

```
1 package Business;
2
3 /*****
4  Shawn Embry
5  Dentist Project
6  CIST2373
7  *****/
8
9 import java.sql.*;
10
11
12
13 /*****
14  * The Dentist Class communicates with the Dentist
15  table from the database
16  *
17  *****/
18
19 ***/
20
21 public class Dentist
22 {
23     /*****Properties*****/
24     private String id, passwd, firstName, lastName,
25     email, office, desc;
26     private int count;
27     public AppointmentList bList = new
28     AppointmentList();
29
30     /*****Constructors*****/
31     public Dentist()
32     {
33         id = "";
34         passwd = "";
35         firstName = "";
36         lastName = "";
37         email = "";
```

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```
31     office = "";
32 }
33     public Dentist(String id, String passwd, String
firstName, String lastName, String email, String office)
34     {
35         this.id = id;
36         this.passwd = passwd;
37         this.firstName = firstName;
38         this.lastName = lastName;
39         this.email = email;
40         this.office = office;
41     }
42     /*****Behaviors*****/
43     public void setDentistID(String did){id=did;}
44     public String getDentistID() {return id; }
45
46     public void setDentistPassword(String pw)
{passwd=pw;}
47     public String getDentistPassword(){return passwd;}
48
49     public void setDentistFirstName(String fn)
{firstName=fn;}
50     public String getDentistFirstName(){return
firstName;}
51
52     public void setDentistLastName(String ln){lastName
= ln; }
53     public String getDentistLastName() {return
lastName; }
54
55     public void setEmail(String em){email = em; }
56     public String getEmail() {return email; }
57
58     public void setOffice(String off){office = off; }
59     public String getOffice() {return office;}
60
61     public void setProDesc(String des){desc = des; }
```

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```
62     public String getProDesc() {return desc;}
63
64     public void setCount(int c){count = c; }
65     public int getCount() {return count;}
66
67
68     *****
69     *****
70     68 * Search the appointments in the db. The string
71     argument will filter by dentist id.
72     69 * Appointments will be stored in an array of
73     appointments (bList).
74     70
75     *****
76     ***
77     public void getAppointments(String i)
78     {
79         try
80         {
81             //Load Driver - Step #1
82             Class.forName("net.ucanaccess.jdbc.
83             UcanaccessDriver");
84             //Get Connection from the Driver - Step #2
85             Connection c1;
86             c1=DriverManager.getConnection("jdbc:
87             ucanaccess://C:
88             /Users/kerds/OneDrive/School/Java3/Dentist/DentistOfficeMDB
89             .mdb");
90
91             //Create a Statement - Step #3
92             Statement stmt = c1.createStatement();
93             ResultSet rs = stmt.executeQuery("Select
94             * from Appointments where dentId = '" + i + "'");
95             //Process ResultSet
96
97             while (rs.next()){
98                 Appointments a1 = new Appointments();
```

```

88
89     String apptDateTime = rs.getString(1);
90     String patId = rs.getString(3);
91     String dentId = rs.getString(4);
92     String procCode = rs.getString(2);
93
94     a1.setAptDT(apptDateTime);
95     a1.setPatId(patId);
96     a1.setDentId(dentId);
97     a1.setProcCode(procCode);
98     bList.addAppointment(a1);
99 }
100 bList.displayList();
101 cl.close();
102 }
103     catch (Exception se)
104     {
105         System.out.println(se);
106     }
107 } //end getAppointments()
108
109     /*****DB
Behaviors*****/
110
111 /*****
*****/
112 * Search the appointments table in the db. The string
argument will filter by dentist id.
113 * getArguments will be ran inside Select to retrieve
appointments
114
115 *****/
116 ***/
117     public void selectDB(String i)
{
    try

```

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```
118         {
119             //Load Driver - Step #1
120             Class.forName("net.ucanaccess.jdbc.
UcanaccessDriver");
121             //Get Connection from the Driver - Step #2
122             Connection c1;
123             c1=DriverManager.getConnection("jdbc:
ucanaccess://C:
/Users/kerds/OneDrive/School/Java3/Dentist/DentistOfficeMDB
.mdb");
124
125             //Create a Statement - Step #3
126             Statement stmt = c1.createStatement();
127             ResultSet rs = stmt.executeQuery("Select
* from Dentists where id = ' " + i + "'");
128             //Process ResultSet
129             rs.next();
130             id = rs.getString("id");
131             passwd = rs.getString("passwd");
132             firstName = rs.getString("firstName");
133             lastName = rs.getString("lastName");
134             email = rs.getString("email");
135             office = rs.getString("office");
136             c1.close();
137         }
138         catch(Exception se)
139         {
140             System.out.println(se);
141         }
142         getAppointments(i);
143     }
144     } //end selectDB()
145
146
147     * Create a database entry for a new Dentist in db
```

Dentist table

