

Nama : Kevin Hansa Wardhana

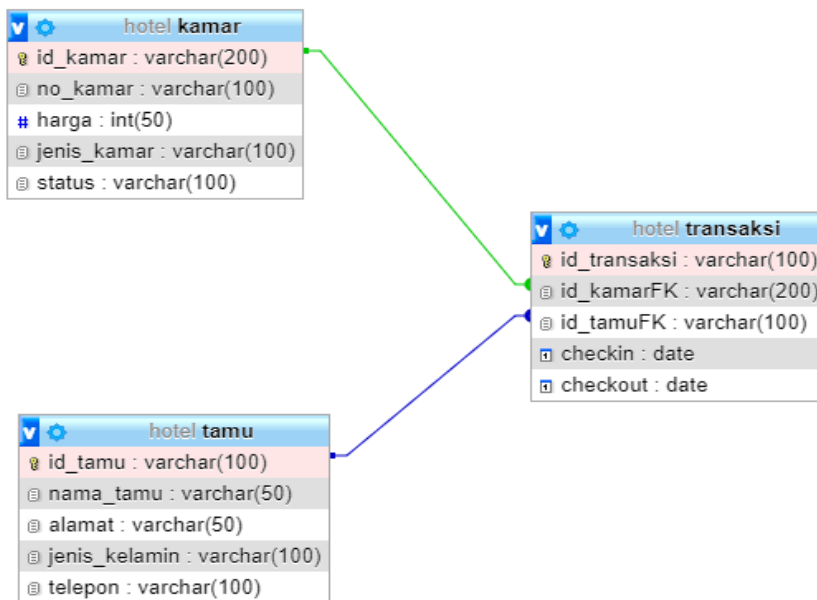
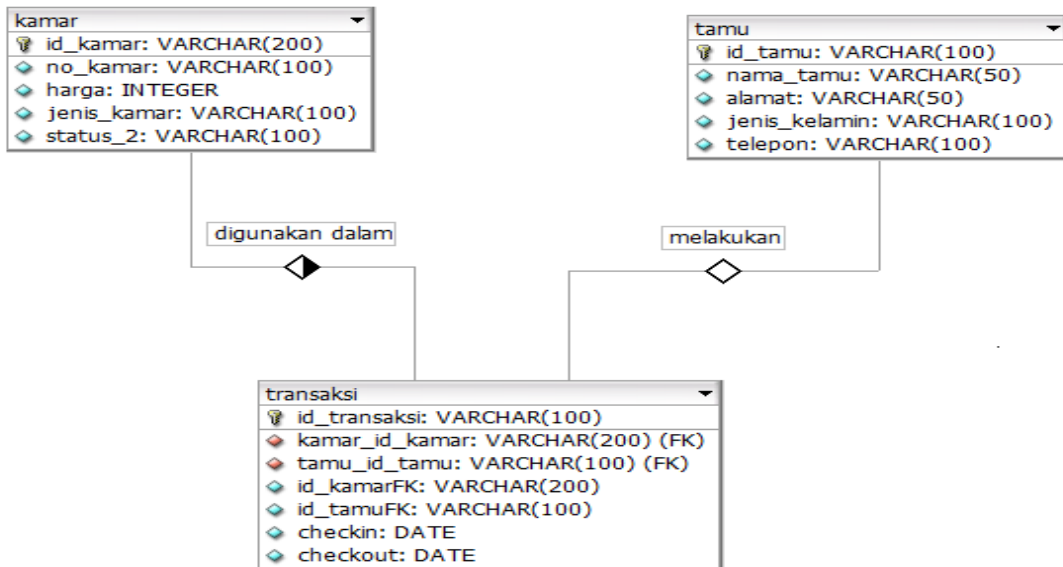
NIM : L200180004

Kelas : A

Praktikum Sistem Basis Data Modul 12

Tugas

ERD Perhotelan



Studi kasus

Dalam hotel tersedia kamar untuk menginap. Kamar memiliki no kamar dan jenis kamar. Setiap kamar memiliki harga yang berbeda tergantung dengan jenis kamar. Dan terdapat status jika kamar tersebut sudah di dipakai atau belum dipakai.

