```
01 package DBLayer;
02 import java.sql.*;
03 import java.util.ArrayList;
04 import ModelLayer.*;
0.5
06
      public class DBMink implements IFDBMink
07
08
      private Connection con;
09
10
      public int createMink(Mink mink) throws Exception
11
12
            int rc = -1;
13
            String query = "INSERT INTO mfMink(color, furLength,
            furDensity, birthdate, qualityType, cageNr) VALUES ('"+
14
                        mink.getColor() + "', '" +
15
                        mink.getFurLength() + "', '" +
16
                        mink.getFurDensity() + "', '" +
17
                        mink.getBirthDate() + "', '" +
18
                        mink.getQualityType() + "', '" +
19
20
                        mink.getCageNr() + "')";
21
            System.out.println("insert : " + query);
22
23
            try
24
            {
25
                  Statement stmt = con.createStatement();
26
                  stmt.setQueryTimeout(5);
27
                  rc = stmt.executeUpdate(query);
28
                  stmt.close();
            }
29
30
            catch(SQLException ex)
31
32
                  System.out.println("Mink er ikke oprettet");
33
                  throw new Exception("Mink er ikke tilføjet");
34
35
            return (rc);
36
37
38
      public int updateMink(Mink mink)
39
            Mink minkobj = mink;
40
41
            int rc = -1;
42
43
            String qry = "UPDATE mfMink SET" +
                        "color = '" + minkobj.getColor()+"', " +
44
                         "furLength ='" + minkobj.getFurLength() + "', " +
45
                         "furDensity ='" + minkobj.getFurDensity() + "', " +
46
                         "birthdate ='" + minkobj.getBirthDate() + "', " +
47
                         "qualityType ='" + minkobj.getQualityType() + "', " +
48
49
                         "cageNr ='" + minkobj.getCageNr() + "',";
50
51
52
                        System.out.println("Update query: " + qry);
53
                         try
54
                         {
55
                               Statement stmt = con.createStatement();
56
                               stmt.setQueryTimeout(5);
57
                               rc = stmt.executeUpdate(qry);
58
59
                               stmt.close();
60
                         }
61
                         catch(Exception ex)
62
                         {
63
                               System.out.println("Update exception in Mink db:
+ ex)
```

```
64
65
66
                         return(rc);
67
68
69
      public int deleteMink(int cageNr)
70
            int rc =-1;
71
72
            String qry = "DELETE FROM mfMink WHERE phoneno = '" +
73
            cageNr + "'";
74
75
            System.out.println(qry);
76
            try
77
            {
78
                   Statement stmt = con.createStatement();
79
                   stmt.setQueryTimeout(5);
80
                   rc = stmt.executeUpdate(qry);
81
                   stmt.close();
82
            }
83
             catch(Exception ex)
84
              {
85
                         System.out.println("Delete exception in Mink db: "+ex)
86
87
             }
88
            return(rc);
89
90
91
      public String buildQuery(String wClause)
92
            String qry = "SELECT color, furLength, furDensity,
93
94
            birthDate, qualityType, cageNr";
95
            if(wClause.length()>0)
96
                   qry=qry + "WHERE" + wClause;
97
            return qry;
98
99
100
      public Mink singleWhere(String wClause, boolean
101
      retrieveAssociation)
102
103
            ResultSet results;
104
            Mink minkobj = new Mink();
105
            String query = buildQuery(wClause);
106
            System.out.println(query);
107
108
            try
109
            {
110
                   Statement stmt = con.createStatement();
111
                   stmt.setQueryTimeout(5);
112
                   results = stmt.executeQuery(query);
113
114
                   if(results.next())
115
                         minkobj = buildMink(results);
116
117
118
                   stmt.close();
119
120
            catch(Exception e)
121
            {
122
                   System.out.println("Query exception: " + e);
123
124
            return minkobj;
125
126
      private Mink buildMink(ResultSet results)
127
```

```
128
      {
129
            Mink minkObj = new Mink();
130
            try
131
            {
132
                  minkObj.setColor(results.getString("color"));
133
                  minkObj.setFurLength(results.getInt("furLength"));
134
                  minkObj.setFurDensity(results.getInt("furDensity"));
135
                  minkObj.setBirthDate(results.getString("birthDate"));
136
                  minkObj.setQualityType(results.getString("qualityType"));
137
                  minkObj.setCageNr(results.getInt("cageNr"));
138
139
            }
140
            catch(Exception e)
141
            {
142
                  System.out.println("Error in building cage");
            }
143
144
            return minkObj;
145
146
      }
147
148 }
```