

Laptop.cs

The screenshot displays the Microsoft Visual Studio IDE with the following components:

- File Explorer:** Shows the project structure with 'LaptopManagement' as the active solution.
- Code Editor:** Contains the 'Laptop.cs' file with the following code:

```
1 using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Text;
5 using System.Threading.Tasks;
6 using System.Windows.Forms;
7 using System.IO;
8
9 namespace LaptopManagement
10 {
11     public class Laptop
12     {
13         public string LaptopID { get; set; }
14         public string LaptopName { get; set; }
15         public string LaptopType { get; set; }
16         public DateTime ProductDate { get; set; }
17         public string Processor { get; set; }
18         public string HDD { get; set; }
19         public string RAM { get; set; }
20         public int Price { get; set; }
21         public string Avatar { get; set; }
22
23         public Laptop()
24         {
25             LaptopID = "Not Assigned";
26             LaptopName = "Not Assigned";
27         }
28     }
29 }
```
- Output Window:** Displays the message: "The program '[4732] LaptopManagement.exe' has exited with code 0 (0x0)."
- Taskbar:** Shows the Windows taskbar with various application icons and the system clock indicating 9:53 PM on ENG.

Form1.cs

The screenshot displays the Microsoft Visual Studio IDE with the following components:

- File Explorer:** Shows the project structure with folders for 'LaptopManagement' and 'LaptopManagement.LaptopManagementForm', and files for 'Form1.cs', 'Laptop.cs', and 'Program.cs'.
- Code Editor:** Contains the following C# code for Form1.cs:

```
1 using System;
2 using System.Collections.Generic;
3 using System.ComponentModel;
4 using System.Data;
5 using System.Drawing;
6 using System.Linq;
7 using System.Text;
8 using System.Threading.Tasks;
9 using System.Windows.Forms;
10 using System.IO;
11 using Excel = Microsoft.Office.Interop.Excel;
12 using System.Globalization;
13 using System.Data.SqlClient;
14
15 namespace LaptopManagement
16 {
17     public partial class LaptopManagementForm : Form
18     {
19         public List<Laptop> LList = new List<Laptop>();
20
21         public int loadData = 0;
22         static string ProjectPath = Directory.GetParent(Directory.GetCurrentDirectory()).Parent.FullName;
23         string ExcelFilePath = ProjectPath + "\\Data\\LaptopList.xlsx";
24         string connetionString = "Data Source=DESKTOP-37M40PJ\\SQLEXPRESS;Initial Catalog = LaptopDB; Integrated Security=SSPI";
25         int CurrentLaptopIndex = -1;
26         DataTable datatable;
27         BindingSource binding = new BindingSource();
28
29         public LaptopManagementForm()
```
- Output Window:** Displays the message: "The program '[4732] LaptopManagement.exe' has exited with code 0 (0x0)."
- Taskbar:** Shows the Windows taskbar with various application icons and the system clock indicating 9:02 PM.

LaptopManagement - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Test Analyze Window Help

Debug Any CPU Start

Form1.cs LaptopManagement LaptopManagement.LaptopManagementForm LList Program.cs

```
29 public LaptopManagementForm()
30 {
31     InitializeComponent();
32 }
33
34 private void btnLoadExcel_Click(object sender, EventArgs e)
35 {
36     loadData = 1;
37     datatable = new DataTable();
38     LList.Clear();
39
40     int colCount = 9;
41     int NumDataRow = ReadDataFromFile(LList, ExcelFilePath, colCount);
42
43     var sublist = LList.Select(x => new
44     {
45         LaptopID = x.LaptopID,
46         LaptopName = x.LaptopName,
47         LaptopType = x.LaptopType,
48         ProductDate = x.ProductDate.ToString("dd/MM/yyyy"),
49         Processor = x.Processor,
50         HDD = x.HDD,
51         RAM = x.RAM,
52         Price = x.Price.ToString() + " VND"
53     }).ToList();
54
55     datatable.Columns.Add("LaptopID");
56     datatable.Columns.Add("LaptopName");
57     datatable.Columns.Add("LaptopType");
```

108 %

Output

Show output from: Debug

The program '[4732] LaptopManagement.exe' has exited with code 0 (0x0).

C# Interactive (64-bit) Error List Output

Ready Ln 14 Col 1 Ch 1 INS

Add to Source Control

A/C ENG 9:02 PM

Solution Explorer

- LaptopManagement
 - Form1.cs
 - Laptop.cs
 - Program.cs

Properties

LaptopManagement - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Test Analyze Window Help

Debug Any CPU Start

Form1.cs x

LaptopManagement LaptopManagement.LaptopManagementForm LLList

```
56 datatable.Columns.Add("LaptopName");
57 datatable.Columns.Add("LaptopType");
58 datatable.Columns.Add("ProductDate");
59 datatable.Columns.Add("Processor");
60 datatable.Columns.Add("HDD");
61 datatable.Columns.Add("RAM");
62 datatable.Columns.Add("Price");
63
64 DataRow newrow;
65 foreach (var h in sublist)
66 {
67     newrow = datatable.NewRow();
68     newrow["LaptopID"] = h.LaptopID;
69     newrow["LaptopName"] = h.LaptopName;
70     newrow["LaptopType"] = h.LaptopType;
71     newrow["ProductDate"] = h.ProductDate;
72     newrow["Processor"] = h.Processor;
73     newrow["HDD"] = h.HDD;
74     newrow["RAM"] = h.RAM;
75     newrow["Price"] = h.Price;
76     datatable.Rows.Add(newrow);
77     datatable.AcceptChanges();
78 }
79
80 binding.AllowNew = true;
81 binding.DataSource = datatable;
82 dgvLapList.AutoGenerateColumns = false;
83 dgvLapList.DataSource = binding;
84 }
```

108 %

Output

Show output from: Debug

The program '[4732] LaptopManagement.exe' has exited with code 0 (0x0).