Tamu yang ingin menginap harus registrasi tamu. Tamu harus mengisi data yang diperlukan seperti : nama tamu, alamat, jenis kelamin, dan nomor telepon nya.

Jika sudah melakukan registrasi tamu melanjutkan ke transaksi. Pada setiap transaksi memiliki id transaksi agar mudah untuk mengecek. Di dalam transaksi mengambil data dari id kamar dan id tamu sebagai foreign key. Selain itu di transaksi terdapat tanggal checkin ketika tamu melakukan transaksi dan tanggal checkout ketika tamu selesai menginap.

Tampilan halaman utama



Config untuk terhubung ke database

```
17 public class config {
18     private static Connection mysqlconfig;
19     public static Connection GetConnection() throws SQLException{
20         try {
21             String url="jdbc:mysql://localhost:3306/hotel"; //url database
22             String user="root"; //user database
23             String pass=""; //password database
24             DriverManager.registerDriver(new com.mysql.jdbc.Driver());
25             mysqlconfig=DriverManager.getConnection(url, user, pass);
26         } catch (Exception e) {
27             System.err.println("koneksi gagal "+e.getMessage()); //perintah menampilkan error pada koneksi
28         }
29         return mysqlconfig;
30     }
31 }
```

TAMU

Melihat data tamu(query SELECT)

```
37 private void tampilkan_data(){
38     DefaultTableModel model = new DefaultTableModel();
39     model.addColumn("Id tamu");
40     model.addColumn("Nama tamu");
41     model.addColumn("Alamat");
42     model.addColumn("Jenis Kelamin");
43     model.addColumn("Telepon");
44
45     try{
46         String sql = "SELECT * FROM tamu";
47         java.sql.Connection conn = (Connection)config.GetConnection();
48         java.sql.Statement stm = conn.createStatement();
49         java.sql.ResultSet res = stm.executeQuery(sql);
50
51         while(res.next()){
52             model.addRow(new Object[]{res.getString(1),
53                 res.getString(2),
54                 res.getString(3),
55                 res.getString(4),
56                 res.getString(5)});
57         }
58         tabletamam.setModel(model);
59     }catch(SQLException e){
60         System.out.println("Error: "+ e.getMessage());
61     }
62 }
```

Menambah data pada table tamu(query INSERT)

```
272 private void tambahActionPerformed(java.awt.event.ActionEvent evt) {  
273     String idtamu=Idtamu.getText();  
274     String Namatamu=namatamu.getText();  
275     String Alamattamu=alamattamu.getText();  
276     String jenis_kelamin=null;  
277     String Telp=telp.getText();  
278  
279     // TODO add your handling code here:  
280     if(laki.isSelected()){  
281         jenis_kelamin = "Laki - Laki";  
282     }else if(perempuan.isSelected()){  
283         jenis_kelamin = "Perempuan";  
284     }  
285     try{  
286         Statement statement= (Statement) config.GetConnection().createStatement();  
287         statement.executeUpdate("insert into tamu VALUES('"+idtamu+  
288             "','"+Namatamu+"','"+Alamattamu+"','"+jenis_kelamin+"','"+Telp+"')");  
289         statement.close();  
290         JOptionPane.showMessageDialog(null,"Data berhasil disimpan");  
291     }catch(Exception t){  
292         JOptionPane.showMessageDialog(null,"Data gagal disimpan");  
293     }  
294     tampilkan_data();  
295     kosongkan_form();  
296 }
```

Mengedit data pada table tamu(query UPDATE)

```
356 private void editActionPerformed(java.awt.event.ActionEvent evt) {  
357     // TODO add your handling code here:  
358     String jenis_kelamin="";  
359  
360     // TODO add your handling code here:  
361     if(laki.isSelected()){  
362         jenis_kelamin = laki.getText();  
363     }else if(perempuan.isSelected()){  
364         jenis_kelamin = perempuan.getText();  
365     }  
366     try{  
367         String sql="UPDATE tamu SET id_tamu = '"+Idtamu.getText()+  
368             "',' nama_tamu = '"+namatamu.getText()+  
369             "',' alamat = '"+alamattamu.getText()+  
370             "',' jenis_kelamin='"+jenis_kelamin+  
371             "',' telepon= '"+telp.getText()+"' WHERE id_tamu = '"+Idtamu.getText()+"'";  
372         java.sql.Connection conn=(Connection)config.GetConnection();  
373         java.sql.PreparedStatement pst=conn.prepareStatement(sql);  
374         pst.execute();  
375         JOptionPane.showMessageDialog(null, "Data berhasil di edit");  
376     } catch (Exception e) {  
377         JOptionPane.showMessageDialog(null, "Data Gagal di edit"+e.getMessage());  
378     }  
379     tampilkan_data();  
380     kosongkan_form();  
381 }
```

