

Hyderabad

A Project Report on

GAME STORE APPLICATION

By

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CERTIFICATE

Certified that this is Project work done by Ms./Mr. TEJA SAI DHONDU of Class XII, Roll No...... in the Informatics Practices Department of Oakridge International School for the year 2016-2017.

Lecturer in Charge

Dept. of Informatics Practices.

Signature of External Examiner Examiner Code:

ACKNOWLEDGEMENT

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Under his guidance, we have successfully completed this project as a practical fulfillment for the completion of the course well within the stipulated period of time.

We are also thankful to our co-ordinator

Ms. Anuradha Vanta

Front End Application Software





Back-End Data base



AIM

The purpose of the project is to create an application that provides information about all the games in a Video Game store. We can easily view all the information of the games and platforms in stock in the game store. Ability to search records based on different selection criteria is supported. There is support for two different users. User "chairman" is the power user. Ability to add records, update records and delete records is provided for the power user "chairman".

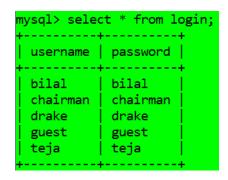
ABSTRACT

This tool requires an RDBMS, which is used to store the information and MySQL is the preferred software for maintaining the data. It maintains the information in the table form so that it can be accessed easily.

In this client side we will be using Java Net beans 8.1 providing the user interface. The requests of the client are made in the interface, which connect to the tables created in MySQL for getting the current information

```
The basic structure and contents of the tables are as follows:
drop database ipproject;
create database ipproject;
use ipproject;
create table login
(username varchar(20) primary key,
password varchar(20));
insert into login values
("bilal","bilal"),
("chairman", "chairman"),
("drake", "drake"),
("guest","guest"),
("teja","teja");
create table platforms
(Platform_Type varchar(30) primary key,
Xbox_One char(1),
PS4 char(1),
PC chair(1));
insert into platforms values
("ALL","Y","Y","Y"),
("PCE","N","N","Y"),
("PSE","N","Y","N"),
("PSPC","N","Y","Y"),
("XBE","Y","N","N"),
("XBPC","Y","N","Y"),
("XBPS","Y","Y","N");
create table games
(Sno int primary key,
Game_Name varchar(30),
Studio varchar(30),
Genre varchar(30),
```

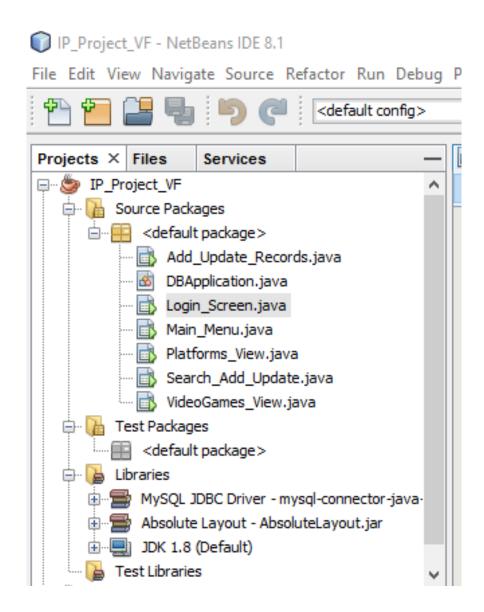
```
Release Year int,
Price int,
Platform_Type varchar(30),
foreign key(Platform_Type) references platforms(Platform_Type)
on delete cascade
on update cascade);
insert into games values
(101,"Bloodborne","From Software","Role Playing Game",2015,2100,"PSE"),
(102,"Demon's Souls", "From Software", "Role Playing Game", 2009, 1000, "PSE"),
(103,"Dark Souls III", "From Software", "Role Playing Game", 2016, 2600, "XBPC"),
(104,"Dark Souls II","From Software","Role Playing Game",2014,1400,"ALL"),
(105,"Uncharted 4","Naughty Dog","Action Adventure",2016,2600,"XBPS"),
(106,"Uncharted 3","Naughty Dog","Action Adventure",2013,1000,"PSE"),
(107,"Uncharted 2","Naughty Dog","Action Adventure",2009,500,"PSE"),
(108,"Uncharted","Naughty Dog","Action Adventure",2007,500,"PSE"),
(109,"Dark Souls", "From Software", "Role Playing Game", 2010, 1000, "PSPC"),
(110,"Halo 5","343 Industries","First Person Shooter",2015,3000,"XBE"),
(111,"Call of Duty Advanced Warfare","Activision","First Person
Shooter",2014,2000,"ALL"),
(112,"Call of Duty Infinite Warfare", "Activision", "First Person
Shooter",2016,4000,"PSPC"),
(113,"Call of Duty Black Ops 3","Activision","First Person
Shooter",2015,3000,"ALL"),
(114,"Call of Ghosts","Activision", "First Person Shooter", 2013, 1000, "XBPC"),
(115,"The Witcher 3","CD Project Red","Role Playing Game",2015,2000,"PSPC"),
(116,"Skyrim","Bethesda","Role Playing Game",2011,2000,"PCE"),
(117,"Metal Gear Solid V","Kojima Productions","Action
Stealth",2015,2000,"PCE"),
(118,"Minecraft","Mojang","Builder",2010,100,"PCE");
```



mysql> select * ·	from platfo		++
Platform_Type	Xbox_One		PC
ALL	Υ	Υ	ΙΥ
PCE	N	N	Υ [
PSE	N	Υ	N I
PSPC	N	Υ	Y
XBE	Y	N	N
XBPC	Y	N	Y
XBPS	Υ	Y	N
+	+	+	++

Sno	Game_Name	Studio	Genre	Release_Year	Price	Platform_Type
01	Bloodborne	From Software	Role Playing Game	2015	2100	PSE
02	Demon's Souls	From Software	Role Playing Game	2009	1000	PSE
93	Dark Souls III	From Software	Role Playing Game	2016	2600	XBPC
94	Dark Souls II	From Software	Role Playing Game	2014	1400	ALL
9 5	Uncharted 4	Naughty Dog	Action Adventure	2016	2600	XBPS
96	Uncharted 3	Naughty Dog	Action Adventure	2013	1000	PSE
97	Uncharted 2	Naughty DOg	Action Adventure	2009	500	PSE
98	Uncharted	Naughty DOg	Action Adventure	2007	500	PSE
99	Dark Souls	From Software	Role Playing Game	2007	1000	PSPC
10	Halo 5	343 Industries	First Person Shooter	2015	3000	XBE
11	Call of Duty Advanced Warfare	Activision	First Person Shooter	2014	2000	ALL
12	Call of Duty Infinite Warfare	Activision	First Person Shooter	2016	4000	PSPC
13	Call of Duty Black Ops 3	Activision	First Person Shooter	2015	3000	ALL
14	Call of Duty Ghosts	Activision	First Person Shooter	2013	1000	XBPC
15	The Witcher 3	CD Project Red	Role Playing Game	2015	2000	PSPC
16	Skyrim	Bethesda	Role Playing Game	2011	2000	PCE
17	Metal Gear Solid V	Kojima Productions	Action Stealth	2015	2000	PCE
18	Minecraft	Mojang	Builder	2010	100	PCE

