

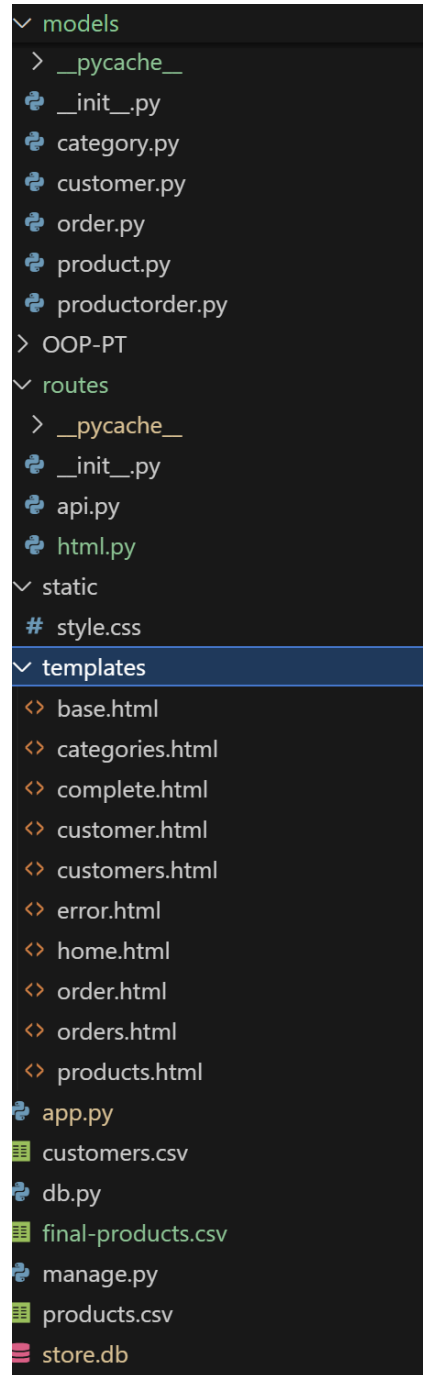
Kevin Wong  
A01275270

## Final Exam

### Part 1: Preparing the data base

```
PS C:\Users\ktzwo\Documents\2024 ACIT\Term 2\ACIT2515\2515-TermProject> python manage.py drop  
Dropped tables
```

### File Structure:



The screenshot shows a file explorer with the following structure:

- models
  - > \_\_pycache\_\_
  - \_\_init\_\_.py
  - category.py
  - customer.py
  - order.py
  - product.py
  - productorder.py
- > OOP-PT
- routes
  - > \_\_pycache\_\_
  - \_\_init\_\_.py
  - api.py
  - html.py
- static
  - # style.css
- templates
  - <> base.html
  - <> categories.html
  - <> complete.html
  - <> customer.html
  - <> customers.html
  - <> error.html
  - <> home.html
  - <> order.html
  - <> orders.html
  - <> products.html
- app.py
- customers.csv
- db.py
- final-products.csv
- manage.py
- products.csv
- store.db

## Part 2 : Make changes to to your models

### Customer

```
class Customer(db.Model):
    __tablename__ = "customers"

    id = mapped_column(Integer, primary_key=True, autoincrement=True)
    name = mapped_column(String)
    phone = mapped_column(String, unique=True)
    order = relationship("Order", back_populates="customer")
    money = mapped_column(Integer, default=0)
    status = mapped_column(String, default="regular")
```

Added 2 attributes, money, and status. Default integer is 0 for money because they start with no money, and status default regular because they start off as regular customers

```
def to_json(self):
    return {
        "id": self.id,
        "name": self.name,
        "phone": self.phone,
        "status": self.status,
        "money": self.money,
        "pending_orders": [o.to_json() for o in self.pending_orders()],
        "completed_orders": [o.to_json() for o in self.completed_orders()]
    }
```

Added the attributes into to\_json method.

### Order

```
class Order(db.Model):
    __tablename__ = "order"

    id = mapped_column(Integer, primary_key=True, autoincrement=True)
    customer_id = mapped_column(Integer, ForeignKey("customers.id"))

    created = mapped_column(DateTime, default=datetime.now)
    completed = mapped_column(DateTime, nullable=True)
    amount = mapped_column(Float, nullable=True)
    delivery = mapped_column(String, default=True)
    product_order = relationship("ProductOrder", back_populates="order")
    customer = relationship("Customer", back_populates="order")
```

Kevin Wong  
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Added delivery attribute, default="pickup"

```
def to_json(self):
    json = {
        "id": self.id,
        "customer_id": self.customer_id,
        "amount": self.amount,
        "created": self.created,
        "completed_date": self.completed,
        "delivery_method": self.delivery
    }
```

Added delivery method key in to\_json method.

```
def import_data():
    with open ("final-products.csv" , "r") as fp:
        reader = csv.DictReader(fp)
        #Filter category
        for info in reader:
```

Changed product.csv file to final-products.csv file to be able to read the new products

```
def create_customer():
    Kevin = Customer(name="Kevin Wong",phone="123-456-7890")
    tim = Customer(name="Time",phone="123-456-7899")

    db.session.add(Kevin,tim)
    db.session.commit()
    print('Added customers')

if __name__ == "__main__":
    with app.app_context():
        if 'Customer' in sys.argv:
            create_customer()
```

Created 2 customers, and committed them into db.

```
PS C:\Users\ktzwo\Documents\2024 ACIT\Term 2\ACIT2515\2515-TermProject> python part3.py Customer
Added customers
```

```
api_bp.route("/exam/deliver/<int:id>", methods=["PUT"])
def update_delivery(id):
    data = request.json
    order = db.session.execute(db.select(Order).where(Order.id == id)).scalar()
    if Order is None:
        return {"message": "Cannot find Order"}, 404
    if data["delivery"] == True:
        Customer.delivery = data["delivery"]
    elif "delivery" in data["delivery"] == False:

    if "status" in data:
        if data["status"] == True:
            Customer.status = data["status"]
        else:
            Customer.status = data["status"]
    db.session.commit()
    return jsonify(Customer.to_json()), 200
```

```
api_bp.route("/exam/customers/<int:id>", methods=["PUT"])
def update_customer(id):
    data = request.json
    Customer = db.session.execute(db.select(Customer).where(Customer.id == id)).scalar()
    if Customer is None:
        return {"message": "Cannot find customer"}, 404
    if "money" in data:
        if data["money"] < 0:
            return {"message": "not a valid price"}, 400
        Customer.money = data["money"]

    if "status" in data:
        if data["status"] == True:
            Customer.status = data["status"]
        else:
            Customer.status = data["status"]
    db.session.commit()
    return jsonify(Customer.to_json()), 200
```