C# Interactive (64-bit) Error List Output

Ready Ln 14 Col 1 Ch 1 INS

Add to Source Control

A/C

ENG 9:03 PM

Solution Explorer

Search Solution Explorer

Solution 'LaptopManagement'

- LaptopManagement
 - Properties
 - References
 - App.config
 - Form1.cs
 - Laptop.cs
 - Program.cs

Properties

LaptopManagement - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Test Analyze Window Help

Debug Any CPU Start

Form1.cs LaptopManagement LaptopManagement.LaptopManagementForm LList Program.cs

```
86 public int ReadDataFromFile(List<Laptop> DataList, string FilePath, int colCount)
87 {
88     Excel.Application xlApp = new Excel.Application();
89     Excel.Workbook xlWorkbook = xlApp.Workbooks.Open(FilePath);
90     Excel._Worksheet xlWorksheet = xlWorkbook.Sheets[1];
91     Excel.Range xlRange = xlWorksheet.UsedRange;
92
93     xlWorksheet.Columns.ClearFormats();
94     xlWorksheet.Rows.ClearFormats();
95
96     int rowCount = xlWorksheet.UsedRange.Rows.Count;
97
98     int numLaptop = 0;
99     string LaptopID = "";
100     string LaptopName = "";
101     string LaptopType = "";
102     DateTime ProductDate = DateTime.Now;
103     string Processor = "";
104     string HDD = "";
105     string RAM = "";
106     int Price = 0;
107     string Avatar = "";
108
109     for (int i = 2; i <= rowCount; i++)
110     {
111         for (int j = 1; j <= colCount; j++)
112         {
113             switch (j)
114             {
```

108 %

Output

Show output from: Debug

The program '[4732] LaptopManagement.exe' has exited with code 0 (0x0).

C# Interactive (64-bit) Error List Output

Ready Ln 14 Col 1 Ch 1 INS

Add to Source Control

A/C

ENG 9:03 PM

Solution Explorer

Search Solution Explorer

Solution 'LaptopManagement'

- LaptopManagement
 - Properties
 - References
 - App.config
 - Form1.cs
 - Laptop.cs
 - Program.cs

Properties

LaptopManagement - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Test Analyze Window Help

Debug Any CPU Start

Form1.cs LaptopManagement LaptopManagement.LaptopManagementForm LList Program.cs

```
109 for (int i = 2; i <= rowCount; i++)
110 {
111     for (int j = 1; j <= colCount; j++)
112     {
113         switch (j)
114         {
115             case 1:
116                 LaptopID = xlRange.Cells[i, j].Value2.ToString();
117                 break;
118             case 2:
119                 LaptopName = xlRange.Cells[i, j].Value2.ToString();
120                 break;
121             case 3:
122                 LaptopType = xlRange.Cells[i, j].Value2.ToString();
123                 break;
124             case 4:
125                 ProductDate = DateTime.ParseExact(xlRange.Cells[i, j].Value2.ToString(),
126                                                     "dd/MM/yyyy", CultureInfo.InvariantCulture);
127                 break;
128             case 5:
129                 Processor = xlRange.Cells[i, j].Value2.ToString();
130                 break;
131             case 6:
132                 HDD = xlRange.Cells[i, j].Value2.ToString();
133                 break;
134             case 7:
135                 RAM = xlRange.Cells[i, j].Value2.ToString();
136                 break;
137             case 8:
```

108 %

Output

Show output from: Debug

The program '[4732] LaptopManagement.exe' has exited with code 0 (0x0).

C# Interactive (64-bit) Error List Output

Ready Ln 14 Col 1 Ch 1 INS

Add to Source Control

A/C

ENG 9:04 PM

Solution Explorer

Search Solution Explorer

Solution 'LaptopManagement'

- LaptopManagement
 - Properties
 - References
 - App.config
 - Form1.cs
 - Laptop.cs
 - Program.cs

Properties

LaptopManagement - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Test Analyze Window Help

Debug Any CPU Start

Form1.cs x

LaptopManagement LaptopManagement.LaptopManagementForm LList

```
137
138         case 8:
139             Price = Convert.ToInt32(xlRange.Cells[i, j].Value2.ToString());
140             break;
141         case 9:
142             Avatar = xlRange.Cells[i, j].Value2.ToString();
143             break;
144     }
145     DataList.Add(new Laptop());
146     DataList[numLaptop].LaptopID = LaptopID;
147     DataList[numLaptop].LaptopName = LaptopName;
148     DataList[numLaptop].LaptopType = LaptopType;
149     DataList[numLaptop].ProductDate = ProductDate;
150     DataList[numLaptop].Processor = Processor;
151     DataList[numLaptop].HDD = HDD;
152     DataList[numLaptop].RAM = RAM;
153     DataList[numLaptop].Price = Price;
154     DataList[numLaptop].Avatar = Avatar;
155     numLaptop = numLaptop + 1;
156 }
157
158 xlApp.Quit();
159
160 MessageBox.Show("Load Data From Excel Done! : " + (rowCount - 1).ToString() + " Records");
161
162 return (rowCount - 1);
163 }
164
165 private void dgvLapList_CellContentClick(object sender, EventArgs e)
```

108 %

Output

Show output from: Debug

The program '[4732] LaptopManagement.exe' has exited with code 0 (0x0).