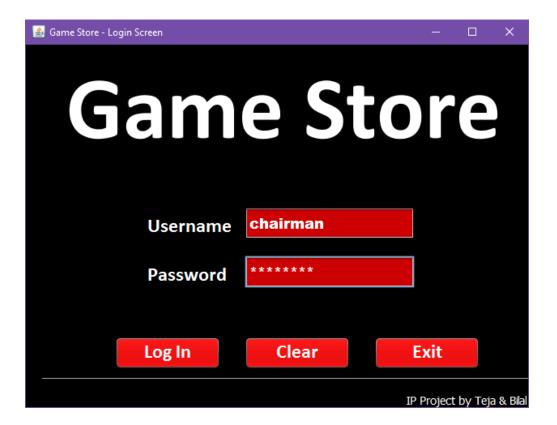
Project Explorer

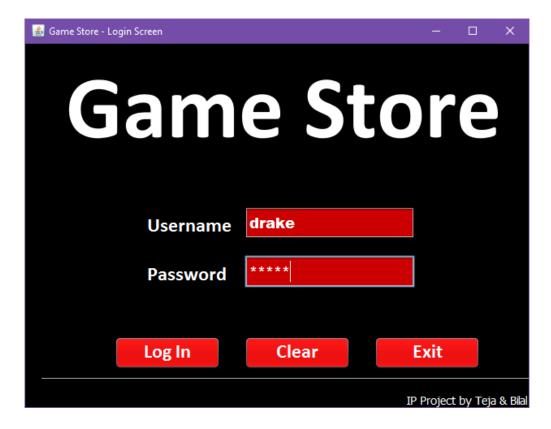


DBApplication.java

```
Source History | 🚱 💀 🔻 🔻 🗸 🖓 🖶 🖫 | 🍄 😓 | 🔄 📦 | 🍥 🔲 | 🐠 🚅
1 🖃 /*
      * To change this license header, choose License Headers in Project Properties.
       * To change this template file, choose Tools | Templates
       * and open the template in the editor.
 5
 6
   - /**
      * @author tejas
10
      */
     public class DBApplication {
11
12
          public static boolean isChairman = false;
          public static Main_Menu mainScreen = null;
13
14
          public static Platforms View platformDB = null;
          public static VideoGames View completeDB = null;
15
16
          public static Search_Add_Update searchDB = null;
17
          public static Add Update Records addDeleteUpdate = null;
18
          public static Login_Screen loginscreen = null;
19
         public static String sno = null;
20
21
```

Login_Screen.java



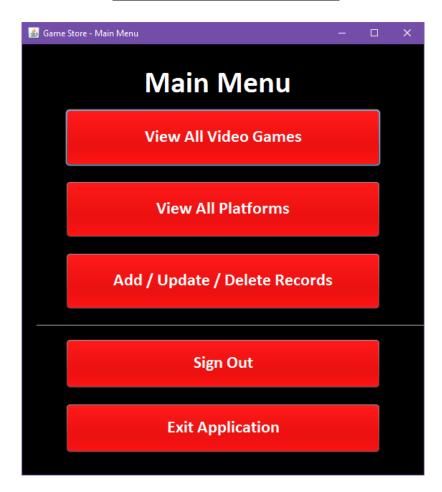


```
Source Design History 🔯 👺 🔻 🐺 🔻 🔁 👺 😭 🖓 😓 🔛 🗐 🔘 🔛 🧶 💂
  1   import com.mysql.jdbc.Connection;
  2
       import com.mysql.jdbc.Statement;
  3
       import java.awt.Color;
  4
     import java.sql.*;
  5
  6
        * To change this license header, choose License Headers in Project Properties.
  7
        * To change this template file, choose Tools | Templates
        * and open the template in the editor.
  8
  9
 10
 11 - /**
 12
 13
        * @author tejas
        */
 14
       public class Login Screen extends javax.swing.JFrame {
 15
 16
            /**
 17 -
 18
            * Creates new form login
            */
 19
 20
    public Login Screen() {
 21
               initComponents();
  <u>Q.</u>
               DBApplication.loginscreen = this;
  ₽.
               this.setTitle("Game Store - Login Screen");
  <u>Q.</u>
               this.getContentPane().setBackground(Color.BLACK);
 25
 26
 27 -
            * This method is called from within the constructor to initialize the form.
 28
 29
            * WARNING: Do NOT modify this code. The content of this method is always
 30
             * regenerated by the Form Editor.
 31
            */
 32
            @SuppressWarnings("unchecked")
 33 +
           Generated Code
128
129
           public void clear()
130 -
131
               try {
132
                   this.clrbtn.doClick();
133
                } catch (Exception ex) {
134
135
           private void passtxtActionPerformed(java.awt.event.ActionEvent evt) {
136
137
               // TODO add your handling code here:
138
139
140 -
           private void clrbtnActionPerformed(java.awt.event.ActionEvent evt) {
141
               passtxt.setText(null);
142
               usertxt.setText(null);
143
               usertxt.requestFocus();
144
145
```

```
146
           private void loginbtnActionPerformed(java.awt.event.ActionEvent evt) {
147
               String pass = passtxt.getText();
148
               String user = usertxt.getText();
               String str = null;
 <u>Q.</u>
               Statement stmt = null;
               ResultSet rs = null;
 <u>Q.</u>
152
               Main Menu m = null;
153
               try
154
                   Class.forName("java.sql.Driver");
155
156
                    String database = "jdbc:mysql://localhost:3306/ipproject";
 Q.
                    Connection conn = (Connection) DriverManager.getConnection(database,
                        "root", "mysq12016");
158
159
                    stmt = (Statement) conn.createStatement();
160
                    String sql = "select * from login where username = '" + user + "';";
161
                    rs = stmt.executeQuery(sql);
                    rs.next();
162
163
                    str = rs.getString("password");
164
                    rs.close();
165
                    stmt.close();
166
                    conn.close();
167
                    if (str.equals(pass))
168
 <u>Q.</u>
                        if(user.equals("chairman"))
170
                            DBApplication.isChairman = true;
171
                        else
172
                            DBApplication.isChairman = false;
173
174
                        if (DBApplication.mainScreen == null)
175
                            DBApplication.mainScreen = new Main_Menu();
176
                        DBApplication.mainScreen.setVisible(true);
177
178
                        this.setVisible(false);
179
180
                    else
181
182
                        passtxt.setText(null);
 ₽
                        jOptionPanel.showMessageDialog(this, "Incorrect username or"
                                + "password. Please try again.");
184
185
                        passtxt.requestFocus();
186
187
               catch (Exception e)
 ₩
189
190
                   passtxt.setText(null);
                    jOptionPane1.showMessageDialog(this, "Incorrect username or"
 Q.
192
                            + "password. Please try again.");
193
                    passtxt.requestFocus();
```

```
194
               }
195
196
           private void exitbtnActionPerformed(java.awt.event.ActionEvent evt) {
197 -
 <u>Q.</u>
               int res = jOptionPanel.showConfirmDialog(this,
199
                       "Are you sure you want to exit?");
 φ,
               if (res == jOptionPane1.YES OPTION)
201
                   System.exit(0);
202
203
204
   _
205
            * @param args the command line arguments
206
207
   public static void main(String args[]) {
208
               /* Set the Nimbus look and feel */
               Look and feel setting code (optional)
209
   +
230
               //</editor-fold>
231
232
               /* Create and display the form */
 <u>Q.</u>
               java.awt.EventQueue.invokeLater(new Runnable() {
   白
₩.
                   public void run() {
                       new Login Screen().setVisible(true);
235
236
237
               });
238
239
240
           // Variables declaration - do not modify
           private javax.swing.JButton clrbtn;
241
242
           private javax.swing.JButton exitbtn;
243
           private javax.swing.JLabel jLabel1;
244
           private javax.swing.JLabel jLabel2;
245
           private javax.swing.JLabel jLabel3;
246
           private javax.swing.JLabel jLabel4;
247
           private javax.swing.JOptionPane jOptionPane1;
248
           private javax.swing.JScrollPane jScrollPane1;
249
           private javax.swing.JSeparator jSeparator1;
250
           private javax.swing.JTextArea jTextArea1;
251
           private javax.swing.JButton loginbtn;
252
           private javax.swing.JPasswordField passtxt;
253
           private javax.swing.JTextField usertxt;
254
           // End of variables declaration
255
```

