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Kelas : H

Praktikum Sistem Basis Data Modul 12

1. Database Perhotelan

a. Dengan entitas :

- Tamu
- Kamar
- Transaksi

2. Penjelasan

a. Studi kasus

i. Attribute setiap entity

1. Tamu

- a. Id_tamu : menyimpan nomor id tamu (varchar(45)) PK
- b. Nama : menyimpan nama tamu (varchar(45)) not null
- c. Alamat : menyimpan alamat tamu (varchar(255)) not null

2. Kamar

- a. Nama_kamar : menyimpan nama kamar (varchar(45)) PK
- b. Kelas_kamar : menyimpan kelas kamar (varchar(45)) not null
- c. Tarif : menyimpan tarif setiap kamar (Integer) not null

3. Transaksi

- a. Id_tamuFK : menyimpan id tamu yang melakukan transaksi (varchar(45)) FK
- b. Nama_kamarFK : menyimpan nama_kamar yang diboeking tamu (varchar(45)) FK
- c. Tanggal : menyimpan tanggal pemakaian kamar (date) not null

ii. Hubungan antar entity

	Tamu	Kamar	Transaksi
Tamu	-	m : n	m : n
Kamar		-	-
Transaksi			-

Hubungan

a. Tamu memesan kamar

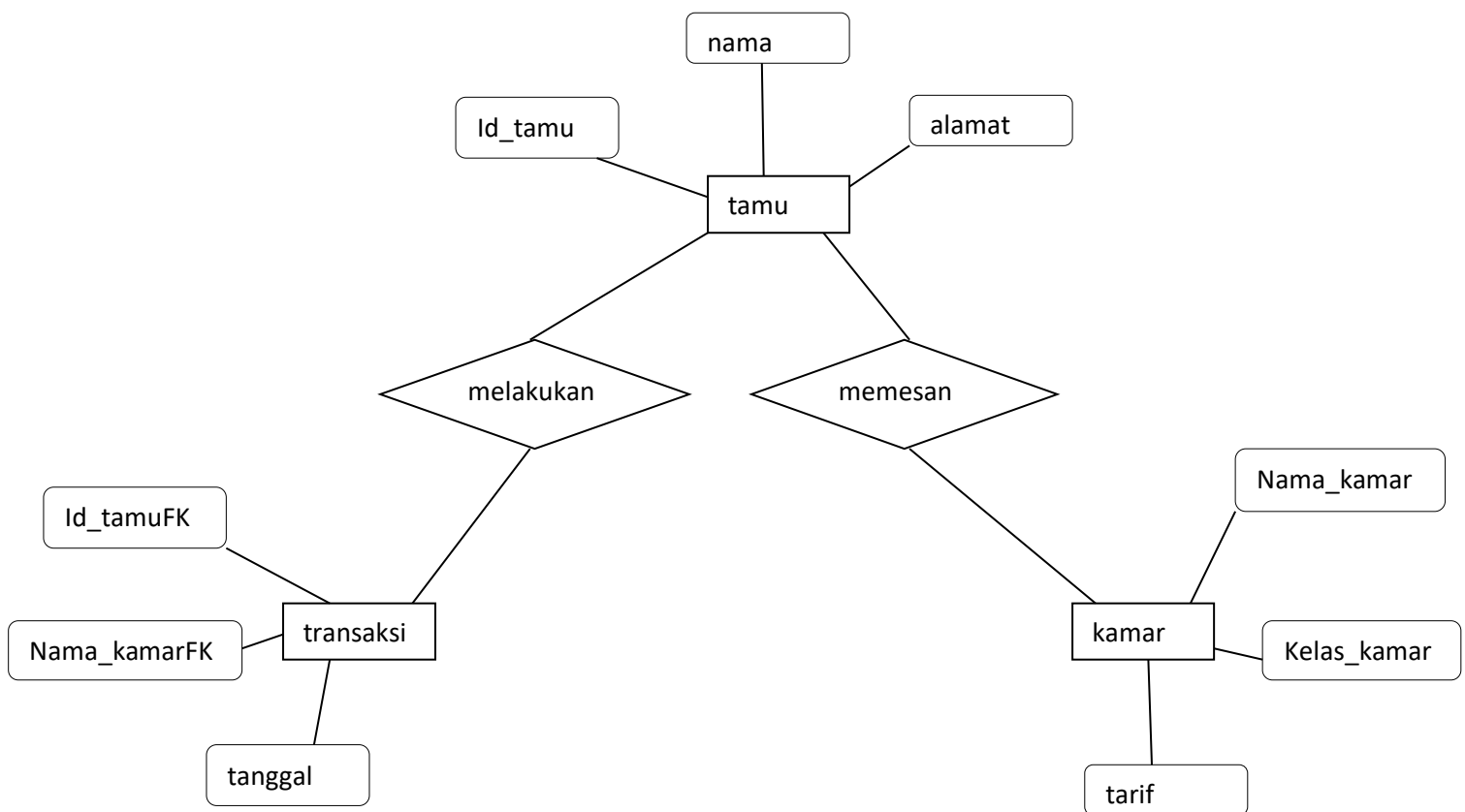
- Tabel utama : tamu, kamar
- Tabel kedua : tamu_has_kamar

