

系分大作业数据库相关

标签：系认同分析与设计

- 7.2 database design
 - 7.2.1 用户及权限系统数据库设计
 - 7.2.2 点餐系统数据库设计
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7.2.1 用户及权限系统数据库设计

创建应用账户ooad，密码ooad

```
1.create user 'ooad'@'localhost' identified by 'ooad';
```

创建应用数据库restaurant

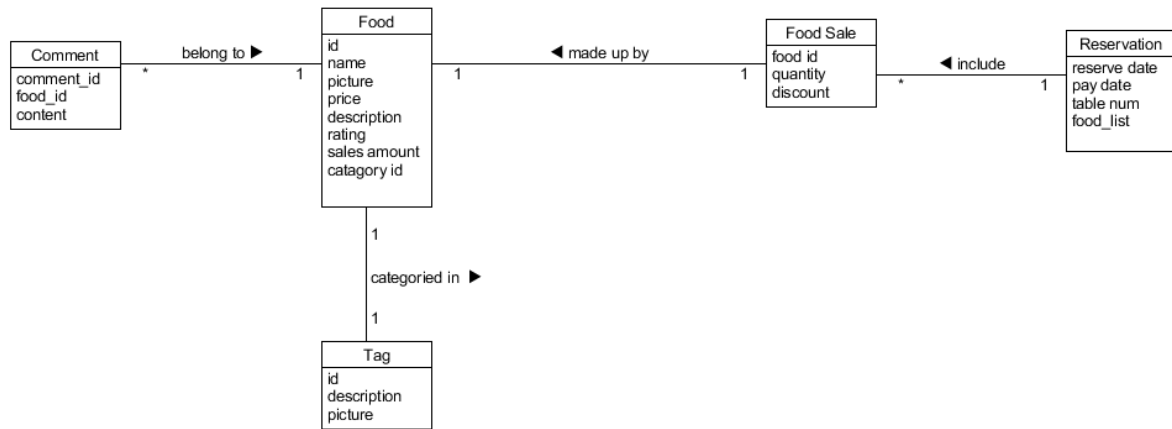
```
1.create database restaurant;
```

为应用账号ooad设置对数据库restaurant的所有权限

```
1.grant all on restaurant.* to 'ooad'@'localhost';
```

7.2.2 点餐系统数据库设计

参考的数据库建表图表



数据库表

数据库初始化使用ORM sqlalchemy，一共4个表

- tag标签
- food菜
- comment评论
- reservation订单

创建一个名为model的包来创建数据结构和初始化数据库，包结构为

- model
 - __init__.py
 - base.py
 - tag.py
 - food.py
 - comment.py
 - reservation.py
 - db_setting.py
 - init_db.py

model包测试文件test_model.py

```
from model import init_db
if __name__ == "__main__":
    init_db.init_database()
```

数据库初始化成功

```
mysql> show tables;
+-----+
| Tables_in_restaurant |
+-----+
| comment               |
| food                  |
| reservation           |
| tag                   |
+-----+
4 rows in set (0.00 sec)
```

tag标签

```
class Tag(base.Base):
    __tablename__ = "Tag"
    id = Column(Integer, primary_key = True)
    description = Column(String(50))
    picture = Column(String(50))
```

food菜

```
class Food(base.Base):
    __tablename__ = "Food"
    id = Column(Integer, primary_key = True)
    name = Column(String(50), unique = True, nullable = False)
    picture = Column(String(50))
    price = Column(Integer, nullable = False)
    description = Column(String(50))
    rating = Column(Integer)
    amount = Column(Integer, nullable = False)
    tag_id = Column(Integer, ForeignKey('Tag.id'), nullable = False)
```

comment评论

```
class Comment(base.Base):
    __tablename__ = "Comment"
    comment_id = Column(Integer, primary_key = True)
    content = Column(String(50), nullable = False)
    food_id = Column(Integer, ForeignKey('Food.id'))
```

reservation订单

```
class Reservation(base.Base):
    __tablename__ = "Reservation"
    reserve_id = Column(Integer, primary_key = True)
    reserve_datetime = Column(DateTime, default = datetime.datetime.now())
    pay_datetime = Column(DateTime, default = datetime.datetime.now())
```

```
table_num = Column(Integer, nullable = False)
food_list = Column(JSON)
```