Main_Menu.java

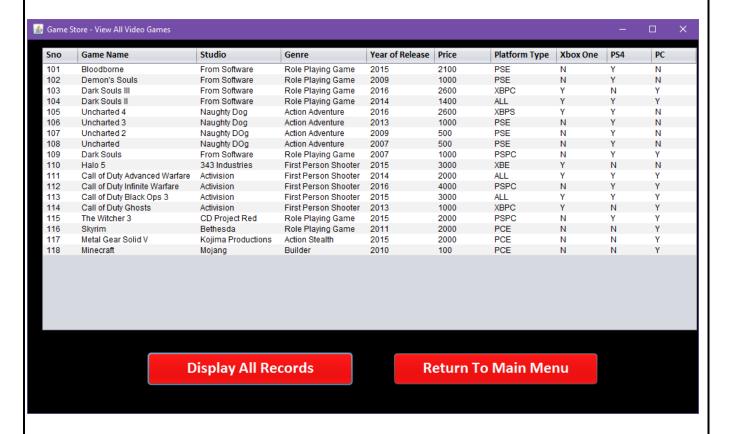


```
1 - import java.awt.Color;
 2
 3
      * To change this license header, choose License Headers in Project Properties.
       * To change this template file, choose Tools | Templates
 6
       * and open the template in the editor.
   - /**
 9
10
      * @author tejas
11
12
13
      public class Main Menu extends javax.swing.JFrame {
14
15 🖃
          * Creates new form main
16
          */
17
18 🖃
          public Main Menu() {
            initComponents();
19
             this.setTitle("Game Store - Main Menu");
             this.getContentPane().setBackground(Color.BLACK);
22
          }
```

```
23
 24
   * This method is called from within the constructor to initialize the form.
 25
            * WARNING: Do NOT modify this code. The content of this method is always
 26
            * regenerated by the Form Editor.
 27
 28
29
           @SuppressWarnings("unchecked")
   +
           Generated Code
30
110
           private void cdbbtnActionPerformed(java.awt.event.ActionEvent evt) {
111
               if (DBApplication.completeDB == null)
112
113
                   DBApplication.completeDB = new VideoGames View();
114
115
               DBApplication.completeDB.clear();
116
               DBApplication.completeDB.setVisible(true);
117
               this.setVisible(false);
118
119
120 -
           private void signoutbtnActionPerformed(java.awt.event.ActionEvent evt) {
               int res = jOptionPanel.showConfirmDialog(this, "Are you sure "
122
                       + "you want to log out?");
               if (res == jOptionPanel.YES OPTION) {
 ₽
124
125
               if (DBApplication.loginscreen == null)
126
                   DBApplication.loginscreen = new Login Screen();
127
               DBApplication.loginscreen.clear();
128
129
               DBApplication.loginscreen.setVisible(true);
130
               this.setVisible(false);}
131
132
           private void exitbtnActionPerformed(java.awt.event.ActionEvent evt) {
133
               int res = jOptionPane1.showConfirmDialog(this, "Are you sure "
                       + "you want to exit?");
135
               if (res == jOptionPanel.YES OPTION)
 ₽.
137
                   System.exit(0);
138
139
140
141 -
           private void pdbbtnActionPerformed(java.awt.event.ActionEvent evt) {
142
               if (DBApplication.platformDB == null)
143
                   DBApplication.platformDB = new Platforms View();
144
               DBApplication.platformDB.clear();
145
146
               DBApplication.platformDB.setVisible(true);
147
               this.setVisible(false);
148
149
            private void search chg btnActionPerformed(java.awt.event.ActionEvent evt) {
150
                if (DBApplication.isChairman == true) {
151
 152
                    if (DBApplication.searchDB == null)
                        DBApplication.searchDB = new Search Add Update();
153
```

```
154
155
                   DBApplication.searchDB.setVisible(true);
                   this.setVisible(false);
156
157
158
               else
                   jOptionPane1.showMessageDialog(this, "This functionality is enabled"
 8
160
                           + " for Chairman only.");
161
162
163
   164
            * @param args the command line arguments
165
166 =
           public static void main(String args[]) {
167
               /* Set the Nimbus look and feel */
168 +
                Look and feel setting code (optional)
189
               //</editor-fold>
190
               /* Create and display the form */
191
               java.awt.EventQueue.invokeLater(new Runnable() {
₩.
                   public void run() {
194
                       new Main Menu().setVisible(true);
195
196
               });
197
198
199
           // Variables declaration - do not modify
200
           private javax.swing.JButton cdbbtn;
201
           private javax.swing.JButton exitbtn;
202
           private javax.swing.JLabel jLabel1;
203
           private javax.swing.JLabel jLabel2;
204
           private javax.swing.JOptionPane jOptionPane1;
205
           private javax.swing.JSeparator jSeparator1;
206
           private javax.swing.JButton pdbbtn;
207
           private javax.swing.JButton search chg btn;
208
           private javax.swing.JButton signoutbtn;
209
           // End of variables declaration
210
       3
```

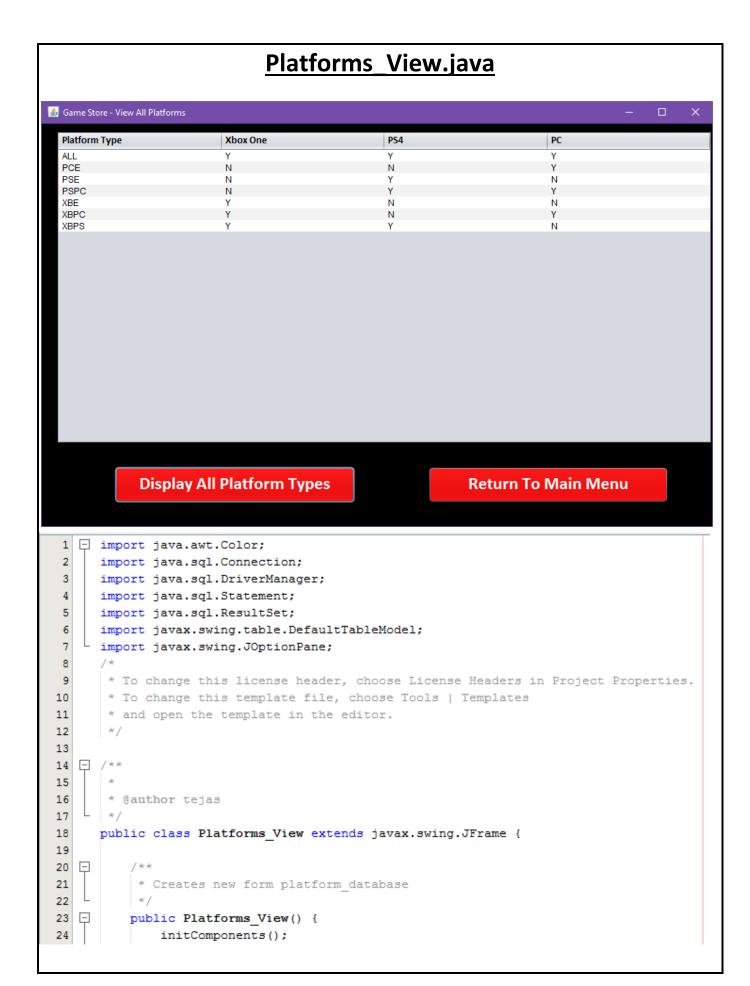
VideoGames View.java



```
1
  import java.awt.Color;
2
      import java.sql.Connection;
 3
      import java.sql.DriverManager;
 4
      import java.sql.Statement;
 5
      import java.sql.ResultSet;
 6
      import javax.swing.table.DefaultTableModel;
 7
     import javax.swing.JOptionPane;
8
9
       * To change this license header, choose License Headers in Project Properties.
10
       * To change this template file, choose Tools | Templates
11
       * and open the template in the editor.
12
13
  + /**...4 lines */
14
18
      public class VideoGames View extends javax.swing.JFrame {
19
  +
          /** Creates new form complete database ...3 lines */
20
23
   public VideoGames View() {
24
             initComponents();
             completedb.getTableHeader().setFont(new java.awt.Font("Calibri", 1, 14));
25
             this.setTitle("Game Store - View All Video Games");
Q.
             this.getContentPane().setBackground(Color.BLACK);
28
```

```
29
 30
   +
           /** This method is called from within the constructor to initialize the form
           @SuppressWarnings("unchecked")
           Generated Code
 36 +
 85
           public void clear()
 86
 87
   88
               try {
                   DefaultTableModel model = (DefaultTableModel) completedb.getModel();
 89
 90
                   model.setRowCount(0);
 91
               } catch (Exception ex) {
 92
               }
 93
           ì
 94
 95
           private void displaybtnActionPerformed(java.awt.event.ActionEvent evt) {
 96
               try {
 97
                   DefaultTableModel model = (DefaultTableModel) completedb.getModel();
 98
                   model.setRowCount(0);
                   Class.forName("java.sql.Driver");
 99
                   Connection con = DriverManager.getConnection(
101
                            "jdbc:mysql://localhost/ipproject", "root", "mysql2016");
102
                   Statement stmt = con.createStatement();
103
                   String query = "Select Sno, Game Name, Studio, Genre, Release Year,"
104
                           + " Price, Platform Type, Xbox One, PS4, PC from games "
                            + "natural join platforms order by Sno;";
105
106
                   ResultSet rs = stmt.executeQuery(query);
107
                   while (rs.next()) {
108
                       String sno = rs.getString("Sno");
109
                       String gname = rs.getString("Game Name");
110
                       String studio = rs.getString("Studio");
111
                       String genre = rs.getString("Genre");
112
                       String ryear = rs.getString("Release Year");
                       String price = rs.getString("Price");
113
114
                       String platform = rs.getString("Platform Type");
115
                       String xbone = rs.getString("Xbox one");
                       String ps4 = rs.getString("PS4");
116
117
                       String pc = rs.getString("PC");
118
                       model.addRow(new Object[] {sno, gname, studio, genre, ryear,
119
                           price, platform, xbone, ps4, pc});
120
                   } rs.close();
121
                   stmt.close();
122
                   con.close();
               } catch (Exception ex) {
124
                   JOptionPane.showMessageDialog(null, "Error in connectivity");
125
               }
126
127
```

