      * @return longDescription value for well-described
144      * room information
145      *****/
146     public String getLongDescription() {
147         // Check to see if room has an item, then return text
```

```
148         if(hasItem()) {
149             String longDescription = "You are currently in " + roomDescri
ption + ". You see " + optionalItem.getDescription() + ".";
150             return longDescription + "\n";
151         }
152
153         // If no item, gives room description without item.
154         else {
155             String longDescription = "You are in " + roomDescription + ".
";
156             return longDescription + "\n";
157         }
158     }
159 }
160
```