- Relationship : many-to-many (m : n)
- Attribute penghubung : id_tamu, nama_kamar (FK id_tamu, nama_kamar di tamu_has_kamar)

b. Tamu melakukan transaksi

- Tabel utama : tamu, transaksi
- Tabel kedua : tamu_has_transaksi
- Relationship : many-to-many (m : n)
- Attribute penghubung : id_tamu, id_tamuFK, nama_kamarFK (FK id_tamu, id_tamuFK, nama_kamarFK di tamu_has_transaksi)

b. ER Diagram



3. Penerapan pada aplikasi pada setiap entitas
 - a. Entity tamu

```
tamu.py - D:\DATA IRVAN\KULI AHHH\Materi\Semester 4\Praktikum Database System_H\mod12\tamu.py
File Edit Format Run Options Window Help

import mysql.connector

db = mysql.connector.connect(
    host="localhost",
    user="root",
    password="",
    database="perhotelan"
)
cursor=db.cursor()

#1.Select
Squery1="select * from tamu"
cursor.execute(Squery1)

result = cursor.fetchall()
for (data) in result:
    print(data)

#1.Insert
Iquery1 = "insert into tamu(id_tamu, nama, alamat) values (%s,%s, %s)"
data1 = ('B019', 'Nadia', 'Bali')
cursor.execute(Iquery1, data1)
db.commit()
print("{} record ditambahkan".format(cursor.rowcount))

#1.Update
Uquery1 = "update tamu set nama=%s, alamat=%s where id_tamu=%s"
update1 = ('Aris', 'Bandung', 'B003')
cursor.execute(Uquery1, update1)
db.commit()
print("{} Record diubah".format(cursor.rowcount))

#1.Delete
Dquery1 = "delete from tamu where id_tamu=%s"
dell = ('B001',)
cursor.execute(Dquery1, dell)
db.commit()
print("{} Record dihapus".format(cursor.rowcount))

cursor.close()
db.close()
```

b. Entity kamar

```
*kamar.py - D:\DATA IRVAN\KULI AHHH\Materi\Semester 4\Praktikum Database System_H\mod12\kamar.py (3.7.2)*
File Edit Format Run Options Window Help

import mysql.connector

db = mysql.connector.connect(
    host="localhost",
    user="root",
    password="",
    database="perhotelan"
)
cursor=db.cursor()

#1.Select
Squery2=("select * from kamar")
cursor.execute(Squery2)

result = cursor.fetchall()
for (data) in result:
    print(data)

#1.Insert
Iquery2 = "insert into kamar(nama_kamar, kelas_kamar, tarif) values (%s,%s, %s)"
data1 = ('Boulevard', 'Eco', 1500000)
cursor.execute(Iquery2, data1)
db.commit()
print("{} record ditambahkan".format(cursor.rowcount))

#1.Update
Uquery2 = "update kamar set kelas_kamar=%s, tarif=%s where nama_kamar=%s"
update1 = ('VIP', '2500000', 'CL21')
cursor.execute(Uquery2, update1)
db.commit()
print("{} Record diubah".format(cursor.rowcount))

#1.Delete
Dquery2 = "delete from kamar where nama_kamar=%s"
dell = ('CL04',)
cursor.execute(Dquery2,dell)
db.commit()
print("{} Record dihapus".format(cursor.rowcount))
|
cursor.close()
db.close()
```

c. Entity transaksi

```
*transaksi.py - D:\DATA IRVAN\KULI AHHH\Materi\Semester 4\Praktikum Database System_H\mod12\transaksi.py (3.7.2)*
File Edit Format Run Options Window Help

import mysql.connector

db = mysql.connector.connect(
    host="localhost",
    user="root",
    password="",
    database="perhotelan"
)
cursor=db.cursor()

#1.Select
Squery3=("select * from transaksi")
cursor.execute(Squery3)

result = cursor.fetchall()
for (data) in result:
    print(data)

#1.Insert
Iquery3 = "insert into transaksi(id_tamuFK,nama_kamarFK,tanggal) values (%s,%s, %s)"
data1 = ('B010', 'V VIP', '2010-11-21')
cursor.execute(Iquery3, data1)
db.commit()
print("{} record ditambahkan".format(cursor.rowcount))

#1.Update
Uquery3 = "update transaksi id_tamuFK=%s, nama_kamarFK=%s where tanggal=%s"
update1 = ('B002', 'VIP', '2019-12-01')
cursor.execute(Uquery3, update1)
db.commit()
print("{} Record diubah".format(cursor.rowcount))

#1.Delete
Dquery3 = "delete from transaksi where tanggal=%s"
del1 = ('2019-10-02',)
cursor.execute(Dquery3, del1)
db.commit()
print("{} Record dihapus".format(cursor.rowcount))
|
cursor.close()
db.close()
```