

Coverage Summary for Class: Product (models)

Class	Class, %	Method, %	Line, %
Product	100% (1/ 1)	89.5% (34/ 38)	82.8% (144/ 174)

```

1 package models;
2
3 import java.sql.Connection;
4 import java.sql.DriverManager;
5 import java.sql.SQLException;
6 import java.sql.Statement;
7 import java.util.Date;
8 import java.sql.ResultSet;
9
10 /**
11  * Created by akshay on 10/29/2016.
12  */
13 public class Product {
14     private long id;
15     private String uploadedBy;
16     private String imagePath;
17     private float price;
18     private String description;
19     private Date dateUploaded;
20     private Date dateSold;
21     private float priceBought;
22     private String onlineLink;
23     private float soldPrice;
24     private int condition;
25     private int months;
26     private int category;
27     private String location;
28     private String paymentMethod;
29
30     public Product() {
31
32     }
33
34     public Product(long id, String uploadedBy, String imagePath, float price, String description,
35                     Date dateUploaded, Date dateSold, float priceBought, String onlineLink,
36                     float soldPrice, int condition, int months, int category, String location, String paymentMethod) {
37         System.out.println("Got to product constructor");
38         this.id = id;
39         this.uploadedBy = uploadedBy;
40         this.imagePath = imagePath;
41         this.price = price;
42         this.description = description;
43         this.dateUploaded = dateUploaded;
44         this.dateSold = dateSold;
45         this.priceBought = priceBought;
46         this.onlineLink = onlineLink;
47         this.soldPrice = soldPrice;
48         this.condition = condition;
49         this.months = months;
50         this.category = category;
51         this.location = location;
52         if (paymentMethod == "")
53             this.paymentMethod = "Unspecified";
54         else this.paymentMethod = paymentMethod;
55     }
56
57     public long getId() {
58
59         return id;
60     }
61
62     public void setId(long id) {
63         this.id = id;
64     }
65
66     public String getImagePath() {
67         return imagePath;

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68     }
69
70     public void setImagePath(String imagePath) {
71         this.imagePath = imagePath;
72     }
73
74     public float getPrice() {
75         return price;
76     }
77
78     public void setPrice(float price) {
79         this.price = price;
80     }
81
82     public String getPaymentMethod() {
83         return paymentMethod;
84     }
85
86     public void setPaymentMethod(String paymentMethod) {
87         this.paymentMethod = paymentMethod;
88     }
89
90     public String getDescription() {
91         return description;
92     }
93
94     public void setDescription(String description) {
95         this.description = description;
96     }
97
98
99     public Date getDateUploaded() {
100         return dateUploaded;
101     }
102
103     public void setDateUploaded(Date dateUploaded) {
104         this.dateUploaded = dateUploaded;
105     }
106
107     public void setDateSold(Date dateSold) {
108         this.dateSold = dateSold;
109     }
110
111     public String getOnlineLink() {
112         return onlineLink;
113     }
114
115     public void setOnlineLink(String onlineLink) {
116         this.onlineLink = onlineLink;
117     }
118
119     public float getSoldPrice() {
120         return soldPrice;
121     }
122
123     public void setSoldPrice(float soldPrice) {
124         this.soldPrice = soldPrice;
125     }
126
127     public int getCondition() {
128         return condition;
129     }
130
131     public void setCondition(int condition) {
132         this.condition = condition;
133     }
134
135     public int getMonths() {
136         return months;
137     }
138
139     public String mapMonthsToString() {
140         String[] months = new String[4];
141         months[0] = "Less than 3 months";
142         months[1] = "3-6 months";
143         months[2] = "6 months - 3 years";