Menghapus data pada table tamu(query DELETE)

```
320 private void hapusActionPerformed(java.awt.event.ActionEvent evt) {  
321     // TODO add your handling code here:  
322     try{  
323         Connection con=new config().getConnection();  
324         Statement st=con.createStatement();  
325         String sql="delete from tamu where id_tamu='"+Idtamu.getText()+"'";  
326         st.execute(sql);  
327         st.close();  
328         JOptionPane.showMessageDialog(this, "Data berhasil di hapus");  
329         tampilkan_data();  
330     }catch (Exception e){  
331         JOptionPane.showMessageDialog(this, "Data gagal di hapus"+e);  
332     }  
333 }
```

KAMAR

Melihat data kamar(query SELECT)

```
36 private void tampilkan_data(){  
37     DefaultTableModel model = new DefaultTableModel();  
38     model.addColumn("Id Kamar");  
39     model.addColumn("No Kamar");  
40     model.addColumn("Harga");  
41     model.addColumn("Jenis Kamar");  
42     model.addColumn("Status");  
43  
44     try{  
45         String sql = "SELECT * FROM kamar";  
46         java.sql.Connection conn = (Connection)config.getConnection();  
47         java.sql.Statement stm = conn.createStatement();  
48         java.sql.ResultSet res = stm.executeQuery(sql);  
49  
50         while(res.next()){  
51             model.addRow(new Object[]{res.getString(1),  
52                 res.getString(2),  
53                 res.getString(3),  
54                 res.getString(4),  
55                 res.getString(5)});  
56         }  
57         tablekamar.setModel(model);  
58     }catch(SQLException e){  
59         System.out.println("Error: "+ e.getMessage());  
60     }  
61 }
```

Menambah data pada table kamar(query INSERT)

```
253 private void tambahActionPerformed(java.awt.event.ActionEvent evt) {  
254     // TODO add your handling code here:  
255     String idkamar=Id_kamar.getText();  
256     String no_kamar=nokamar.getText();  
257     String Harga=harga.getText();  
258     String jenis_kamar=jeniskamar.getText();  
259     String Status=status.getText();  
260  
261     try{  
262         Statement statement= (Statement) config.GetConnection().createStatement();  
263         statement.executeUpdate("insert into kamar VALUES('"+idkamar+  
264             "','" +no_kamar+  
265             "','" +Harga+  
266             "','" +jenis_kamar+  
267             "','" +Status+"')");  
268         statement.close();  
269         JOptionPane.showMessageDialog(null,"Data berhasil disimpan");  
270     }catch(Exception t){  
271         JOptionPane.showMessageDialog(null,"Data gagal disimpan");  
272     }  
273     tampilkan_data();  
274     kosongkan_form();  
275  
276 }
```

Mengedit data pada table kamar(query UPDATE)

```
328 private void editActionPerformed(java.awt.event.ActionEvent evt) {  
329     // TODO add your handling code here:  
330     try{  
331         String sql="UPDATE kamar SET id_kamar = '"+Id_kamar.getText()+  
332             "','" no_kamar = '"+nokamar.getText()+  
333             "','" harga = '"+harga.getText()+  
334             "','" jenis_kamar='"+jeniskamar.getText()+  
335             "','" status= '"+status.getText()+"' WHERE id_kamar = '"+Id_kamar.getText()+"'";  
336         java.sql.Connection conn=(Connection) config.GetConnection();  
337         java.sql.PreparedStatement pst=conn.prepareStatement(sql);  
338         pst.execute();  
339         JOptionPane.showMessageDialog(null, "Data berhasil di edit");  
340     } catch (Exception e) {  
341         JOptionPane.showMessageDialog(null, "Data Gagal di edit"+e.getMessage());  
342     }  
343     tampilkan_data();  
344     kosongkan_form();  
345 }
```