C# Interactive (64-bit) Error List Output

Ready Ln 14 Col 1 Ch 1 INS

Add to Source Control

A/C

ENG 9:04 PM

Solution Explorer

Search Solution Explorer

Solution 'LaptopManagement'

- LaptopManagement
 - Form1.cs
 - Laptop.cs
 - Program.cs

Properties

LaptopManagement - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Test Analyze Window Help

Debug Any CPU Start

Form1.cs x

LaptopManagement LaptopManagement.LaptopManagementForm btnLoadSQL_Click(object sender, EventArgs e)

```
165 private void dgvLapList_CellContentClick(object sender, EventArgs e)
166 {
167 }
168 }
169
170 private void btnLoadSQL_Click(object sender, EventArgs e)
171 {
172     loadData = 2;
173     datatable = new DataTable();
174     LList.Clear();
175
176     int NumDataRow = ReadDataFromSQLServer(LList, connetionString);
177
178     var sublist = LList.Select(x => new
179     {
180         LaptopID = x.LaptopID,
181         LaptopName = x.LaptopName,
182         LaptopType = x.LaptopType,
183         ProductDate = x.ProductDate.ToString("dd/MM/yyyy"),
184         Processor = x.Processor,
185         HDD = x.HDD,
186         RAM = x.RAM,
187         Price = x.Price.ToString() + "VND"
188     }).ToList();
189
190     datatable.Columns.Add("LaptopID");
191     datatable.Columns.Add("LaptopName");
192     datatable.Columns.Add("LaptopType");
193     datatable.Columns.Add("ProductDate");
```

108 %

Output

Show output from: Debug

The program '[4732] LaptopManagement.exe' has exited with code 0 (0x0).

C# Interactive (64-bit) Error List Output

Ready Ln 169 Col 9 Ch 9 INS

Add to Source Control

A/C

ENG 9:29 PM

Solution Explorer

Search Solution Explorer

Solution 'LaptopManagement'

- LaptopManagement
 - Properties
 - References
 - App.config
 - Form1.cs
 - Laptop.cs
 - Program.cs

Properties

LaptopManagement - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Test Analyze Window Help

Debug Any CPU Start

Form1.cs x

LaptopManagement LaptopManagement.LaptopManagementForm btnLoadSQL_Click(object sender, EventArgs e)

```
192 datatable.Columns.Add("LaptopType");
193 datatable.Columns.Add("ProductDate");
194 datatable.Columns.Add("Processor");
195 datatable.Columns.Add("HDD");
196 datatable.Columns.Add("RAM");
197 datatable.Columns.Add("Price");
198
199 DataRow newrow;
200 foreach (var h in sublist)
201 {
202     newrow = datatable.NewRow();
203     newrow["LaptopID"] = h.LaptopID;
204     newrow["LaptopName"] = h.LaptopName;
205     newrow["LaptopType"] = h.LaptopType;
206     newrow["ProductDate"] = h.ProductDate;
207     newrow["Processor"] = h.Processor;
208     newrow["HDD"] = h.HDD;
209     newrow["RAM"] = h.RAM;
210     newrow["Price"] = h.Price;
211     datatable.Rows.Add(newrow);
212     datatable.AcceptChanges();
213 }
214
215 binding.AllowNew = true;
216 binding.DataSource = datatable;
217 dgvLapList.AutoGenerateColumns = false;
218 dgvLapList.DataSource = binding;
219
220
```

Program.cs x

Solution Explorer

Search Solution Explorer

Solution 'LaptopManagement'

- LaptopManagement
 - Form1.cs
 - Laptop.cs
 - Program.cs

Properties

108 %

Output

Show output from: Debug

The program '[4732] LaptopManagement.exe' has exited with code 0 (0x0).

C# Interactive (64-bit) Error List Output

Ready Ln 169 Col 9 Ch 9 INS

Add to Source Control

A/C

ENG 9:30 PM

LaptopManagement - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Test Analyze Window Help

Debug Any CPU Start

Form1.cs x LaptopManagement LaptopManagement.LaptopManagementForm btnLoadSQL_Click(object sender, EventArgs e)

```
221 public int ReadDataFromSQLServer(List<Laptop> DataList, string connectionString)
222 {
223     SqlConnection cnn;
224     cnn = new SqlConnection(connectionString);
225     int iRow = 0;
226     int NumRecords = 0;
227
228     try
229     {
230         cnn.Open();
231         Console.WriteLine("Connection Open !");
232
233         string SqlString = @"SELECT
234                             LaptopID,
235                             LaptopName,
236                             LaptopType,
237                             ProductDate = Convert(varchar(10),CONVERT(date,ProductDate,106),103),
238                             Processor,
239                             HDD,
240                             RAM,
241                             Price,
242                             ImageName
243                             FROM Laptop";
244
245         using (var command = new SqlCommand(SqlString, cnn))
246         {
247             using (var reader = command.ExecuteReader())
248             {
249                 while (reader.Read())
```

108 %

Output

Show output from: Debug

The program '[4732] LaptopManagement.exe' has exited with code 0 (0x0).