```

148
*****
***/
149 public void insertDB(String id, String pw, String fn,
String ln, String em, String off){
150
151     setDentistID(id);
152     setDentistPassword(pw);
153     setDentistFirstName(fn);
154     setDentistLastName(ln);
155     setEmail(em);
156     setOffice(off);
157     this.id = id;
158     this.passwd = pw;
159     this.firstName = fn;
160     this.lastName = ln;
161     this.email = em;
162     this.office = off;
163
164     try{
165         Class.forName("net.ucanaccess.jdbc.
UcanaccessDriver");
166         Connection con = DriverManager.
getConnection("jdbc:ucanaccess://C:
/Users/kerds/OneDrive/School/Java3/Dentist/DentistOfficeMDB
.mdb");
167
168         Statement stmt = con.createStatement();
169         String sql = "Insert into Dentists values
('"+getDentistFirstName()+"', '"+
170
'" "+getDentistLastName()+"', '"+
171
'" "+getEmail()+"', '"+
172
'" "+getDentistID()+"', '"+

```

```

173
174 ""+getDentistPassword()+"',"
175
176         System.out.println(sql);
177         int n1 = stmt.executeUpdate(sql);
178         if (n1==1)
179             System.out.println("INSERT
Successful!!!");
180         else
181             System.out.println("INSERT
FAILED*****");
182         con.close();
183     }
184     catch(Exception e1){
185         System.out.println(e1);
186     }
187
188 } //end insertDB()
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/Users/kerds/OneDrive/School/Java3/Dentist/DentistOfficeMDB
.mdb");
199
200         Statement stmt = con.createStatement();
201         String sql = "update Dentists set firstName
= '"+getDentistFirstName() + "','"+
202                                     " lastName
='"+getDentistLastName()+"','"+
203                                     " email =
 '"+getEmail() + "','"+
204                                     " id
='"+getDentistID()+"','"+
205                                     " passwd =
 '"+getDentistPassword() + "'" +
206                                     " where
id='"+getDentistID()+"'";
207
208         System.out.println(sql);
209         int n = stmt.executeUpdate(sql);
210         if (n==1)
211             System.out.println("UPDATE
Successful!!!");
212         else
213             System.out.println("UPDATE
FAILED*****");
214         con.close();
215     }
216     catch (Exception e1){
217         System.out.println(e1);
218     }
219
220 } //end updateDB()
221
222
/*****
****
223  * Displays dentist info and appointments to console

```



```

224
*****
***/
225     public void display()
226     {
227         System.out.println("Dentist ID = " +
getDentistID());
228         System.out.println("Dentist Password = "
+getDentistPassword());
229         System.out.println("Dentist Name = " +
getDentistFirstName() + " " + getDentistLastName());
230         System.out.println("Email = " + getEmail());
231         System.out.println("Office = " + getOffice());
232         bList.displayList();
233     }
234
235
/*****
*****
236  *  Deletes existing entry in dentist table in db
237
*****
***/
238     public void deleteDB() {
239
240
241         try{
242             Class.forName("net.ucanaccess.jdbc.
UcanaccessDriver");
243             Connection con = DriverManager.
getConnection("jdbc:ucanaccess://C:
/Users/kerds/OneDrive/School/Java3/Dentist/DentistOfficeMDB
.mdb");
244
245             Statement stmt = con.createStatement();
246             String sql = "Delete from Dentists where
id='"+getDentistID()+"'";

```

```

247         System.out.println(sql);
248         int n = stmt.executeUpdate(sql);
249         if (n==1)
250             System.out.println("DELETE
Successful!!!");
251         else
252             System.out.println("DELETE
FAILED*****");
253         con.close();
254     }
255     catch(Exception e1){
256         System.out.println(e1);
257     }
258
259     } //end deleteDB()
260     public static void main(String args[]) {
261
262         *****Select and Display
test*****
263         //Dentist d1;
264         //d1 = new Dentist();
265         //d1.selectDB("D203");
266         //d1.display();
267         //d1.getAppointments("D202");
268
269         //System.out.println(d1.getCount());
270
271         //d1.bList.displayList(1);
272
273         *****Insert test*****
274         //Dentist d2;
275         //d2 = new Dentist();
276         //d2.insertDB("D206", "4323", "Shawn",
"Embry", "ShawnEmbry@mail.com", "555");
277
278         *****Update test*****
279         /*Dentist d3 = new Dentist();

```

```
280         d3.selectDB("D206");
281         d3.setDentistLastName("Jones");
282         d3.setDentistFirstName("Shawn");
283         d3.setDentistPassword("1234");
284         d3.updateDB();
285         d3.display();
286     */
287
288     /*****Delete test*****/
289     //Dentist d4 = new Dentist();
290     //d4.selectDB("D206");
291     //d4.deleteDB();
292
293
294     }
295 } //END OF DENTIST CLASS
296
```