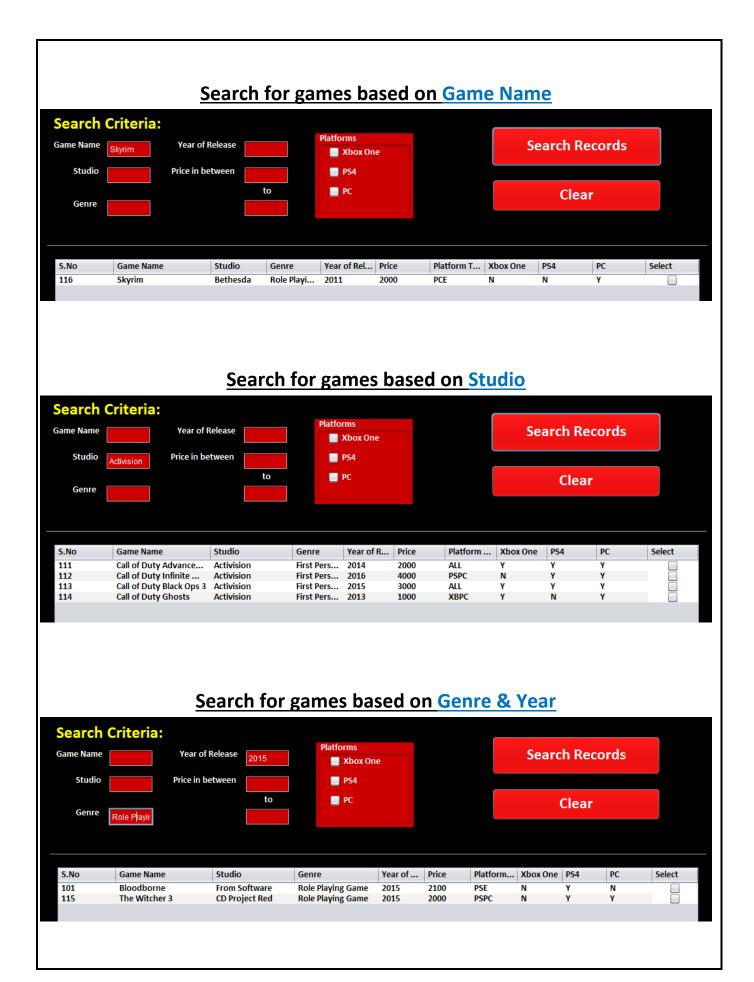
```
128 --
           private void returnbtnActionPerformed(java.awt.event.ActionEvent evt) {
129
               if (DBApplication.mainScreen == null)
130
                   DBApplication.mainScreen = new Main Menu();
131
132
               DBApplication.mainScreen.setVisible(true);
133
               this.setVisible(false);
134
135
136 🚍
137
           * @param args the command line arguments
           */
138
           public static void main(String args[]) {
139 -
140
              /* Set the Nimbus look and feel */
               Look and feel setting code (optional)
141
   +
               //</editor-fold>
162
163
164
               /* Create and display the form */
 java.awt.EventQueue.invokeLater(new Runnable() {
₩.
                   public void run() {
167
                       new VideoGames View().setVisible(true);
168
169
               });
170
           }
171
172
          // Variables declaration - do not modify
173
           private javax.swing.JTable completedb;
174
          private javax.swing.JButton displaybtn;
175
           private javax.swing.JScrollPane jScrollPane1;
          private javax.swing.JSeparator jSeparator1;
176
177
           private javax.swing.JButton returnbtn;
          // End of variables declaration
178
179
180
```