C# Interactive (64-bit) Error List Output

Ready Ln 169 Col 9 Ch 9 INS

Add to Source Control

A/C

ENG 9:30 PM

Solution Explorer

Search Solution Explorer

Solution 'LaptopManagement'

- LaptopManagement
 - Properties
 - References
 - App.config
 - Form1.cs
 - Laptop.cs
 - Program.cs

Properties

LaptopManagement - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Test Analyze Window Help

Debug Any CPU Start

Form1.cs x

LaptopManagement LaptopManagement.LaptopManagementForm btnLoadSQL_Click(object sender, EventArgs e)

```
245 using (var command = new SqlCommand(SqlString, cnn))
246 {
247     using (var reader = command.ExecuteReader())
248     {
249         while (reader.Read())
250         {
251             LList.Add(new Laptop());
252             LList[iRow].LaptopID = reader.GetString(0);
253             LList[iRow].LaptopName = reader.GetString(1);
254             LList[iRow].LaptopType = reader.GetString(2);
255             LList[iRow].ProductDate = DateTime.ParseExact(reader.GetString(3), "dd/MM/yyyy", CultureInfo.InvariantCulture);
256             LList[iRow].Processor = reader.GetString(4);
257             LList[iRow].HDD = reader.GetString(5);
258             LList[iRow].RAM = reader.GetString(6);
259             LList[iRow].Price = reader.GetInt32(7);
260             LList[iRow].Avatar = reader.GetString(8);
261
262             iRow = iRow + 1;
263         }
264     }
265 }
266
267 SqlCommand cmd = new SqlCommand("select count(*) from Laptop", cnn);
268 object result = cmd.ExecuteScalar();
269 NumRecords = int.Parse(result.ToString());
270
271 MessageBox.Show("Finish Load Data Frome SQL: " + NumRecords.ToString() + "Records");
272 cnn.Close();
273 }
```

108 %

Output

Show output from: Debug

The program '[4732] LaptopManagement.exe' has exited with code 0 (0x0).

C# Interactive (64-bit) Error List Output

Ready Ln 169 Col 9 Ch 9 INS

Add to Source Control

A/C

ENG 9:30 PM

Solution Explorer

Search Solution Explorer

Solution 'LaptopManagement'

- LaptopManagement
 - Properties
 - References
 - App.config
 - Form1.cs
 - Laptop.cs
 - Program.cs

Properties

LaptopManagement - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Test Analyze Window Help

Debug Any CPU Start

Form1.cs LaptopManagement LaptopManagement.LaptopManagementForm ReadDataFromSQLServer(List<Laptop> DataList, string connectionString)

```
275         catch (SqlException ex)
276         {
277             MessageBox.Show("Can not open connection ! : " + ex.Message);
278         }
279         return NumRecords;
280     }
281
282     private void dgvLapList_EditingControlShowing(object sender, DataGridViewEditingControlShowingEventArgs e)
283     {
284         e.Control.KeyPress -= new KeyPressEventHandler(ColumnPrice_KeyPress);
285         if (dgvLapList.CurrentCell.ColumnIndex == 7)
286         {
287             TextBox tb = e.Control as TextBox;
288             if (tb != null)
289             {
290                 tb.KeyPress += new KeyPressEventHandler(ColumnPrice_KeyPress);
291             }
292         }
293     }
294
295     private void ColumnPrice_KeyPress(object sender, KeyPressEventArgs e)
296     {
297         if (!char.IsControl(e.KeyChar) && !char.IsDigit(e.KeyChar)){
298             e.Handled = true;
299         }
300     }
301
302     private void btnAdd_Click(object sender, EventArgs e)
303     {
```

108 %

Output

Show output from: Debug

The program '[4732] LaptopManagement.exe' has exited with code 0 (0x0).

C# Interactive (64-bit) Error List Output

Ready Ln 266 Col 17 Ch 17 INS

Add to Source Control

A/C

ENG 9:31 PM

Solution Explorer

- Solution 'LaptopManagement'
- LaptopManagement
 - Properties
 - References
 - App.config
 - Form1.cs
 - Laptop.cs
 - Program.cs

Diagnostic Tools

Search Solution Explorer

Properties

LaptopManagement - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Test Analyze Window Help