Menghapus data pada table kamar(query DELETE)

```
290 private void hapusActionPerformed(java.awt.event.ActionEvent evt) {  
291     // TODO add your handling code here:  
292     try{  
293         Connection con=new config().getConnection();  
294         Statement st=con.createStatement();  
295         String sql="delete from kamar where id_kamar='"+Id_kamar.getText()+"'";  
296         st.execute(sql);  
297         st.close();  
298         JOptionPane.showMessageDialog(this, "Data berhasil di hapus");  
299         tampilkan_data();  
300     }catch (Exception e){  
301         JOptionPane.showMessageDialog(this, "Data gagal di hapus"+e);  
302     }  
303 }
```

TRANSAKSI

Melihat data transaksi(query SELECT)

```
41 private void tampilkan_data(){  
42     DefaultTableModel model = new DefaultTableModel();  
43     model.addColumn("Id Transaksi");  
44     model.addColumn("Id Kamar");  
45     model.addColumn("Id Tamu");  
46     model.addColumn("Check In");  
47     model.addColumn("Check Out");  
48  
49     try{  
50         String sql = "SELECT * FROM transaksi";  
51         java.sql.Connection connn = (Connection)config.getConnection();  
52         java.sql.Statement stm = connn.createStatement();  
53         java.sql.ResultSet res = stm.executeQuery(sql);  
54  
55         while(res.next()){  
56             model.addRow(new Object[]{res.getString(1),  
57                 res.getString(2),  
58                 res.getString(3),  
59                 res.getString(4),  
60                 res.getString(5)});  
61         }  
62         tabletransaksi.setModel(model);  
63     }catch(SQLException e){  
64         System.out.println("Error: "+ e.getMessage());  
65     }  
66 }
```

Menambah data pada table transaksi(query INSERT)

```
312 private void tambahActionPerformed(java.awt.event.ActionEvent evt) {  
313     // TODO add your handling code here:  
314     java.sql.Date date1 = new java.sql.Date(checkin.getDate().getTime());  
315     java.sql.Date date2 = new java.sql.Date(checkout.getDate().getTime());  
316     try{  
317         Statement statement= (Statement) config.GetConnection().createStatement();  
318         statement.executeUpdate("insert into transaksi VALUES('"+Id_transaksi.getText()+  
319             "','"+idkamarFK.getSelectedItemAt()+  
320             "','"+idtamufk.getSelectedItemAt()+"','"+date1+"','"+date2+"')");  
321         statement.close();  
322         JOptionPane.showMessageDialog(null,"Data berhasil disimpan");  
323     }catch (Exception e){  
324         JOptionPane.showMessageDialog(null,"Data gagal disimpan");  
325     }  
326     tampilkan_data();  
327     kosongkan_form();  
328 }  
329 }
```

Mengedit data pada table kamar(query UPDATE)

```
371 private void editActionPerformed(java.awt.event.ActionEvent evt) {  
372     // TODO add your handling code here:  
373     java.sql.Date date1 = new java.sql.Date(checkin.getDate().getTime());  
374     java.sql.Date date2 = new java.sql.Date(checkout.getDate().getTime());  
375     try{  
376         String sql="UPDATE transaksi SET id_transaksi = '"+Id_transaksi.getText()+  
377             "',' id_kamarFK = '"+idkamarFK.getSelectedItemAt()+  
378             "',' id_tamuFK = '"+idtamufk.getSelectedItemAt()+  
379             "',' checkin='"+date1+"', checkout= '"+date2+"' WHERE id_transaksi = '"+Id_transaksi.getText()+"'";  
380         java.sql.Connection conn=(Connection) config.GetConnection();  
381         java.sql.PreparedStatement pst=conn.prepareStatement(sql);  
382         pst.execute();  
383         JOptionPane.showMessageDialog(null, "data berhasil di edit");  
384     } catch (Exception e) {  
385         JOptionPane.showMessageDialog(null, "Perubahan Data Gagal"+e.getMessage());  
386     }  
387     tampilkan_data();  
388     kosongkan_form();  
389 }
```