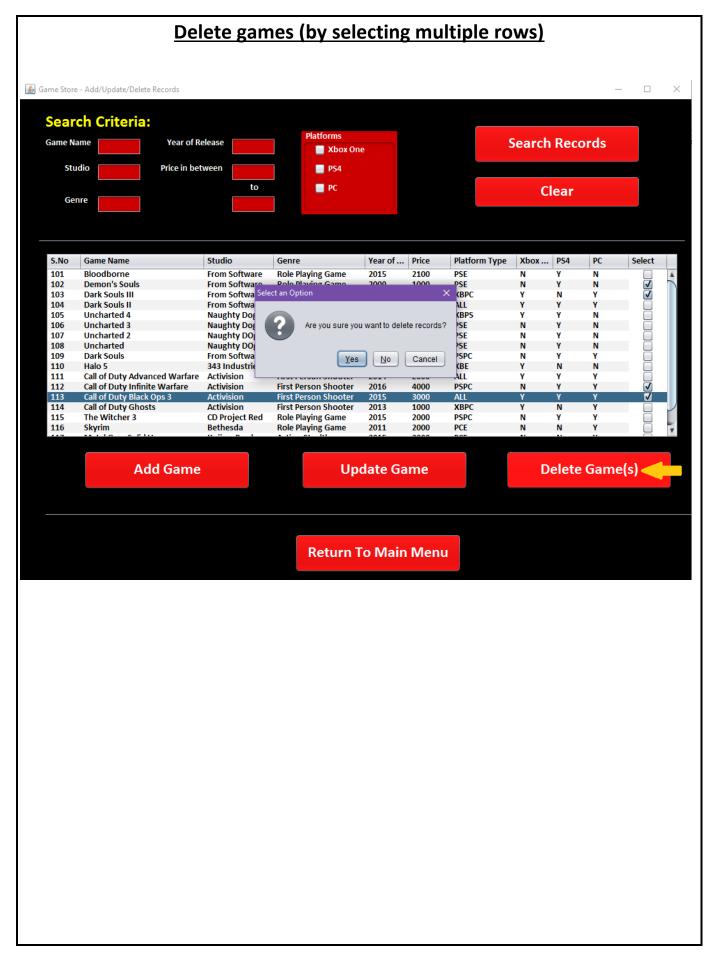


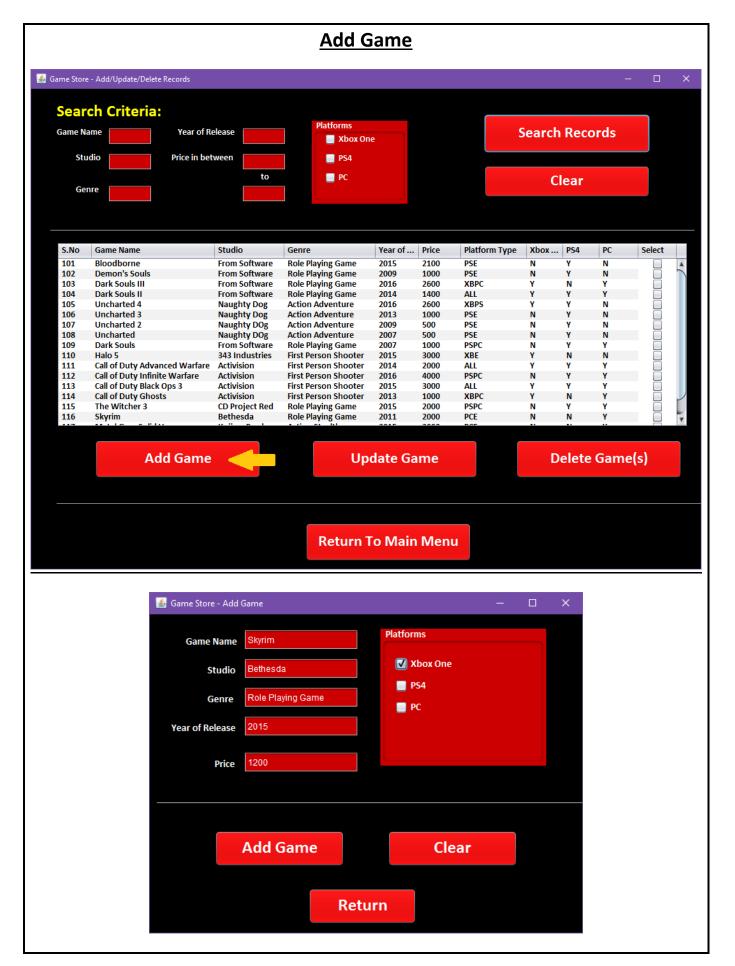
```
25
               platformdb.getTableHeader().setFont(new java.awt.Font("Calibri", 1, 14));
               this.setTitle("Game Store - View All Platforms");
 Q.
 Q.
               this.getContentPane().setBackground(Color.BLACK);
 28
29
30 -
            * This method is called from within the constructor to initialize the form.
31
32
            * WARNING: Do NOT modify this code. The content of this method is always
            * regenerated by the Form Editor.
 33
34
           @SuppressWarnings("unchecked")
35
36
    +
           Generated Code
85
       public void clear()
    86
87
               try {
                   DefaultTableModel model = (DefaultTableModel) platformdb.getModel();
88
89
                   model.setRowCount(0);
90
               } catch (Exception ex) {
 91
92
           3
    private void displaybtnActionPerformed(java.awt.event.ActionEvent evt) {
93
94
               try {
95
                   DefaultTableModel model = (DefaultTableModel) platformdb.getModel();
 96
                   model.setRowCount(0);
 97
                   Class.forName("java.sql.Driver");
                   Connection con = DriverManager.getConnection(
 <u>Q</u>
                           "jdbc:mysql://localhost/ipproject", "root", "mysql2016");
99
100
                   Statement stmt = con.createStatement();
                   String query = "Select Platform Type, Xbox One, PS4, "
101
 Q
                           + "PC from platforms;";
103
                   ResultSet rs = stmt.executeQuery(query);
104
                   while (rs.next()) {
                       String platform = rs.getString("Platform_Type");
105
106
                       String xbone = rs.getString("Xbox one");
107
                       String ps4 = rs.getString("PS4");
108
                       String pc = rs.getString("PC");
109
                       model.addRow(new Object[] {platform, xbone, ps4, pc});
110
                   } rs.close();
111
                   stmt.close();
112
                   con.close();
 Q.
               } catch (Exception ex) {
114
                   JOptionPane.showMessageDialog(null, "Error in connectivity");
115
116
117
118
           private void returnbtnActionPerformed(java.awt.event.ActionEvent evt) {
119
               if (DBApplication.mainScreen == null)
120
                   DBApplication.mainScreen = new Main Menu();
```

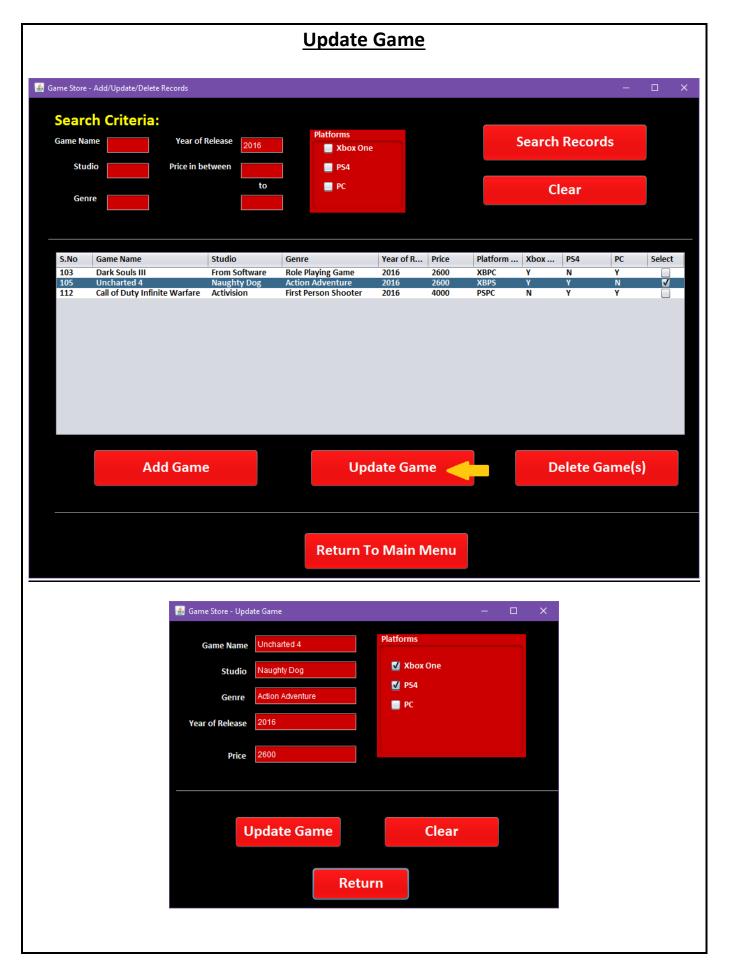
```
121
122
               DBApplication.mainScreen.setVisible(true);
               this.setVisible(false);
123
124
125
126 =
127
            * @param args the command line arguments
128
129 -
           public static void main(String args[]) {
130
               /* Set the Nimbus look and feel */
               Look and feel setting code (optional)
131 🕀
               //</editor-fold>
152
153
154
               /* Create and display the form */
               java.awt.EventQueue.invokeLater(new Runnable() {
 ₩ 🖨
                   public void run() {
₩. 🖃
157
                       new Platforms View().setVisible(true);
158
159
               });
160
           }
161
162
           // Variables declaration - do not modify
163
           private javax.swing.JButton displaybtn;
164
           private javax.swing.JScrollPane jScrollPane1;
165
           private javax.swing.JSeparator jSeparator1;
166
           private javax.swing.JTable platformdb;
           private javax.swing.JButton returnbtn;
167
168
          // End of variables declaration
169
       }
170
```

Search/Add/Update/Delete View all records (no selection criteria provided) Game Store - Add/Update/Delete Records Search Criteria: **Game Name** Year of Release Search Records Studio Price in between PS4 Clear Genre S.No Platform T... Xbox One Select Game Name | Studio Genre Year of Rel... Price PS4 PC Role Playin... 101 Bloodborne From Soft... 2015 2100 PSE Role Playin... 102 Demon's S... 1000 PSE N From Soft... 2009 103 Dark Souls III Role Playin... 2016 2600 XBPC From Soft... 104 Dark Souls II From Soft... Role Playin... 2014 1400 ALL 105 Uncharted 4 XBPS **Naughty Dog** Action Adv... 2016 2600 Naughty Dog 106 Uncharted 3 Action Adv... 1000 PSE 107 **Uncharted 2** Naughty D... Action Adv... 2009 500 PSE 108 Uncharted Naughty D... Action Adv... 2007 500 **PSE** 109 **Dark Souls** From Soft... Role Playin... 2007 1000 **PSPC** 110 Halo 5 343 Indust... First Perso... 2015 3000 XBE Call of Dut... 111 Activision First Perso... 2014 2000 ALL 112 Call of Dut... Activision 2016 4000 PSPC First Perso... 113 Call of Dut... Activision 2015 3000 First Perso... ALL 114 Call of Dut... Activision 2013 1000 **XBPC** First Perso... Role Playin... 115 The Witch... CD Project ... 2015 2000 PSPC 116 Bethesda Role Playin... Skyrim **Add Game Update Game** Delete Game(s) Return To Main Menu Search for games based on Platforms **Search Criteria: Game Name** Year of Release Search Records Xbox One Studio Price in between PS4 **V** PC Clear Genre Platform Ty... Xbox One Select S.No PS4 Game Name Studio Year of Rel... Price PC Dark Souls III From Softw... Role Playin... 103 2016 2600 XBPC 114 XBPC Call of Duty... Activision First Perso... 2013