Debug Any CPU Start

Form1.cs x Program.cs x

LaptopManagement LaptopManagement.LaptopManagementForm ReadDataFromSqlServer(List<Laptop> DataList, string connectionString)

```
302 private void btnAdd_Click(object sender, EventArgs e)
303 {
304     Laptop l = new Laptop();
305     l.LaptopID = "Not Assigned";
306     l.LaptopName = "Not Assigned";
307     l.LaptopType = "Not Assigned";
308     l.ProductDate = DateTime.ParseExact("01/01/1900", "dd/MM/yyyy", CultureInfo.InvariantCulture);
309     l.Processor = "Not Assigned";
310     l.HDD = "Not Assigned";
311     l.RAM = "Not Assigned";
312     l.Price = 0;
313     l.Avatar = "laptop.jpg";
314     LList.Add(l);
315
316     DataRow newrow;
317     newrow = datatable.NewRow();
318     newrow["LaptopID"] = l.LaptopID;
319     newrow["LaptopName"] = l.LaptopName;
320     newrow["LaptopType"] = l.LaptopType;
321     newrow["ProductDate"] = l.ProductDate;
322     newrow["Processor"] = l.Processor;
323     newrow["HDD"] = l.HDD;
324     newrow["RAM"] = l.RAM;
325     newrow["Price"] = l.Price.ToString() + "VND";
326     datatable.Rows.Add(newrow);
327     datatable.AcceptChanges();
328
329     MessageBox.Show("Finish Adding");
330 }
```

108 %

Output

Show output from: Debug

The program '[4732] LaptopManagement.exe' has exited with code 0 (0x0).

C# Interactive (64-bit) Error List Output

Ready Ln 266 Col 17 Ch 17 INS

Add to Source Control

A/C

ENG 9:32 PM

Solution Explorer

Search Solution Explorer

Solution 'LaptopManagement'

- LaptopManagement
 - Properties
 - References
 - App.config
 - Form1.cs
 - Laptop.cs
 - Program.cs

Properties

LaptopManagement - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Test Analyze Window Help

Debug Any CPU Start

Form1.cs LaptopManagement LaptopManagement.LaptopManagementForm ReadDataFromSqlServer(List<Laptop> DataList, string connectionString)

```
329     MessageBox.Show("Finish Adding");
330 }
331
332
333 private void btnDelete_Click(object sender, EventArgs e)
334 {
335     Laptop l;
336     if (CurrentLaptopIndex >= 0)
337         l = LList[CurrentLaptopIndex];
338     else
339         return;
340
341     string question = "Do You Want to delete Laptop:" + l.LaptopID;
342     DialogResult result = MessageBox.Show(question, "Delete", MessageBoxButtons.YesNo, MessageBoxIcon.Question);
343     if (result == DialogResult.Yes)
344     {
345         LList.RemoveAt(CurrentLaptopIndex);
346         binding.RemoveAt(CurrentLaptopIndex);
347     }
348     MessageBox.Show("Finish Delete");
349 }
350
351 private void btnUpdate_Click(object sender, EventArgs e)
352 {
353     DataRow row;
354     for (int i = 0; i < datatable.Rows.Count; i++)
355     {
356         row = datatable.Rows[i];
357     }
358 }
```

108 %

Output

Show output from: Debug

The program '[4732] LaptopManagement.exe' has exited with code 0 (0x0).

C# Interactive (64-bit) Error List Output

Ready Ln 266 Col 17 Ch 17 INS

Add to Source Control

A/C

ENG 9:32 PM

Solution Explorer

Search Solution Explorer

Solution 'LaptopManagement'

- LaptopManagement
 - Properties
 - References
 - App.config
 - Form1.cs
 - Laptop.cs
 - Program.cs

Properties

LaptopManagement - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Test Analyze Window Help

Debug Any CPU Start

Form1.cs x

LaptopManagement LaptopManagement.LaptopManagementForm ReadDataFromSqlServer(List<Laptop> DataList, string connectionString)

```
351 private void btnUpdate_Click(object sender, EventArgs e)
352 {
353     DataRow row;
354     for (int i = 0; i < datatable.Rows.Count; i++)
355     {
356         row = datatable.Rows[i];
357
358         LList[i].LaptopID = row["LaptopID"].ToString();
359         LList[i].LaptopName = row["LaptopName"].ToString();
360         LList[i].LaptopType = row["LaptopType"].ToString();
361         LList[i].ProductDate = DateTime.ParseExact(row["ProductDate"].ToString(), "dd/MM/yyyy", CultureInfo.InvariantCulture);
362         LList[i].Processor = row["Processor"].ToString();
363         LList[i].HDD = row["HDD"].ToString();
364         LList[i].RAM = row["RAM"].ToString();
365         string sPrice = row["Price"].ToString();
366         LList[i].Price = Convert.ToInt32(sPrice.Substring(0, sPrice.IndexOf("VND")));
367     }
368     MessageBox.Show("Finish Update");
369 }
370
371 private void btnUpdateSource_Click(object sender, EventArgs e)
372 {
373     if (loadData == 1)
374         WriteDataToExcelFile(LList, ExcelFilePath);
375     else
376         WriteDataToSqlServer(LList, connectionString);
377 }
378
379 public void WriteDataToExcelFile(List<Laptop> LList, string ExcelFilePath)
```

108 %

Output

Show output from: Debug

The program '[4732] LaptopManagement.exe' has exited with code 0 (0x0).

