SharedExpense.java Monday, May 10, 2021, 3:54 PM

```
1 package application;
 3 import java.sql.Connection;
 4 import java.sql.DriverManager;
 5 import java.sql.PreparedStatement;
 6 import java.sql.ResultSet;
 7 import java.sql.SQLException;
 8 import java.sql.Statement;
 9 import java.util.ArrayList;
10 import java.util.List;
11
12 public class SharedExpense extends Expense implements Presistable{
13
       private String payer;
14
       private Double amount;
15
       private List<String> SharedWith;
16
17
18
        * getters and setters
19
20
       public String getPayer() {
21
           return payer;
22
23
       public void setPayer(String payer) {
24
           this.payer = payer;
25
26
       public Double getAmount() {
27
           return amount:
28
29
       public void setAmount(Double amount) {
30
           this.amount = amount;
31
32
33
       public List<String> getSharedWith() {
34
           return SharedWith;
35
36
       public void setSharedWith(List<String> sharedWith) {
37
           SharedWith = sharedWith;
38
39
       /**
40
        * Save - Saves all the data into the database.
41
        */
42
       @Override
43
       public void save() {
44
           Connection conn;
45
           try {
46
               conn = DriverManager.getConnection("jdbc:mysql://localhost:3306/LoginDatabase", "root", "password");
47
48
               PreparedStatement ps = conn.prepareStatement(
49
                       "INSERT INTO `MYAPP`.`DETAILS` (title, description, subType) VALUES (?, ?, ?)", Statement RETURN_GENERATED_KEYS);
50
51
               ps.setString(1, this.getTitle());
               ps.setString(2, this.getDescription());
52
53
               ps.setString(3, this.getExpenseCatagory());
54
               ps.executeUpdate();
55
               ResultSet rs = ps.getGeneratedKeys();
56
               if(rs.next()) {
```

```
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                                                                                                                                     Monday, May 10, 2021, 3:54 PM
                    Integer detailId = (int) rs.getLong(1);
 58
                    Double splitAmount = this.amount / (this.SharedWith.size() + 1);
 59
                    PreparedStatement ps1 = conn.prepareStatement(
                            "INSERT INTO `MYAPP`.`TRANSACTIONS` (transactionDate, fromUser, toUser, amount, detailId) VALUES (?, ?, ?, ?, ?)");
 60
 61
 62
                    ps1.setDate(1, this.getDate());
 63
                    ps1.setString(2, this.getUserName());
 64
                    ps1.setString(3, "NONE");
 65
                    ps1.setDouble(4, splitAmount);
 66
                    ps1.setInt(5, detailId);
 67
                    ps1.executeUpdate();
 68
                    for(String user:this.SharedWith) {
 69
                        PreparedStatement ps2 = conn.prepareStatement(
 70
                                "INSERT INTO `MYAPP`.`TRANSACTIONS` (transactionDate, fromUser, toUser, amount, detailId) VALUES (?, ?, ?, ?, ?)");
 71
 72
73
                        ps2.setDate(1, this.getDate());
74
                        ps2.setString(2, this.getUserName());
 75
                        ps2.setString(3, user);
76
                        ps2.setDouble(4, splitAmount);
77
                        ps2.setInt(5, detailId);
78
                        ps2.executeUpdate();
79
80
 81
            } catch (SQLException e) {
 82
                e.printStackTrace();
 83
 84
 85
       //abstract class method implementation
86
       public void showTransaction() {
87
88
89
 90
91
       @Override
 92
        public ArrayList<String> getCategoryOptions() {
 93
 94
            return null:
 95
 96
97
        * getAvailableUsers - gets all the user names and displays them on a list.
98
99
100
        public static ArrayList<String> getAvailableUsers() {
            ArrayList<String> users = new ArrayList<String>();
101
102
                Connection conn = DriverManager.getConnection("jdbc:mysql://localhost:3306/LoginDatabase", "root", "password");
103
104
                PreparedStatement ps = conn.prepareStatement("SELECT UserName FROM MYAPP.USERS where UserName != ?");
105
                ps.setString(1, UserHolder.getInstance().getName());
106
                ResultSet rs = ps.executeQuery();
107
                while(rs.next()) {
                    users.add(rs.getString("UserName"));
108
109
110
111
                System.out.println(users);
```

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