

```
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
21
22     /*****
23     * Overloaded Constuctor
24     *
25     * @param pDescription variable to describe room
26     * @param pItem variable for item in the room
27     *****/
28     public Room(String pDescription) {
29         // Initialize instance variables
30         this.roomDescription = pDescription;
31
32         // Creates hashmap for neighbors
33         neighbors = new HashMap <String, Room> ();
34     }
35
36
37     /*****
38     * Default Constructor for Room
39     *
40     * @param pDescription variable to describe room
41     *****/
42     public Room(String pDescription, Item pItem) {
43         this.roomDescription = pDescription;
44         this.optionalItem = pItem;
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         Item temp = optionalItem;
136         this.optionalItem = null;
137         return temp;
138     }
139
140
141     /*****
142      * Method to retrieve the full description of a room
143      *
144      * @return longDescription value for well-described
145      * room information
146      *****/
147     public String getLongDescription() {
```

```
148         // Check to see if room has an item, then return text
149         if(hasItem()) {
150             String longDescription = "You are currently in " + roomDescri
ption + ".\n You see " + optionalItem.getDescription() + ".";
151             return longDescription + "\n";
152         }
153
154         // If no item, gives room description without item.
155         else {
156             String longDescription = "You are in " + roomDescription + ".
";
157             return longDescription + "\n";
158         }
159     }
160 }
161
```