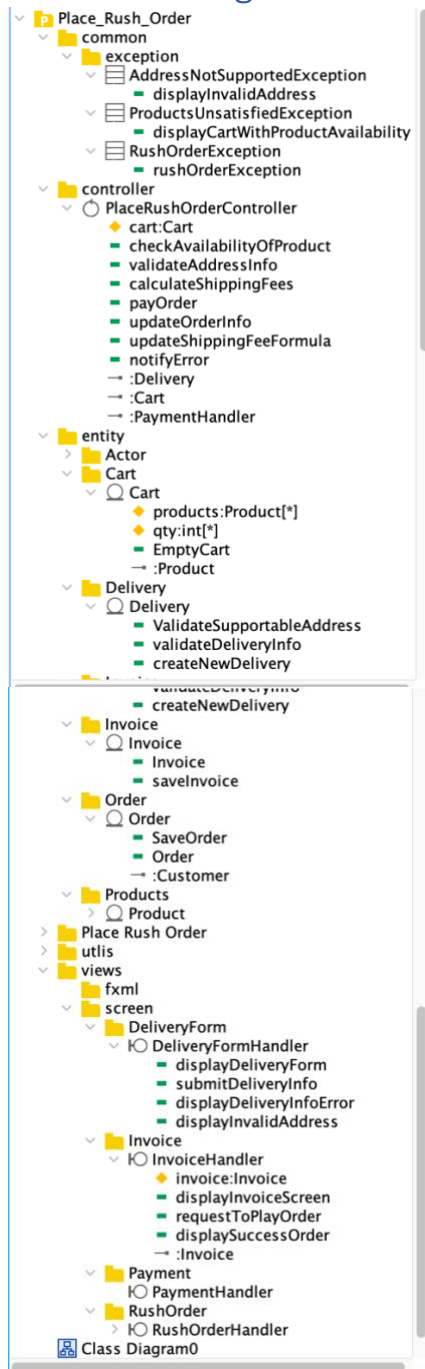
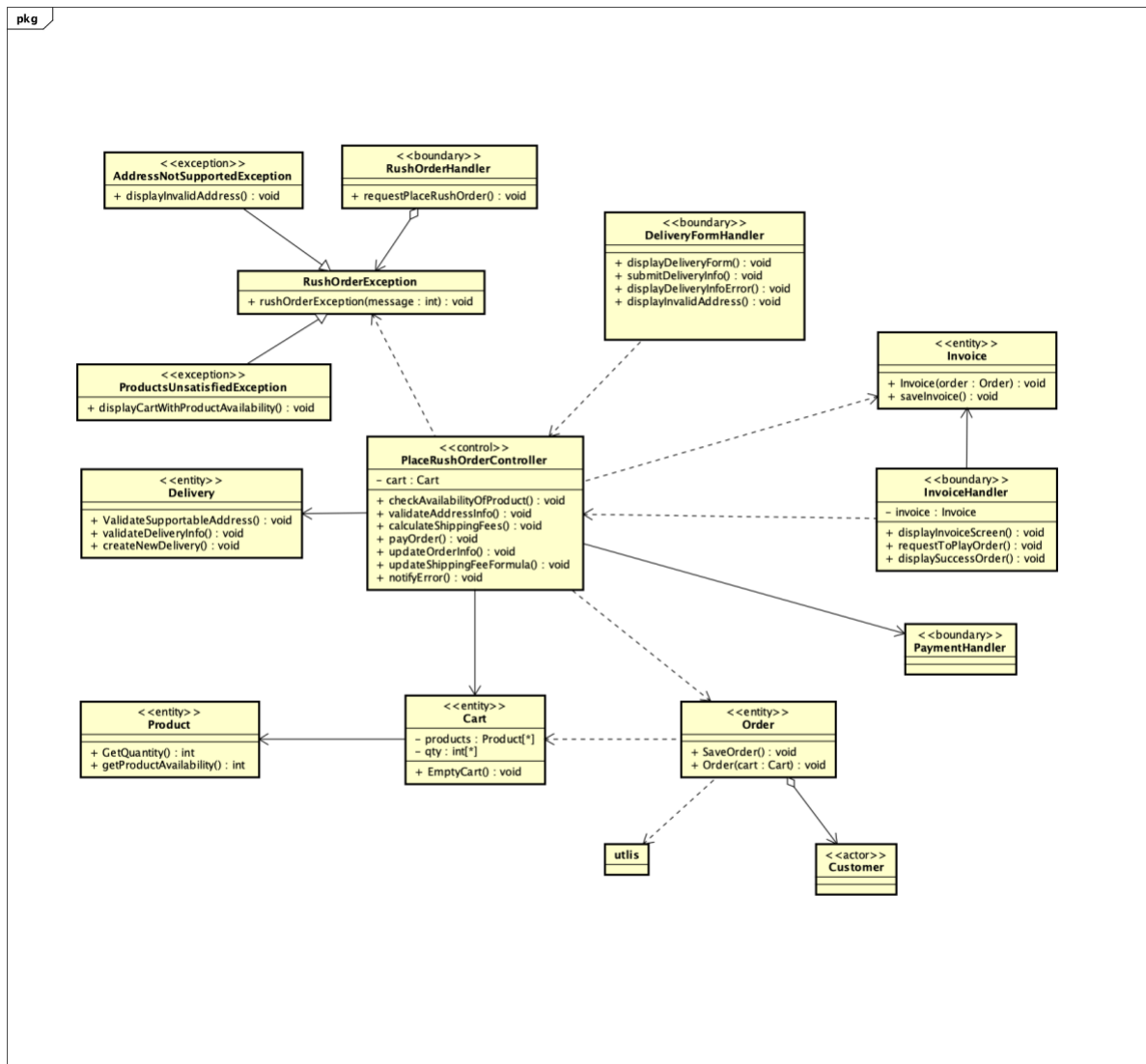


