

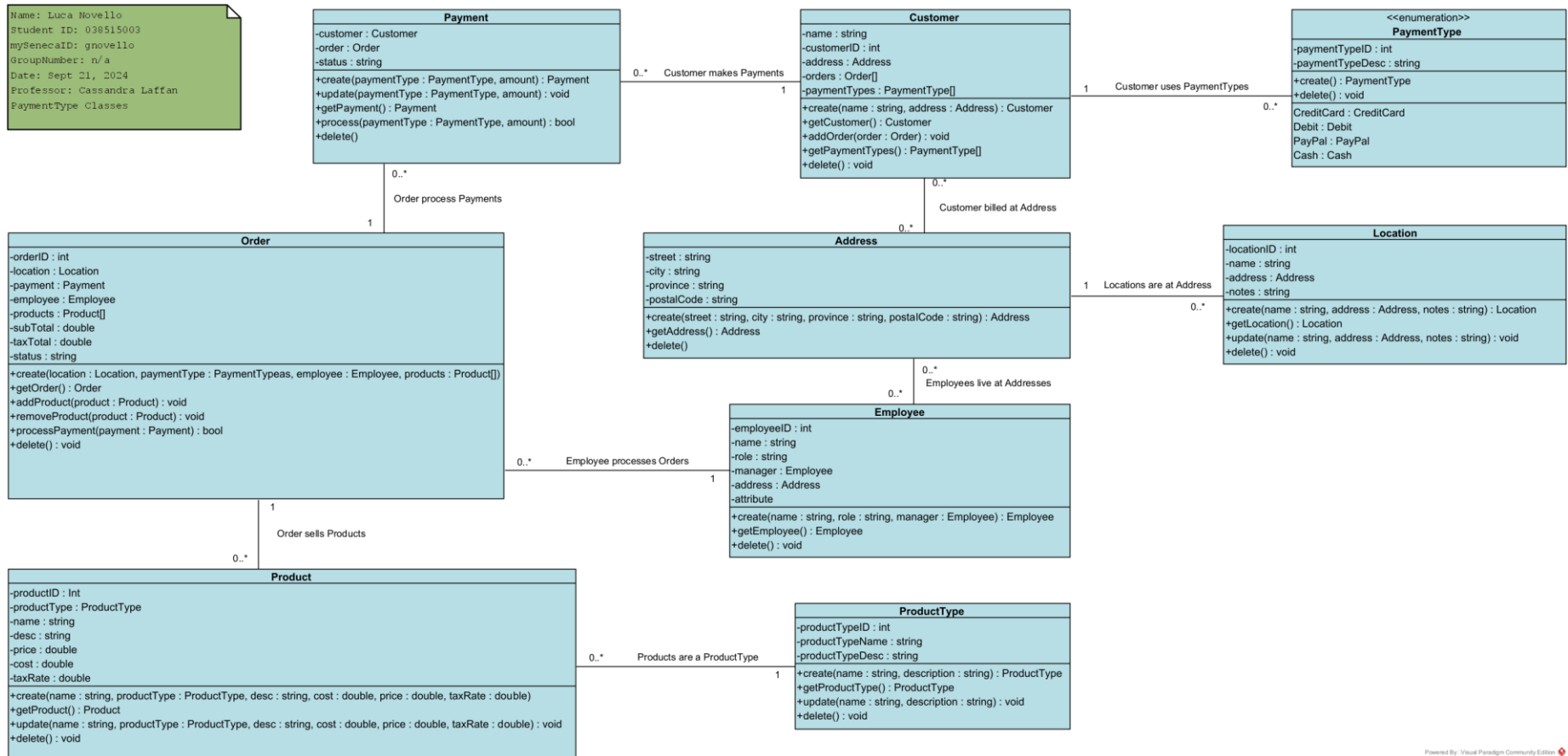
# Week 4 – In Class Lab

Luca Novello | 038515003 | gnovello

## Short Explanation:

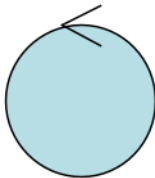
I created different Classes for each payment type to handle their unique attributes. The customer can place an Order, the Order can process 1 or many Payments. A Payment has a Customer, and a Customer can have 0 or many PaymentTypes of 1 of the 3 PaymentTypes available. I used an enumeration class to show the limited options. I think maybe using base and sub classes would work better but I am probably just overthinking it again.

## Main Classes:

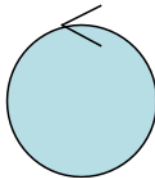


Controller Classes:

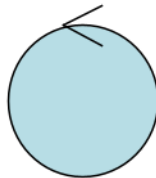
```
Name: Luca Novello
Student ID: 038515003
mySenecaID: gnovello
GroupNumber: n/a
Date: Sept 21, 2024
Professor: Cassandra Laffan
Controller Classes
```



UIController



DomainController



EntityManager  
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PaymentType Classes:

```
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Controller Classes
```

CreditCard
<div><div>-paymentTypeID : int</div><div>-customer : Customer</div><div>-bank : string</div><div>-acctNumber : int</div><div>-expiryDate : int</div><div>#cvv : int</div></div> <div><div>+create(customer : Customer, bank : string, acctNumber : int, expiryDate : int, cvv : int) : CreditCard</div><div>+update(customer : Customer, bank : string, acctNumber : int, expiryDate : int, cvv : int) : void</div><div>+processTransaction() : string</div><div>+delete() : void</div></div>

Debit
<div><div>-paymentTypeID : int</div><div>-customer : Customer</div><div>-bank : string</div><div>-cardNumber : int</div><div>#pin : int</div></div> <div><div>+create(customer : Customer, bank : string, cardNumber : int, pin : int) : Debit</div><div>+update(customer : Customer, bank : string, cardNumber : int, pin : int) : void</div><div>+delete() : void</div><div>+processTransaction() : string</div></div>

PayPal
<div><div>-paymentTypeID : int</div><div>-customer : Customer</div><div>-email : string</div><div>#password : string</div></div> <div><div>+create(customer : Customer, email : string, password : string) : PayPal</div><div>+update(customer : Customer, email : string, password : string) : void</div><div>+processTransaction() : string</div><div>+delete() : void</div></div>

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