144         months[3] = ">3 years";
145         return months[this.getMonths()-1];
146     }

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147
148     public void setMonths(int months) {
149         this.months = months;
150     }
151     public float getPriceBought() {
152         return priceBought;
153     }
154
155     public void setPriceBought(float priceBought) {
156         this.priceBought = priceBought;
157     }
158
159     public String getUploadedBy() {
160         return uploadedBy;
161     }
162
163     public void setUploadedBy(String uploadedBy) {
164         this.uploadedBy = uploadedBy;
165     }
166     public int getCategory() {
167         return category;
168     }
169
170     public void setCategory(int category) {
171         this.category = category;
172     }
173
174     public String getLocation() {
175         return location;
176     }
177
178     public void setLocation(String location) {
179         this.location = location;
180     }
181
182     public boolean checkConditions(){
183         if(price > 999999 || price < 0 || imagePath.length()>100 || imagePath.length() == 0 || priceBought > 999999
184             || priceBought < 0 || description.length() == 0 || description.length() > 65535 ||
185             category > 4 || category < 1 || onlineLink.length() > 255 || condition > 5 || condition < 1 ||
186             months > 4 || months < 1 || location.length()>255 || location.length() == 0)
187             return false;
188         return true;
189     }
190
191     public boolean addProductToDatabase() throws ClassNotFoundException {
192         return addProductToDatabase(false);
193     }
194
195     public boolean addProductToDatabase(boolean isTest) throws ClassNotFoundException {
196         String myDriver = null;
197         String myURL = null;
198         Connection conn = null;
199         boolean returnVal = true;
200         if(isTest) {
201             myDriver = "com.mysql.jdbc.Driver";
202             myURL = "jdbc:mysql://localhost:3306/mydatabase?zeroDateTimeBehavior=convertToNull";
203         }
204         else{
205             myDriver = "com.mysql.jdbc.Driver";
206             myURL = "jdbc:mysql://lionmart.cvkciaoutkr.us-east-1.rds.amazonaws.com:3306/lionmart";
207         }
208         try {
209             Class.forName(myDriver);
210             if(isTest)
211             {
212                 conn = DriverManager.getConnection(myURL, "root", "");
213             }
214             else
215             {
216                 conn = DriverManager.getConnection(myURL, "lionadmin", "lionlynx42");
217             }
218             Statement st = conn.createStatement();
219             st.executeUpdate("CREATE TABLE IF NOT EXISTS product (id INT PRIMARY KEY, price DECIMAL(8,2), imagepath VARCHAR(100),category INT NOT NULL,price_bought DECIMAL(8,2) NOT NULL,description TEXT NOT NULL,date_upload
220
221             java.sql.Timestamp product_timestamp = new java.sql.Timestamp(this.getDateUploaded().getTime());
222             //Check conditions before actually attempting to insert into database
223             boolean shouldInsert = checkConditions();
224             if (shouldInsert)
225                 st.executeUpdate("INSERT INTO product(id,imagepath, price, category, price_bought, description, date_upload,online_link,price_sold,product_condition,months_used,location,user_id, payment_method) VALUES ("

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226         else
227             return false;
228         //Confirm that product is, in fact, inserted into DB.
229         ResultSet rs = st.executeQuery("SELECT * from product where id = "+id);
230         if(!rs.next())
231             returnVal = false;
232         if(isTest)
233             st.executeUpdate("DROP TABLE product;");
234         conn.close();
235     } catch (SQLException e) {
236         e.printStackTrace();
237         return false;
238     }
239     return returnVal;
240 }
241 // the below method is made for specific test cases and is not redundant. DO NOT DELETE.