Menghapus data pada table kamar(query DELETE)

```
354 private void hapusActionPerformed(java.awt.event.ActionEvent evt) {  
355     // TODO add your handling code here:  
356     try{  
357         Connection con=new config().GetConnection();  
358         Statement st=con.createStatement();  
359         String sql="delete from transaksi where id_transaksi='"+Id_transaksi.getText()+"'";  
360         st.execute(sql);  
361         st.close();  
362         JOptionPane.showMessageDialog(this, "Data berhasil di hapus");  
363         tampilkan_data();  
364     }catch (Exception e){  
365         JOptionPane.showMessageDialog(this, "Data gagal di hapus"+e);  
366     }  
367     tampilkan_data();  
368     kosongkan_form();  
369 }
```


TAMU

Tampilan halaman tamu

TAMU

Id Tamu

Tambah

Nama Tamu

Hapus

Alamat

Ubah

Jenis Kelamin

☐ Laki-laki ☒ Perempuan

clear

Telepon

Kembali

Id tamu	Nama tamu	Alamat	Jenis Kelamin	Telepon
T1000	yoga adi saputra	surakarta	Perempuan	0800000000000
T1001	tanti	klaten	Laki - Laki	0812312321
T1002	kevin	sukoharjo	Laki - Laki	085642343
T1004	goevara	mojosongo	Perempuan	08621331245
T1005	tutis	bandung	Laki-laki	082132372134
T1007	tuti	solo	Perempuan	0324324
T1008	yanti	boyolali	Laki-laki	081111111112

Menambah data di halaman tamu

TAMU

Id Tamu

T1010

Tambah

Nama Tamu

ajindu

Hapus

Alamat

kartasura

Ubah

Jenis Kelamin

☐ Laki-laki ☒ Perempuan

clear

Telepon

Kembali

Message

i

Data berhasil disimpan

OK

Id tamu	Nama tamu	Alamat	Jenis Kelamin	Telepon
T1000	yoga adi saputra	surakarta	Perempuan	0800000000000
T1001	tanti	klaten	Laki - Laki	0812312321
T1002	kevin	sukoharjo	Laki - Laki	085642343
T1004	goevara	mojosongo	Perempuan	08621331245
T1005	tutis	bandung	Laki-laki	082132372134
T1007	tuti	solo	Perempuan	0324324
T1008	yanti	boyolali	Laki-laki	081111111112

Mengedit data di halaman tamu

TAMU

Id Tamu: T1010


Nama Tamu: ajindu sang indutoro

Alamat: kartasura

Jenis Kelamin: ☐ Laki-laki ☒ Perempuan

Telepon: 0899999999

Message

 Data berhasil di edit

Id tamu	Nama tamu	Alamat	Jenis Kelamin	Telepon
T1001	tanti	klaten	Laki - Laki	0812312321
T1002	kevin	sukoharjo	Laki - Laki	085642343
T1004	goevara	mojosongo	Perempuan	08621331245
T1005	tutis	bandungLaki-l...	Laki-laki	082132372134
T1007	tuti	solo	Perempuan	0324324
T1008	yanti	boyolali	Laki-laki	081111111112
T1010	ajindu	kartasura	Laki - Laki	0823232323

Menghapus data di halaman tamu

TAMU

Id Tamu: T1010


Nama Tamu: ajindu sang indutoro

Alamat: kartasura

Jenis Kelamin: ☐ Laki-laki ☒ Perempuan

Telepon: 0899999999

Message

 Data berhasil di hapus

Id tamu	Nama tamu	Alamat	Jenis Kelamin	Telepon
T1001	tanti	klaten	Laki - Laki	0812312321
T1002	kevin	sukoharjo	Laki - Laki	085642343
T1004	goevara	mojosongo	Perempuan	08621331245
T1005	tutis	bandungLaki-l...	Laki-laki	082132372134
T1007	tuti	solo	Perempuan	0324324
T1008	yanti	boyolali	Laki-laki	081111111112
T1010	ajindu sang in...	kartasura	Perempuan	0899999999

KAMAR

Tampilan halaman kamar

KAMAR

Id Kamar

Tambah

No Kamar

Hapus

Harga

Ubah

Jenis Kamar

clear

Status

Kembali

Id Kamar	No Kamar	Harga	Jenis Kamar	Status
K0310	10	300000	Presidential Suite	tidak dipakai
K0412	12	150000	Suite Room	dipakai
K0502	14	160000	Suite Room	tidak dipakai
K0712	37	175000	Standart Room	tidak dipakai