C# Interactive (64-bit) Error List Output

Ready Ln 266 Col 17 Ch 17 INS

Add to Source Control

A/C

ENG 9:33 PM

Solution Explorer

Search Solution Explorer

Solution 'LaptopManagement'

- LaptopManagement
 - Properties
 - References
 - App.config
 - Form1.cs
 - Laptop.cs
 - Program.cs

Properties

LaptopManagement - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Test Analyze Window Help

Debug Any CPU Start

Form1.cs x

LaptopManagement LaptopManagement.LaptopManagementForm ReadDataFromSQLServer(List<Laptop> DataList, string connectionString)

```
379 public void WriteDataToExcelFile(List<Laptop> LList, string ExcelFilePath)
380 {
381     Excel.Application xlApp = new Excel.Application();
382     Excel.Workbook xlWorkbook = xlApp.Workbooks.Open(ExcelFilePath);
383     Excel._Worksheet xlWorksheet = xlWorkbook.Sheets[1];
384
385     Excel.Range xlRange;
386     string[,] Data = new string[1, 10];
387
388     int idxRow = 2;
389     foreach (Laptop l in LList)
390     {
391         Data[0, 0] = l.LaptopID;
392         Data[0, 1] = l.LaptopName;
393         Data[0, 2] = l.LaptopType;
394         Data[0, 3] = l.ProductDate.ToString("dd/MM/yyyy", CultureInfo.InvariantCulture);
395         Data[0, 4] = l.Processor;
396         Data[0, 5] = l.HDD;
397         Data[0, 6] = l.RAM;
398         Data[0, 7] = l.Price.ToString();
399         Data[0, 8] = l.Avatar;
400
401         xlRange = xlWorksheet.get_Range("A" + idxRow.ToString(), "J" + idxRow.ToString());
402         xlRange.Value2 = Data;
403
404         idxRow = idxRow + 1;
405     }
406
407     xlWorkbook.Save();
```

108 %

Output

Show output from: Debug

The program '[4732] LaptopManagement.exe' has exited with code 0 (0x0).

C# Interactive (64-bit) Error List Output

Ready Ln 266 Col 17 Ch 17 INS Add to Source Control

A/C ENG 9:33 PM

Solution Explorer

Search Solution Explorer

Solution 'LaptopManagement'

- LaptopManagement
 - Properties
 - References
 - App.config
 - Form1.cs
 - Laptop.cs
 - Program.cs

Properties

LaptopManagement - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Test Analyze Window Help

Debug Any CPU Start

Form1.cs x Program.cs x

LaptopManagement LaptopManagement.LaptopManagementForm ReadDataFromSqlServer(List<Laptop> DataList, string connectionString)

```
407 xlWorkbook.Save();
408 xlWorkbook.Close();
409 xlApp.Quit();
410
411 MessageBox.Show("Finish Update to DataSource Excel");
412 }
413
414 public void WriteDataToSqlServer(List<Laptop> LList, string connetionString)
415 {
416     SqlConnection cnn;
417     SqlCommand myCommand = new SqlCommand();
418     string query;
419
420     cnn = new SqlConnection(connetionString);
421     try
422     {
423         cnn.Open();
424         Console.WriteLine("Connection Open !");
425
426         query = "TRUNCATE TABLE Laptop";
427         myCommand.CommandText = query;
428         myCommand.Connection = cnn;
429         myCommand.ExecuteNonQuery();
430
431         query = @"INSERT INTO Laptop(LaptopID,LaptopName,LaptopType,
432                                     ProductDate,Processor,HDD,RAM,Price,ImageName)";
433         query += @"VALUES (@LaptopID,@LaptopName,@LaptopType,
434                             @ProductDate,@Processor,@HDD,@RAM,@Price,@ImageName)";
435         myCommand.CommandText = query;
```

108 %

Output

Show output from: Debug

The program '[4732] LaptopManagement.exe' has exited with code 0 (0x0).

C# Interactive (64-bit) Error List Output

Ready Ln 266 Col 17 Ch 17 INS Add to Source Control

A/C ENG 9:34 PM

Solution Explorer

Search Solution Explorer

Solution 'LaptopManagement'

- LaptopManagement
 - Properties
 - References
 - App.config
 - Form1.cs
 - Laptop.cs
 - Program.cs

Properties

LaptopManagement - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Test Analyze Window Help

Debug Any CPU Start

Form1.cs x Program.cs x

LaptopManagement LaptopManagement.LaptopManagementForm ReadDataFromSQLServer(List<Laptop> DataList, string connectionString)

```
435 myCommand.CommandText = query;
436 myCommand.Connection = cnn;
437
438 myCommand.Parameters.Add(new SqlParameter("@LaptopID", SqlDbType.NVarChar));
439 myCommand.Parameters.Add(new SqlParameter("@LaptopName", SqlDbType.NVarChar));
440 myCommand.Parameters.Add(new SqlParameter("@LaptopType", SqlDbType.NVarChar));
441 myCommand.Parameters.Add(new SqlParameter("@ProductDate", SqlDbType.DateTime));
442 myCommand.Parameters.Add(new SqlParameter("@Processor", SqlDbType.NVarChar));
443 myCommand.Parameters.Add(new SqlParameter("@HDD", SqlDbType.NVarChar));
444 myCommand.Parameters.Add(new SqlParameter("@RAM", SqlDbType.NVarChar));
445 myCommand.Parameters.Add(new SqlParameter("@Price", SqlDbType.Int));
446 myCommand.Parameters.Add(new SqlParameter("@ImageName", SqlDbType.NVarChar));
447
448 foreach (Laptop l in LList)
449 {
450     myCommand.Parameters[0].Value = l.LaptopID;
451     myCommand.Parameters[1].Value = l.LaptopName;
452     myCommand.Parameters[2].Value = l.LaptopType;
453     myCommand.Parameters[3].Value = l.ProductDate.ToString("yyyy-MM-dd", CultureInfo.InvariantCulture);
454     myCommand.Parameters[4].Value = l.Processor;
455     myCommand.Parameters[5].Value = l.HDD;
456     myCommand.Parameters[6].Value = l.RAM;
457     myCommand.Parameters[7].Value = l.Price.ToString();
458     myCommand.Parameters[8].Value = l.Avatar;
459
460     myCommand.ExecuteNonQuery();
461 }
462 cnn.Close();
463
```