Search_Update.java

```
1 = import java.awt.Color;
 2
      import java.sql.Connection;
 3
      import java.sql.DriverManager;
      import java.sql.SQLException;
 4
 5
      import java.sql.Statement;
  6
      import java.sql.ResultSet;
 7
      import java.util.logging.Level;
 8
      import java.util.logging.Logger;
 9
      import javax.swing.table.DefaultTableModel;
    import javax.swing.JOptionPane;
10
11
        * To change this license header, choose License Headers in Project Properties.
12
        * To change this template file, choose Tools | Templates
        * and open the template in the editor.
15
16
17 ± /**...4 lines */
21
      public class Search Add Update extends javax.swing.JFrame {
22
           /** Creates new form search ...3 lines */
 23
   +
26 =
           public Search Add Update() {
               initComponents();
27
28
               searchdb.getTableHeader().setFont(new java.awt.Font("Calibri", 1, 14));
 ₽.
               this.setTitle("Game Store - Add/Update/Delete Records");
               this.getContentPane().setBackground(Color.BLACK);
 ₽.
 31
 32
   _
           public void doSearch() {
33
               searchbtn.doClick();
34
35
36
   37
 38
            * This method is called from within the constructor to initialize the form.
            * WARNING: Do NOT modify this code. The content of this method is always
39
            * regenerated by the Form Editor.
 40
            */
41
42
           @SuppressWarnings("unchecked")
43 +
           Generated Code
266
267
           public void clear()
268 =
269
               try {
270
                   this.clearBtn.doClick();
271
               } catch (Exception ex) {
272
273
           private void returnbtnActionPerformed(java.awt.event.ActionEvent evt) {
274
               if (DBApplication.mainScreen == null)
275
276
                   DBApplication.mainScreen = new Main Menu();
```

```
277
278
               DBApplication.mainScreen.setVisible(true);
279
               this.setVisible(false);
280
281
           private void yeartxtActionPerformed(java.awt.event.ActionEvent evt) {
282
               // TODO add your handling code here:
283
284
285
286 =
           private void gametxtActionPerformed(java.awt.event.ActionEvent evt) {
287
               // TODO add your handling code here:
288
289
290 -
           private void searchbtnActionPerformed(java.awt.event.ActionEvent evt) {
291
               try
292
293
                   DefaultTableModel model = (DefaultTableModel) searchdb.getModel();
294
                   model.setRowCount(0);
295
                   Class.forName("java.sql.Driver");
296
                   try
297
                       Connection con = DriverManager.getConnection(
 Q.
                            "jdbc:mysql://localhost/ipproject", "root", "mysql2016");
299
300
                       Statement stmt=con.createStatement();
301
302
                       String gname = gametxt.getText();
303
                       if(gname.equals(""))
304
                            gname = "in (Game Name)";
305
                       else
306
                            gname = "=" + "'" + gametxt.getText() + "'";
307
308
                       String studio = studiotxt.getText();
309
                       if(studio.equals(""))
310
                            studio = "in (Studio)";
311
                       else
                            studio = "=" + "'" + studiotxt.getText() + "'";
312
313
314
                       String genre = genretxt.getText();
315
                       if (genre.equals(""))
316
                            genre = "in (Genre)";
317
                       else
                            genre = "=" + "'" + genretxt.getText()+ "'";
318
319
320
                       String year = yeartxt.getText();
321
                       if(year.equals(""))
                           year = "in (Release_Year)";
322
323
                       else
324
                           year = "=" + yeartxt.getText();
325
```

```
326
                        String lprice = lpricetxt.getText();
327
                        if(lprice.equals(""))
                            lprice = "in ";
328
329
                        else
                            lprice = "between " + lpricetxt.getText();
330
331
332
                        String hprice = hpricetxt.getText();
333
                        if(hprice.equals(""))
334
                            hprice = "(Price)";
335
                        else
336
                            hprice = " and " + hpricetxt.getText();
337
                        String platform = "";
 <u>Q.</u>
339
                        if(xbcb.isSelected() == true){
                            if(pscb.isSelected() == true){
340
341
                                 if(pccb.isSelected() == true) {
342
                                   platform = "= \"ALL\"";
343
                                }
344
                                else{
                                   platform = "= \"XBPS\"";
345
346
                                }
347
                            }
348
                            else{
349
                                 if(pccb.isSelected() == true){
350
                                    platform = "= \"XBPC\"";
351
352
                                else{
                                   platform = "= \"XBE\"";
353
354
355
356
357
                        else{
358
                        if(pscb.isSelected() == true){
359
                                 if(pccb.isSelected() == true){
                                   platform = "= \"PSPC\"";
360
361
362
                                else{
                                   platform = "= \"PSE\"";
363
364
365
366
                            else{
367
                                if(pccb.isSelected() == true){
368
                                   platform = "= \"PCE\"";
369
370
                                else{
                                   platform = "in (Platform Type)";
371
372
373
                            }
374
```

```
375
376
                       String query = "Select * from games natural join platforms where"
377
                                + " Game Name " + gname + " and Studio " + studio +
378
                                " and Genre " + genre + " and Release Year " + year +
379
                                " and games.Platform Type " + platform + " and Price " +
380
                                lprice + hprice + " order by sno;";
381
                       ResultSet rs=stmt.executeQuery(query);
382
383
                       while (rs.next())
384
385
                           String one = rs.getString("Sno");
386
                           String two = rs.getString("Game Name");
387
                           String three = rs.getString("Studio");
388
                           String four = rs.getString("Genre");
389
                            String five = rs.getString("Release Year");
390
                           String six = rs.getString("Price");
391
                           String seven = rs.getString("Platform Type");
392
                           String eight = rs.getString("Xbox one");
393
                           String nine = rs.getString("PS4");
394
                           String ten = rs.getString("PC");
395
                           model.addRow(new Object[] {one, two, three, four, five,
396
                                six, seven, eight, nine, ten});
397
398
                       rs.close();
399
                       stmt.close();
400
                       con.close();
401
402
                   catch (SQLException ex)
403
404
                       Logger.getLogger(
405
                           Search Add Update.class.getName()).log(Level.SEVERE,
406
                           null, ex);
                       jOptionPane1.showMessageDialog(this, "No records found.");