Menambah data di halaman kamar

KAMAR

Id Kamar

K0843

Tambah

No Kamar

43

Hapus

Harga

1500000

Ubah

Jenis Kamar

Suite Room

clear

Status

tidak dipakai

Kembali

Message

i

Data berhasil disimpan

OK

Id Kamar	No Kamar	Harga	Jenis Kamar	Status
K0310	10	300000	Presidential Suite	tidak dipakai
K0412	12	150000	Suite Room	dipakai
K0502	14	160000	Suite Room	tidak dipakai
K0712	37	175000	Standart Room	tidak dipakai

Mengedit data di halaman kamar

KAMAR

Id Kamar: K0843


No Kamar: 43

Harga: 1500000

Jenis Kamar: Standart Room

Status: dipakai

Message

 Data berhasil di edit

Id Kamar	No Kamar	Harga	Jenis Kamar	Status
K0310	10	300000	Presidential Suite	tidak dipakai
K0412	12	150000	Suite Room	dipakai
K0502	14	160000	Suite Room	tidak dipakai
K0712	37	175000	Standart Room	tidak dipakai
K0843	43	1500000	Suite Room	tidak dipakai

Menghapus data di halaman kamar

KAMAR

Id Kamar: K0843


No Kamar: 43

Harga: 1500000

Jenis Kamar: Standart Room

Status: dipakai

Message

 Data berhasil di hapus

Id Kamar	No Kamar	Harga	Jenis Kamar	Status
K0310	10	300000	Presidential Suite	tidak dipakai
K0412	12	150000	Suite Room	dipakai
K0502	14	160000	Suite Room	tidak dipakai
K0712	37	175000	Standart Room	tidak dipakai
K0843	43	1500000	Standart Room	dipakai

TRANSAKSI

Tampilan halaman transaksi

The screenshot shows a window titled "TRANSAKSI" with a light gray background. At the top, there are window control buttons (minimize, maximize, close). Below the title, there are five input fields on the left and five buttons on the right. The input fields are: "Id Transaksi" (text box), "Id Kamar" (dropdown menu with "--Pilih--"), "Id Tamu" (dropdown menu with "--Pilih--"), "Check In" (text box with a calendar icon), and "Check ..." (text box with a calendar icon). The buttons are: "Tambah", "Hapus", "Ubah", "clear", and "Kembali". Below the input fields, there is a table with 5 columns: "Id Transaksi", "Id Kamar", "Id Tamu", "Check In", and "Check Out". The table contains three rows of data.

Id Transaksi	Id Kamar	Id Tamu	Check In	Check Out
T123220	K0310	T1000	2020-06-09	2020-06-09
T123221	K0412	T1001	2020-06-11	2020-06-12
T123222	K0310	T1000	2020-06-28	2020-06-30

Menambah data di halaman transaksi

The screenshot shows the same "TRANSAKSI" window, but now with a new record added. The "Id Transaksi" field is filled with "T123123", "Id Kamar" with "K0712", "Id Tamu" with "T1008", "Check In" with "Jun 29, 2020", and "Check ..." with "Jul 5, 2020". The "Tambah" button is highlighted. A "Message" dialog box is open in the center, displaying an information icon and the text "Data berhasil disimpan" (Data successfully saved), with an "OK" button. The table at the bottom remains the same as in the previous screenshot.

Id Transaksi	Id Kamar	Id Tamu	Check In	Check Out
T123220	K0310	T1000	2020-06-09	2020-06-09
T123221	K0412	T1001	2020-06-11	2020-06-12
T123222	K0310	T1000	2020-06-28	2020-06-30

Setelah berhasil ditambah

TRANSAKSI

Id Transaksi

Id Kamar

Id Tamu

Check In

Check ...