108 %

Output

Show output from: Debug

The program '[4732] LaptopManagement.exe' has exited with code 0 (0x0).

C# Interactive (64-bit) Error List Output

Ready Ln 266 Col 17 Ch 17 INS

Add to Source Control

A/C

ENG 9:34 PM

Solution Explorer

Search Solution Explorer

Solution 'LaptopManagement'

- LaptopManagement
 - Properties
 - References
 - App.config
 - Form1.cs
 - Laptop.cs
 - Program.cs

Properties

LaptopManagement - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Test Analyze Window Help

Debug Any CPU Start

Form1.cs LaptopManagement LaptopManagement.LaptopManagementForm ReadDataFromSQLServer(List<Laptop> DataList, string connectionString)

```
447
448     foreach (Laptop l in lList)
449     {
450         myCommand.Parameters[0].Value = l.LaptopID;
451         myCommand.Parameters[1].Value = l.LaptopName;
452         myCommand.Parameters[2].Value = l.LaptopType;
453         myCommand.Parameters[3].Value = l.ProductDate.ToString("yyyy-MM-dd", CultureInfo.InvariantCulture);
454         myCommand.Parameters[4].Value = l.Processor;
455         myCommand.Parameters[5].Value = l.HDD;
456         myCommand.Parameters[6].Value = l.RAM;
457         myCommand.Parameters[7].Value = l.Price.ToString();
458         myCommand.Parameters[8].Value = l.Avatar;
459
460         myCommand.ExecuteNonQuery();
461     }
462     cnn.Close();
463 }
464 catch (SqlException ex)
465 {
466     MessageBox.Show("Can not open connection ! " + ex.Message);
467 }
468 MessageBox.Show("Finish Update to DataSource SQL Server");
469 }
470
471
472
473
474
```

108 %

Output

Show output from: Debug

The program '[4732] LaptopManagement.exe' has exited with code 0 (0x0).