 <u>Q.</u>
408
409
410
               catch (ClassNotFoundException ex)
411
                   Logger.getLogger(Search Add Update.class.getName()).log(Level.SEVERE,
412
413
                           null, ex);
 ₽
                   jOptionPanel.showMessageDialog(this, "No records found.");
415
416
417
418
419
           private void clearBtnActionPerformed(java.awt.event.ActionEvent evt) {
420
               gametxt.setText(null);
421
               studiotxt.setText(null);
422
               genretxt.setText(null);
423
               yeartxt.setText(null);
```

```
424
               hpricetxt.setText(null);
425
               lpricetxt.setText(null);
426
               xbcb.setSelected(false);
427
               pscb.setSelected(false);
428
               pccb.setSelected(false);
429
430
               DefaultTableModel model = (DefaultTableModel) searchdb.getModel();
431
               model.setRowCount(0);
432
433
               gametxt.requestFocus();
434
435
436 -
           private void deleteRecord(String sno) {
437
               try
438
439
                  Class.forName("java.sql.Driver");
440
                  Connection con=DriverManager.getConnection(
441
                           "jdbc:mysql://localhost/ipproject", "root", "mysql2016");
442
                  Statement stmt = con.createStatement();
443
                  String query = "delete from games where Sno = \"" + sno + "\";";
444
445
                  stmt.executeUpdate(query);
446
447
 ₽.
               catch (Exception e) {
 Q.
                 jOptionPanel.showMessageDialog(this, "Error in table Deletion");
450
451
452
453
           private void deletebtnActionPerformed(java.awt.event.ActionEvent evt) {
454
               DefaultTableModel model = (DefaultTableModel) searchdb.getModel();
455
               int rowCount = model.getRowCount();
456
               boolean atleastOne = false;
457
458
               if (rowCount >0) {
459
                   for(int i = 0; i < rowCount; i++) {</pre>
460
                        Object isChecked = model.getValueAt(i, 10);
                        if (isChecked != null && (boolean)isChecked == true) {
461
462
                            if (atleastOne == false) {
463
                                int res = JOptionPane.showConfirmDialog(this,
464
                                        "Are you sure you want to delete records?");
465
                                if (res != JOptionPane.YES OPTION)
466
                                    break;
467
468
                            String tmp = (String)model.getValueAt(i, 0);
469
                            deleteRecord(tmp);
                            atleastOne = true;
470
471
472
```

```
if (atleastOne) {
473
474
                       // Refresh the table grid so that the user can see
475
                       // the deleted records have gone away
476
                       searchbtn.doClick();
477
                       // display message to tell the user that one or more records
478
                       // have been successfully deleted
479
                       jOptionPane1.showMessageDialog(this,
                               "Record(s) successfully deleted");
481
482
483
               }
484
485
           private void UpdateActionPerformed(java.awt.event.ActionEvent evt) {
486
487
               DefaultTableModel model = (DefaultTableModel)searchdb.getModel();
488
               int checked = 0;
489
               int rowToUpdate = 0;
490
               int rowCount = model.getRowCount();
491
492
               for(int i = 0; i < rowCount; i++) {
493
                   Object isChecked = model.getValueAt(i, 10);
494
                   if (isChecked != null && (boolean)isChecked == true) {
495
                       checked++;
496
                       rowToUpdate = i;
497
                       if (checked > 1) {
498
                           // Show message to the user that they can update
499
                           // only one record at a time
                           jOptionPane1.shovMessageDialog(this,
 Q
501
                                "Please select only one record for update purpose");
502
                           return;
503
504
505
506
507
               // if no rows are present or no rows are selected, simply return
508
               if (checked == 0)
509
                   return;
510
511
               // retrieve the S.No of the row selected by the user and set
512
               // the global SNo value to this retrieved value, so that we know
               // Add operation is being performed
513
514
               DBApplication.sno = (String)model.getValueAt(rowToUpdate, 0);
515
516
               // Imvoke the update screen
               if (DBApplication.addDeleteUpdate == null)
518
                   DBApplication.addDeleteUpdate = new Add Update Records();
519
520
               DBApplication.addDeleteUpdate.PopulateScreen();
521
               DBApplication.addDeleteUpdate.setVisible(true);
522
               this.setVisible(false);
523
524
```

```
525
           private void AddGameActionPerformed(java.awt.event.ActionEvent evt) {
526
               // Set the global SNo value to NULL, so that we know Add operation
527
               // is being performed
               DBApplication.sno = null;
528
529
530
               if (DBApplication.addDeleteUpdate == null)
                       DBApplication.addDeleteUpdate = new Add Update Records();
531
532
               DBApplication.addDeleteUpdate.PopulateScreen();
533
               DBApplication.addDeleteUpdate.setVisible(true);
534
535
               this.setVisible(false);
536
537
    538
539
            * @param args the command line arguments
540
           public static void main(String args[]) {
541
    _
542
               /* Set the Nimbus look and feel */
    +
                Look and feel setting code (optional)
543
564
               //</editor-fold>
565
566
               /* Create and display the form */
               java.awt.EventQueue.invokeLater(new Runnable() {
 <u>Q.</u>
Q.↓
                   public void run() {
569
                       new Search Add Update().setVisible(true);
570
571
               });
572
573
574
           // Variables declaration - do not modify
575
           private javax.swing.JButton AddGame;
576
           private javax.swing.JButton Update;
577
           private javax.swing.JButton clearBtn;
578
           private javax.swing.JButton deletebtn;
           private javax.swing.JTextField gametxt;
579
580
           private javax.swing.JTextField genretxt;
581
           private javax.swing.JTextField hpricetxt;
582
           private javax.swing.JLabel jLabel1;
583
           private javax.swing.JLabel jLabel2;
584
           private javax.swing.JLabel jLabel3;
585
           private javax.swing.JLabel jLabel4;
586
           private javax.swing.JLabel jLabel5;
587
           private javax.swing.JLabel jLabel6;
588
           private javax.swing.JLabel jLabel7;
589
           private javax.swing.JOptionPane jOptionPane1;
590
           private javax.swing.JPanel jPanel1;
591
           private javax.swing.JScrollPane jScrollPane1;
592
           private javax.swing.JSeparator jSeparator1;
```

```
593
           private javax.swing.JSeparator jSeparator2;
594
           private javax.swing.JSeparator jSeparator3;
595
           private javax.swing.JTextField lpricetxt;
596
           private javax.swing.JCheckBox pccb;
597
           private javax.swing.JCheckBox pscb;
598
           private javax.swing.JButton returnbtn;
599
           private javax.swing.JButton searchbtn;
600
           private javax.swing.JTable searchdb;
601
           private javax.swing.JTextField studiotxt;
602
           private javax.swing.JCheckBox xbcb;
           private javax.swing.JTextField yeartxt;
603
604
           // End of variables declaration
605
606
```