242 public boolean addProductToDatabase2(boolean isTest) throws ClassNotFoundException {
243     String myDriver = null;
244     String myURL = null;
245     Connection conn = null;
246     boolean returnVal = true;
247     if(isTest) {
248         myDriver = "com.mysql.jdbc.Driver";
249         myURL = "jdbc:mysql://localhost:3306/mydatabase?zeroDateTimeBehavior=convertToNull";
250     }
251     else{
252         myDriver = "com.mysql.jdbc.Driver";
253         myURL = "jdbc:mysql://lionmart.cvkciaoutkr.us-east-1.rds.amazonaws.com:3306/lionmart";
254     }
255     try {
256         Class.forName(myDriver);
257         if(isTest)
258         {
259             conn = DriverManager.getConnection(myURL, "root", "");
260         }
261         else
262         {
263             conn = DriverManager.getConnection(myURL, "lionadmin", "lionlynx42");
264         }
265         Statement st = conn.createStatement();
266         st.executeUpdate("CREATE TABLE IF NOT EXISTS product (id INT PRIMARY KEY, price DECIMAL(8,2), imagepath VARCHAR(100),category INT NOT NULL,price_bought DECIMAL(8,2) NOT NULL,description TEXT NOT NULL,date_upl
267         //TODO img path
268         java.sql.Timestamp product_timestamp = new java.sql.Timestamp(this.getDateUploaded().getTime());
269         //Check conditions before actually attempting to insert into database
270         boolean shouldInsert = checkConditions();
271         if (shouldInsert)
272             st.executeUpdate("INSERT INTO product(id,imagepath, price, category, price_bought, description, date_upload,online_link,price_sold,product_condition,months_used,location,user_id, payment_method) VALUES ("
273         else
274             return false;
275         //Confirm that product is, in fact, inserted into DB.
276         ResultSet rs = st.executeQuery("SELECT * from product where id = "+id);
277         if(!rs.next())
278             returnVal = false;
279         conn.close();
280     } catch (SQLException e) {
281         e.printStackTrace();
282         return false;
283     }
284     return returnVal;
285 }
286
287 public boolean updateProductInDatabase() throws ClassNotFoundException {
288     return updateProductInDatabase(false);
289 }
290
291 public boolean updateProductInDatabase(boolean isTest) throws ClassNotFoundException {
292     String myDriver = null;
293     String myURL = null;
294     Connection conn = null;
295     boolean returnVal = true;
296     if(isTest) {
297         myDriver = "com.mysql.jdbc.Driver";
298         myURL = "jdbc:mysql://localhost:3306/mydatabase?zeroDateTimeBehavior=convertToNull";
299     }
300     else{
301         myDriver = "com.mysql.jdbc.Driver";
302         myURL = "jdbc:mysql://lionmart.cvkciaoutkr.us-east-1.rds.amazonaws.com:3306/lionmart";
303     }
304     try {

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305     Class.forName(myDriver);
306     if(isTest)
307     {
308         conn = DriverManager.getConnection(myURL, "root", "");
309     }
310     else
311     {
312         conn = DriverManager.getConnection(myURL, "lionadmin", "lionlynx42");
313     }
314     Statement st = conn.createStatement();
315     st.executeUpdate("CREATE TABLE IF NOT EXISTS product (id INT PRIMARY KEY, price DECIMAL(8,2), imagepath VARCHAR(100),category INT NOT NULL,price_bought DECIMAL(8,2) NOT NULL,description TEXT NOT NULL,date_upl
316
317     java.sql.Timestamp product_timestamp = new java.sql.Timestamp(this.getDateUploaded().getTime());
318     //Check conditions before actually attempting to update into database
319     boolean shouldInsert = checkConditions();
320
321     if (shouldInsert) {
322         System.out.println("shouldinsert is True!");
323         st.executeUpdate("UPDATE product SET price=" + this.getPrice() + ",category='" + this.getCategory() + "',price_bought=" + this.getPriceBought() + ",description='" + this.getDescription() + "',date_upload=
324     }
325     else
326     {
327         System.out.println("product upload check conditions failed");
328         return false;
329     }
330
331     //Confirm that product is, in fact, inserted into DB.
332     ResultSet rs = st.executeQuery("SELECT * from product where id = "+id);
333     if(!rs.next()){
334         System.out.println("updated product not found!");
335         returnVal = false;
336     }
337     if(isTest)
338         st.executeUpdate("DROP TABLE product;");
339     conn.close();
340 } catch (SQLException e) {
341     e.printStackTrace();
342     return false;
343 }
344 return returnVal;
345 }
346 }

```