Id Transaksi	Id Kamar	Id Tamu	Check In	Check Out
T123123	K0712	T1008	2020-06-29	2020-07-05
T123220	K0310	T1000	2020-06-09	2020-06-09
T123221	K0412	T1001	2020-06-11	2020-06-12
T123222	K0310	T1000	2020-06-28	2020-06-30

Mengedit data di halaman transaksi

TRANSAKSI

Id Transaksi


Id Kamar

Id Tamu

Check In

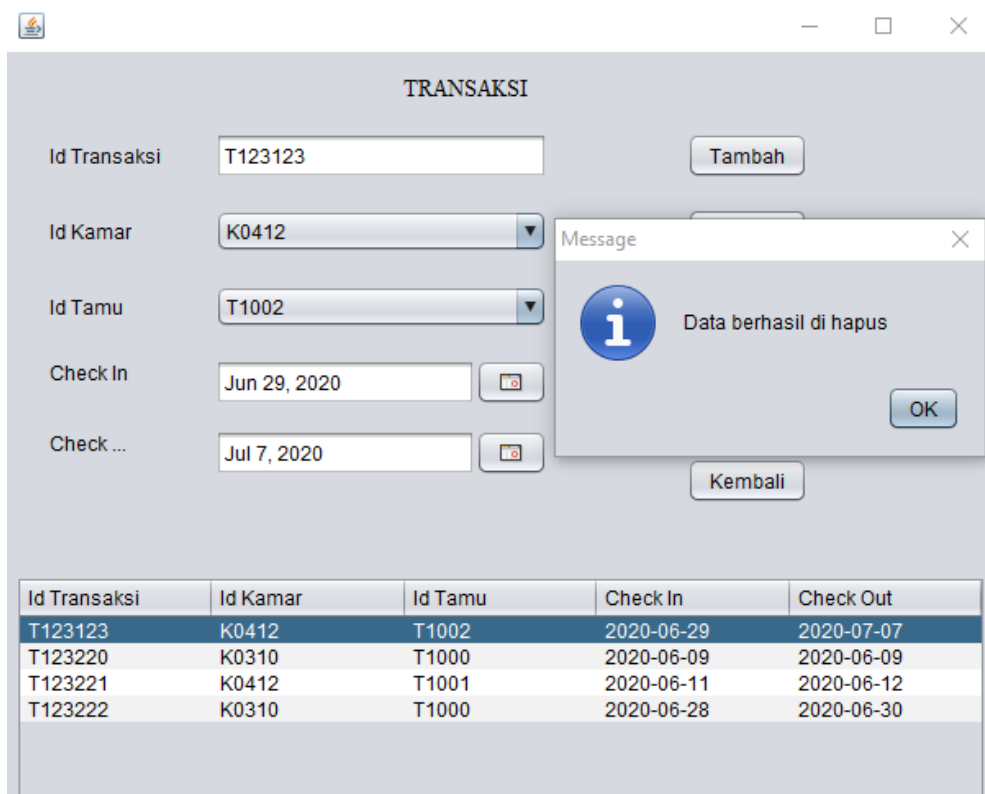
Check ...

Message

 data berhasil di edit

Id Transaksi	Id Kamar	Id Tamu	Check In	Check Out
T123123	K0712	T1008	2020-06-29	2020-07-05
T123220	K0310	T1000	2020-06-09	2020-06-09
T123221	K0412	T1001	2020-06-11	2020-06-12
T123222	K0310	T1000	2020-06-28	2020-06-30

Menghapus data di halaman transaksi



The screenshot shows a window titled "TRANSAKSI" with several input fields and a table. A modal message box is displayed over the form, indicating a successful deletion.

TRANSAKSI

Id Transaksi: T123123 Tambah

Id Kamar: K0412 ▼

Id Tamu: T1002 ▼

Check In: Jun 29, 2020 📅

Check ...: Jul 7, 2020 📅

Kembali

Message

i Data berhasil di hapus OK

Id Transaksi	Id Kamar	Id Tamu	Check In	Check Out
T123123	K0412	T1002	2020-06-29	2020-07-07
T123220	K0310	T1000	2020-06-09	2020-06-09
T123221	K0412	T1001	2020-06-11	2020-06-12
T123222	K0310	T1000	2020-06-28	2020-06-30

Halaman keluar



The screenshot shows a window titled "Perhotelan" with a menu of buttons. A modal dialog box is displayed, asking for confirmation to exit the program.

Perhotelan

Tamu

Kamar

Transaksi

Keluar

Yakin untuk keluar dari program

? Konfirmasi Keluar Aplikasi Yes No