Add Update Records.java

```
1 - import java.awt.Color;
 2
      import java.sql.Connection;
 3
      import java.sql.DriverManager;
      import java.sql.Statement;
    import java.sql.ResultSet;
 5
 6
7
 8
      * To change this license header, choose License Headers in Project Properties.
 9
       * To change this template file, choose Tools | Templates
       * and open the template in the editor.
10
11
       */
12
13 ± /**...4 lines */
17
      public class Add Update Records extends javax.swing.JFrame {
18
19
          /** Creates new form add delete update ...3 lines */
20 +
23 =
          public Add Update Records() {
24
              initComponents();
              clrbtn.doClick();
25
Q.
              PopulateScreen();
₩.
              this.getContentPane().setBackground(Color.BLACK);
28
29
30
  public void PopulateScreen() {
31
              if (DBApplication.sno == null)
32
33
                  gametxt.setText(null);
                  studiotxt.setText(null);
34
35
                  genretxt.setText(null);
36
                  yeartxt.setText(null);
37
                  pricetxt.setText(null);
38
                  xbcb.setSelected(false);
39
                  pscb.setSelected(false);
40
                  pccb.setSelected(false);
41
                  gametxt.requestFocus();
42
43
                  // User is trying to perform an Add operation so hide
                  // the Update Btn and shown Add Btn
44
                  updatebtn.setVisible(false);
45
                  addbtn.setVisible(true);
46
47
                  this.setTitle("Game Store - Add Game");
48
49
              else
50
                  // User is trying to perform an Update operation so hide
51
                  // Add Btn and shown Update Btn
52
53
                  updatebtn.setVisible(true);
                  addbtn.setVisible(false);
54
```

```
55
                   this.setTitle("Game Store - Update Game");
56
57
                   try
58
                        String query = "Select * from games natural join platforms "
59
                                + "where sno = " + DBApplication.sno + ";";
60
61
 Q.
                        Connection con = DriverManager.getConnection(
                                "jdbc:mysql://localhost/ipproject", "root", "mysql2016");
63
64
                        Statement stmt=con.createStatement();
65
                        ResultSet rs=stmt.executeQuery(query);
66
67
                        while (rs.next())
68
69
                            gametxt.setText(rs.getString("Game Name"));
70
                            studiotxt.setText(rs.getString("Studio"));
71
                            genretxt.setText(rs.getString("Genre"));
72
                            yeartxt.setText(rs.getString("Release Year"));
                            pricetxt.setText(rs.getString("Price"));
73
74
                            String eight = rs.getString("Xbox one");
75
                            String nine = rs.getString("PS4");
76
                            String ten = rs.getString("PC");
77
78
                            if(eight.equals("Y"))
79
                                xbcb.setSelected(true);
80
                            else
81
                                xbcb.setSelected(false);
82
                            if(nine.equals("Y"))
83
                                pscb.setSelected(true);
84
                            else
85
                                pscb.setSelected(false);
                            if(ten.equals("Y"))
86
87
                                pccb.setSelected(true);
88
89
                                pccb.setSelected(false);
90
91
                        rs.close();
92
                        stmt.close();
93
                        con.close();
94
95
                   catch (Exception e)
96
 <u>@</u>
                        jOptionPane1.showMessageDialog(this, "Error in table Deletion");
98
99
100
101 +
           /** This method is called from within the constructor to initialize the form
106
           @SuppressWarnings("unchecked")
107
           Generated Code
```

```
107 +
           Generated Code
262
           private void gametxtActionPerformed(java.awt.event.ActionEvent evt) {
263 -
               // TODO add your handling code here:
264
265
266
267
    private void yeartxtActionPerformed(java.awt.event.ActionEvent evt) {
268
               // TODO add your handling code here:
269
270
271
           private void updatebtnActionPerformed(java.awt.event.ActionEvent evt) {
272
273
           {
274
              String gname = gametxt.getText();
275
              String studio = studiotxt.getText();
276
              String genre = genretxt.getText();
277
              String year = yeartxt.getText();
278
              String price = pricetxt.getText();
279
              String query;
280
281
              // Let's check to make sure none of the fields are left empty by the user
              if (gname.equals("") || studio.equals("") || genre.equals("") ||
282
283
                      year.equals("") || price.equals("")) {
 <u>Q</u>
                  jOptionPane1.showMessageDialog(this, "Please do not leave any field"
285
                           + " empty for update to succeed");
286
                  return;
287
              3
288
              Class.forName("java.sql.Driver");
289
290
              Connection con=DriverManager.getConnection(
291
                      "jdbc:mysql://localhost/ipproject", "root", "mysql2016");
292
              Statement stmt = con.createStatement();
293
294
              if(xbcb.isSelected() == true){
295
                  if(pscb.isSelected() == true){
296
                      if(pccb.isSelected() == true)
297
                           query = "update games set Platform Type = \"ALL\" "
298
                                   + "where sno = " + DBApplication.sno + ";";
299
                       else
300
                           query = "update games set Platform Type = \"XBPS\" "
                                  + "where sno = " + DBApplication.sno + ";";
301
302
                  3
303
                  else{
304
                       if(pccb.isSelected() == true)
305
                           query = "update games set Platform Type = \"XBPC\" "
                                   + "where sno = " + DBApplication.sno + ";";
306
307
                      else
308
                           query = "update games set Platform Type = \"XBE\" "
309
                                   + "where sno = " + DBApplication.sno + ";";
```

```
310
311
              }
312
              else{
313
               if(pscb.isSelected() == true){
314
                       if(pccb.isSelected() == true)
315
                           query = "update games set Platform Type = \"PSPC\" "
316
                                  + "where sno = " + DBApplication.sno + ";";
317
                       else
318
                           query = "update games set Platform Type = \"PSE\" "
319
                                 + "where sno = " + DBApplication.sno + ";";
320
321
                  else{
322
                       if(pccb.isSelected() == true)
323
                           query = "update games set Platform Type = \"PCE\" "
324
                                  + "where sno = " + DBApplication.sno + ";";
325
                       else{
 ₩
                           jOptionPanel.showMessageDialog(this, "Do not leave Platform "
327
                                   + "field empty for update to succeed");
328
                           return;
329
                       3
330
331
332
              stmt.executeUpdate(query);
333
              query = "update games set Game Name = \"" + gname + "\" where "
334
                      + "sno = " + DBApplication.sno + ";";
335
336
              stmt.executeUpdate(query);
337
              query = "update games set Studio = \"" + studio + "\" where "
338
                       + "sno = " + DBApplication.sno + ";";
339
              stmt.executeUpdate(query);
340
341
              query = "update games set Genre = \"" + genre + "\" where "
342
343
                      + "sno = " + DBApplication.sno + ";";
344
              stmt.executeUpdate(query);
345
              query = "update games set Release Year = " + year + " where "
346
347
                      + "sno = " + DBApplication.sno + ";";
348
              stmt.executeUpdate(query);
349
              query = "update games set Price = " + price + " where "
350
                      + "sno = " + DBApplication.sno + ";";
351
352
              stmt.executeUpdate(query);
353
              jOptionPanel.showMessageDialog(this, "Record Successfully Updated");
 ₩
355
           catch(Exception e) {
             jOptionPane1.showMessageDialog(this, "Error in updating record");
358
359
360
```

```
361
           private void clrbtnActionPerformed(java.awt.event.ActionEvent evt) {
362
               gametxt.setText(null);
363
               studiotxt.setText(null);
364
               genretxt.setText(null);
365
               yeartxt.setText(null);
366
               pricetxt.setText(null);
367
               xbcb.setSelected(false);
368
               pscb.setSelected(false);
369
               pccb.setSelected(false);
370
               gametxt.requestFocus();
371
372
373
           private void returnbtnActionPerformed(java.awt.event.ActionEvent evt) {
374
               if (DBApplication.searchDB == null)
375
                       DBApplication.searchDB = new Search Add Update();
376
377
               DBApplication.searchDB.doSearch();
378
               DBApplication.searchDB.setVisible(true);
379
               this.setVisible(false);
380
381
382 -
           private void addbtnActionPerformed(java.awt.event.ActionEvent evt) {
383
           try
384
385
              Class.forName("java.sql.Driver");
              Connection con=DriverManager.getConnection(
386
387
                      "jdbc:mysql://localhost/ipproject", "root", "mysql2016");
388
              Statement stmt = con.createStatement();
389
390
              String sql = "select max(Sno)+1 from games;";
391
              ResultSet rs = stmt.executeQuery(sql);
392
              rs.next():
393
              String str = rs.getString("max(Sno)+1");
394
395
              String gname = gametxt.getText();
              String studio = studiotxt.getText();
396
397
              String genre = genretxt.getText();
398
              String year = yeartxt.getText();
399
              String price = pricetxt.getText();
              String platform = "";
 Q.
401
402
              if(xbcb.isSelected() == true){
403
                  if(pscb.isSelected() == true){
404
                      if(pccb.isSelected() == true)
405
                           platform = "ALL";
406
407
                           platform = "XBPS";
408
409
                  else{
```

```
410
                      if(pccb.isSelected() == true)
411
                          platform = "XBPC";
412
                      else
413
                       platform = "XBE";
414
415
              } else {
416
                   if(pscb.isSelected() == true){
417
                      if(pccb.isSelected() == true)
418
                          platform = "PSPC";
419
                      else
420
                          platform = "PSE";
                  } else {
421
422
                      if(pccb.isSelected() == true)
423
                         platform = "PCE";
424
                      else
425
                      platform = "ALL";
426
427
              }
428
              String query = "insert into games values (" + str + ", \"" + gname +
429
                      "\", \"" + studio + "\", \"" + genre + "\", " + year + ", " +
430
431
                      price + " , \"" + platform + "\");";
432
              stmt.executeUpdate(query);
             jOptionPane1.showMessageDialog(this, "Record successfully added");
 <u>Q</u>
434
           catch(Exception e) {
 Q.
             jOptionPanel.showMessageDialog(this, "Error in adding record");
437
438
439
440 =
441
            * @param args the command line arguments
442
443 -
           public static void main(String args[]) {
444
               /* Set the Nimbus look and feel */
               Look and feel setting code (optional)
445 🛨
466
               //</editor-fold>
467
               //</editor-fold>
468
               //</editor-fold>
469
470
               /* Create and display the form */
               java.awt.EventQueue.invokeLater(new Runnable() {
 ₩.
   阜
₩.
                   public void run() {
473
                      new Add Update Records().setVisible(true);
474
475
               });
476
477
```

```
478
           // Variables declaration - do not modify
479
           private javax.swing.JButton addbtn;
480
           private javax.swing.JButton clrbtn;
481
           private javax.swing.JTextField gametxt;
482
           private javax.swing.JTextField genretxt;
483
           private javax.swing.JLabel jLabel1;
484
           private javax.swing.JLabel jLabel2;
485
           private javax.swing.JLabel jLabel3;
486
           private javax.swing.JLabel jLabel4;
487
           private javax.swing.JLabel jLabel5;
488
           private javax.swing.JOptionPane jOptionPane1;
489
           private javax.swing.JPanel jPanel1;
490
           private javax.swing.JSeparator jSeparator1;
           private javax.swing.JSeparator jSeparator2;
491
492
           private javax.swing.JCheckBox pccb;
493
           private javax.swing.JTextField pricetxt;
494
           private javax.swing.JCheckBox pscb;
495
           private javax.swing.JButton returnbtn;
496
           private javax.swing.JTextField studiotxt;
           private javax.swing.JButton updatebtn;
497
498
           private javax.swing.JCheckBox xbcb;
499
           private javax.swing.JTextField yeartxt;
500
           // End of variables declaration
501
502
```

BIBLIOGRAPHY

- Informatics Practices by Sumita Arora
- Move Fast with IP By Sumita Arora
- Internet
 - o http://stackoverflow.com/