

Recipe.java

```

1  package edu.towson.cis.cosc603.project5.coffeemaker;
2
3  /**
4   * Recipe object for the coffee maker
5   * @author Josh
6   * @version $Revision: 1.0 $
7   */
8  public class Recipe {
9      private String name;
10     private int price;
11     private int amtCoffee;
12     private int amtMilk;
13     private int amtSugar;
14     private int amtChocolate;
15
16     /**
17      * Method getAmtChocolate.
18      * @return int
19      */
20     public int getAmtChocolate() {
21         1 return amtChocolate;
22     }
23     /**
24      * Method setAmtChocolate.
25      * @param amtChocolate int
26      */
27     public void setAmtChocolate(int amtChocolate) {
28         2 if(amtChocolate >= 0) {
29         this.amtChocolate = amtChocolate;
30         }
31         else {
32         this.amtChocolate = 0;
33         }
34     }
35     /**
36      * Method getAmtCoffee.
37      * @return int
38      */
39     public int getAmtCoffee() {
40         1 return amtCoffee;
41     }
42     /**
43      * Method setAmtCoffee.
44      * @param amtCoffee int
45      */
46     public void setAmtCoffee(int amtCoffee) {
47         2 if(amtCoffee >= 0) {
48         this.amtCoffee = amtCoffee;
49         }
50         else {
51         this.amtCoffee = 0;
52         }
53     }
54     /**
55      * Method getAmtMilk.
56      * @return int
57      */
58     public int getAmtMilk() {
59         1 return amtMilk;
60     }
61     /**
62      * Method setAmtMilk.
63      * @param amtMilk int
64      */

```

```

65     public void setAmtMilk(int amtMilk) {
66 2     if(amtMilk >= 0) {
67         this.amtMilk = amtMilk;
68     }
69     else {
70         this.amtMilk = 0;
71     }
72 }
73 /**
74  * Method getAmtSugar.
75  * @return int
76  */
77     public int getAmtSugar() {
78 1     return amtSugar;
79 }
80 /**
81  * Method setAmtSugar.
82  * @param amtSugar int
83  */
84     public void setAmtSugar(int amtSugar) {
85 2     if(amtSugar >= 0) {
86         this.amtSugar = amtSugar;
87     }
88     else {
89         this.amtSugar = 0;
90     }
91 }
92 /**
93  * Method getName.
94  * @return String
95  */
96     public String getName() {
97 1     return name;
98 }
99 /**
100  * Method setName.
101  * @param name String
102  */
103     public void setName(String name) {
104         this.name = name;
105     }
106 /**
107  * Method getPrice.
108  * @return int
109  */
110     public int getPrice() {
111 1     return price;
112 }
113 /**
114  * Method setPrice.
115  * @param price int
116  */
117     public void setPrice(int price) {
118 2     if(price >= 0) {
119         this.price = price;
120     }
121     else {
122         this.price = 0;
123     }
124 }
125 /**
126  * Method equals.
127  * @param r Recipe
128  * @return boolean
129  */
130     public boolean equals(Recipe r) {

```

```

131 1    if(r.getName() == null) {
132 1        return false;
133      }
134 1    if(this.name == null) {
135 1        return false;
136      }
137 1    if((this.name).equals(r.getName())) {
138 1        return true;
139      }
140 1    return false;
141 1    }
142 1    /**
143 1     * Method toString.
144 1     * @return String
145 1     */
146 1    public String toString() {
147 1        return name;
148 1    }
149 1    }

```

Mutations

21	1. replaced return of integer sized value with (x == 0 ? 1 : 0) → KILLED
28	1. changed conditional boundary → SURVIVED
	2. negated conditional → KILLED
40	1. replaced return of integer sized value with (x == 0 ? 1 : 0) → KILLED
47	1. changed conditional boundary → SURVIVED
	2. negated conditional → KILLED
59	1. replaced return of integer sized value with (x == 0 ? 1 : 0) → KILLED
66	1. changed conditional boundary → SURVIVED
	2. negated conditional → KILLED
78	1. replaced return of integer sized value with (x == 0 ? 1 : 0) → KILLED
85	1. changed conditional boundary → SURVIVED
	2. negated conditional → KILLED
97	1. mutated return of Object value for edu/towson/cis/cosc603/project5/coffeemaker/Recipe::getName to (if (x != null) null else throw new RuntimeException) → KILLED
111	1. replaced return of integer sized value with (x == 0 ? 1 : 0) → KILLED
118	1. changed conditional boundary → SURVIVED
	2. negated conditional → KILLED
131	1. negated conditional → KILLED
132	1. replaced return of integer sized value with (x == 0 ? 1 : 0) → KILLED
134	1. negated conditional → KILLED
135	1. replaced return of integer sized value with (x == 0 ? 1 : 0) → KILLED
137	1. negated conditional → KILLED
138	1. replaced return of integer sized value with (x == 0 ? 1 : 0) → KILLED
140	1. replaced return of integer sized value with (x == 0 ? 1 : 0) → KILLED
147	1. mutated return of Object value for edu/towson/cis/cosc603/project5/coffeemaker/Recipe::toString to (if (x != null) null else throw new RuntimeException) → KILLED

Active mutators

- INCREMENTS_MUTATOR
- VOID_METHOD_CALL_MUTATOR
- RETURN_VALS_MUTATOR
- MATH_MUTATOR
- NEGATE_CONDITIONALS_MUTATOR
- INVERT_NEGS_MUTATOR
- CONDITIONALS_BOUNDARY_MUTATOR

Tests examined

- edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest.testEnoughIngredientsGoodChocolate5(edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest) (2 ms)
- edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest.testEqualsRecipeSame(edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest) (2 ms)
- edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest.testSetAmtMilk(edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest) (1 ms)
- edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest.testEditRecipe2(edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest) (2 ms)
- edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest.testEnoughIngredientsBadChocolate0(edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest) (2 ms)
- edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest.testDeleteRecipeNull(edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest) (2 ms)
- edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest.testGetAmtMilk(edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest) (1 ms)
- edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest.testAddInventory1(edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest) (14 ms)
- edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest.testSetCoffeeWithPos(edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest) (1 ms)
- edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest.testGetChocolate(edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest) (8 ms)
- edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest.testSetPrice0(edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest) (1 ms)
- edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest.testToStringRecipe(edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest) (1 ms)
- edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest.testEnoughIngredientsGood(edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest) (2 ms)
- edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest.testEnoughIngredientsBadSugar3(edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest) (1 ms)
- edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest.testSetMilkWithNeg(edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest) (1 ms)
- edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest.testSetAmtChocolateNeg(edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest) (1 ms)
- edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest.testPurchaseBeveragePriceNeg(edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest) (2 ms)
- edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest.testPurchaseBeverage3(edu.towson.cis.cosc603.project5.coffeemaker.CoffeeMakerTest) (1 ms)