C# Interactive (64-bit) Error List Output

Ready Ln 266 Col 17 Ch 17 INS

Add to Source Control

A/C

ENG 9:35 PM

Solution Explorer

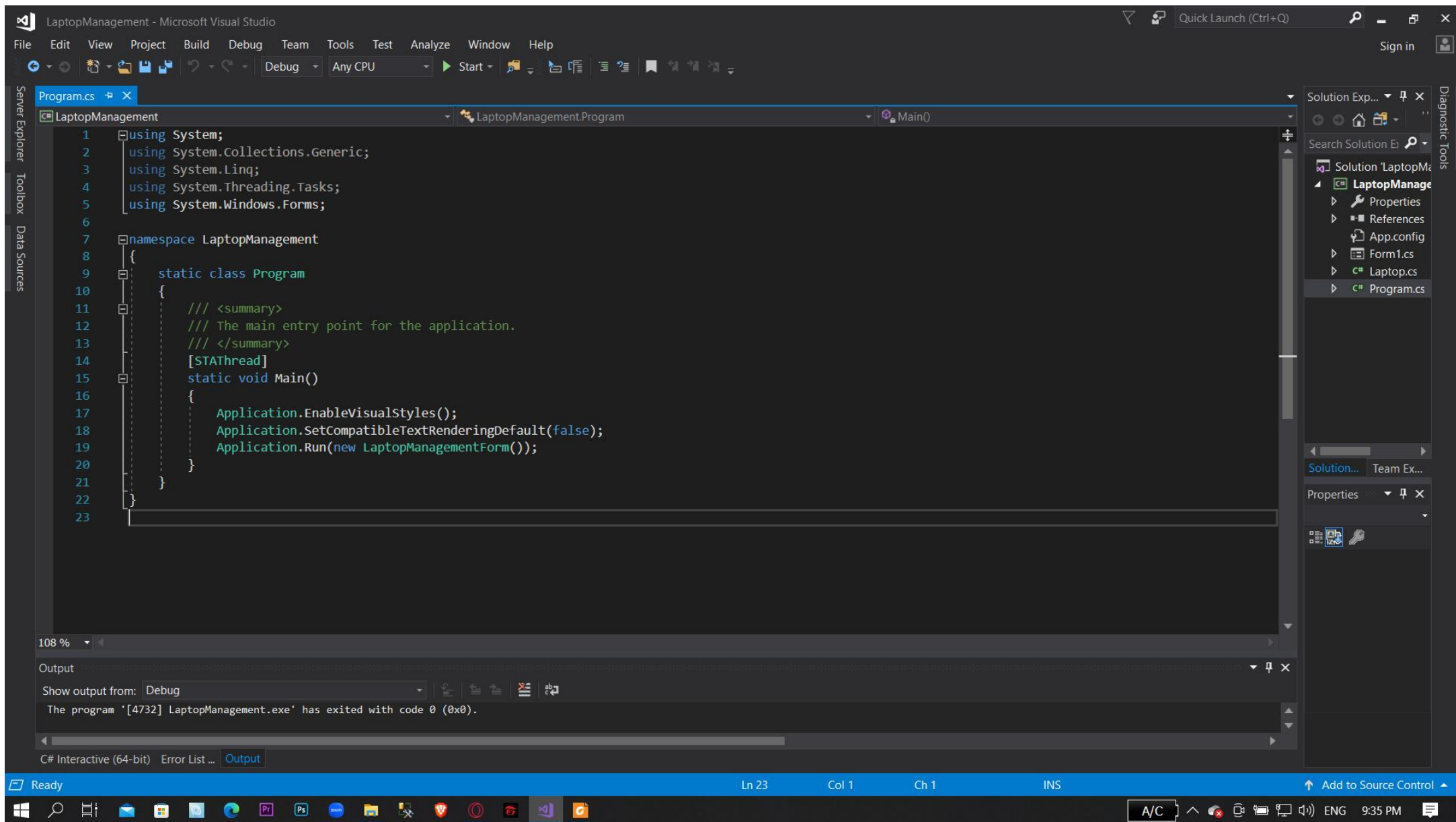
Search Solution Explorer

Solution 'LaptopManagement'

- LaptopManagement
 - Form1.cs
 - Laptop.cs
 - Program.cs

Properties

Program.cs



Load Data From Excel

Load Data From SQL

	LaptopID	Laptop Name	Laptop Type	Product Date
*				



Add

Update

Delete

Update To DataSource

Load Data From SQL

A collage of various laptops in different colors and orientations, including gold, silver, and black models, some open and some closed. The laptops are arranged in a grid-like fashion, with some showing their screens and others showing their backs. The screens display various images, including Windows desktops, a landscape, and a person. The laptops are shown from different angles, highlighting their design and build.

Update To DataSource

Load Data From Excel

Load Data From SQL

	LaptopID	Laptop Name	Laptop Type	
▶	M001	MacBook Air 13	Apple	20/10/2019
	M002	MacBook Air M1	Apple	25/12/2020
	M003	MacBook Pro 13	Apple	22/10/2021
	D001	Dell Alienware M15 R6	Dell	29/11/2017
	D002	Dell G15	Dell	18/10/2023
	D003	Dell Inspiron 15	Dell	19/12/2018
	A001	ASUS Vivobook	Asus	30/11/2020
	A002	ASUS D515DA	Asus	20/11/2019
	A003	Asus ROG Flow X13	Asus	15/10/2021
*				
< >				

Add

Update

Delete

Update To DataSource



Load Data From Excel

Load Data From SQL

	LaptopID	Laptop Name	Laptop Type	Product Dat
	M003	MacBook Pro 13	Apple	22/10/2021
	D001	Dell Alienware M15 R6	Dell	29/11/2017
	D002	Dell G15	Dell	18/10/2023
	D003	Dell Inspiron 15	Dell	19/12/2018
	A001	ASUS Vivobook	Asus	30/11/2020
	A002	ASUS D515DA	Asus	20/11/2019
	A003	Asus ROG Flow X13	Asus	15/10/2021
	A004	asus nitro 5 2021	Asus	01/01/2021
▶	Not Assigned	Not Assigned	Not Assigned	1/1/1900 12:00
*				

Add

Update

Delete

Update To DataSource



Load Data From Excel

Load Data From SQL

	LaptopID	Laptop Name	Laptop Type	Product Dat ^
	M003	MacBook Pro 13	Apple	22/10/2021
	D001	Dell Alienware M15 R6	Dell	29/11/2017
	D002	Dell G15	Dell	18/10/2023
	D003	Dell Inspiron 15	Dell	10/12/2018
	A001	ASUS Vivobook	Asus	
	A002	ASUS D515DA	Asus	
	A003	Asus ROG Flow X13	Asus	
	A004	asus nitro 5 2021	Asus	
▶	Not Assigned	Not Assigned	Not Assigned	1/1/1900 12:00
•				

Finish Update to DataSource Excel

OK

Add

Update

Delete

Update To DataSource



Update Data From SQL:

Laptop Management

Load Data From Excel

Load Data From SQL

		HDD	RAM	Price
i5	...	512GB	8GB	26690000VND
	...	512GB	16GB	35000000VND
i5	...	256GB	8GB	33500000VND
i7	...	1TB	32GB	57900000VND
i5	...	256GB	8GB	27000000VND
i7	...	512GB	8GB	23000000VND
i5	...	512GB	8GB	18300000VND
n 3	...	512GB	4GB	12900000VND
n 9	...	1TB	32GB	79990000VND
n 7		512GB	16GB	31000000VND

Finish Update

OK

Add

Update

Delete

Update To DataSource