# LAB 06: CLASS DESIGN

## 1. Initial Design Classes

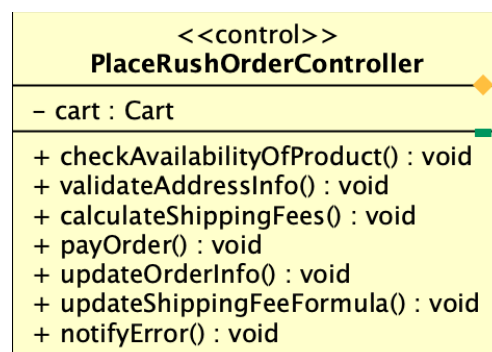


## 2. Define Relationships Between Classes



### 3. Class Design

### 3.1. Class “PlaceRushOrderController”



### 3.1.1. Attributes

#	Name	Type	Description
1	cart	entity.Cart	Cart of the customer which contains the information of products and corresponding quantities.

### 3.1.2. Operations

#	Name	Return type	Description
1	checkAvailabilityOfProduct	void	Check the product is available or not
2	validateAddressInfo	void	Validate the shipping address information
3	calculateShippingFees	void	Calculate the shipping fees
4	payOrder	void	To call class payOrder to pay the order
5	updateOrderInfo	void	update the shipping information of customer
6	updateShippingFeeFormula	void	update the shipping calculating formula for rush order
7	notifyError	void	call class ExceptionHandler to display the error.

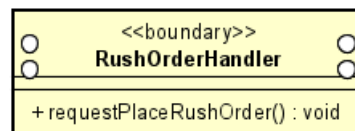
### 3.1.3. Parameter

### 3.1.4. Exception

### 3.1.5. Method

### 3.1.5. State

## 3.2. Class “RushOrderHandler”



### 3.2.1. Attributes

### 3.2.2. Operations

#	Name	Return Type	Description
1	requestPlaceRushOrder	void	Customer requests to place rush order

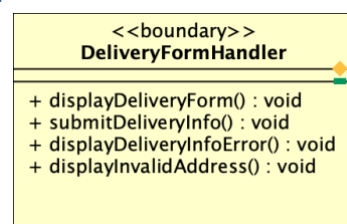
### 3.2.3. Parameter

### 3.2.4. Exception

### 3.2.5. Method

### 3.2.6. State

## 3.3. Class “DeliveryFormHandler”



### 3.2.1. Attributes

### 3.2.2. Operation

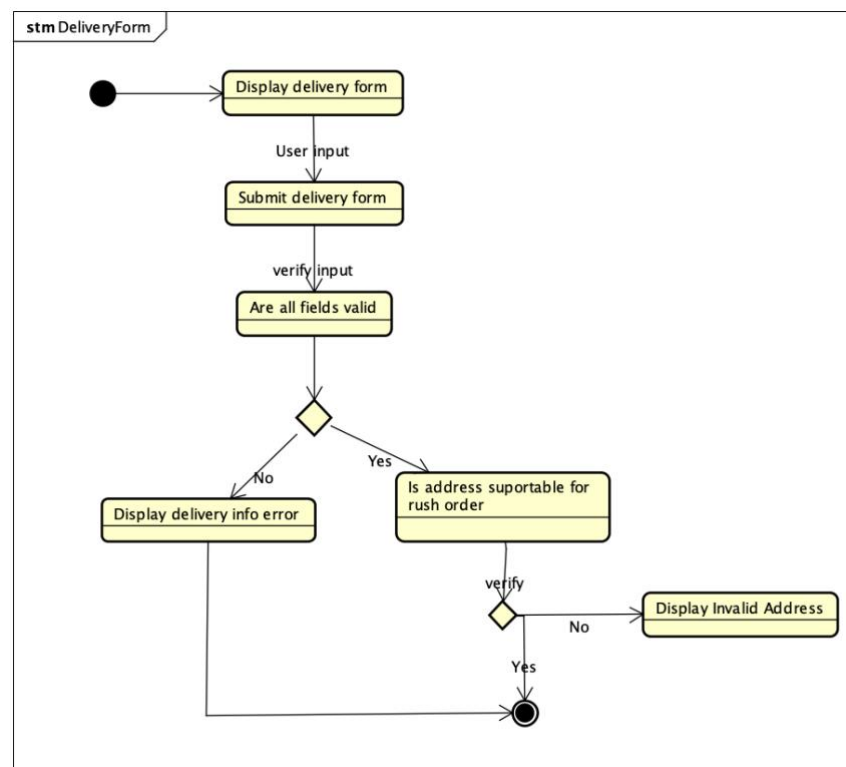
#	Name	Return Type	Description
1	displayDeliveryForm	void	display delivery form to the customer
2	submitDeliveryForm	void	submit the inputted delivery form of customer
3	displayDeliveryInfoError	void	notify the invalid information that customer inputted
4	displayInvalidAddress	void	notify that the address is not supportable for rush order

### 3.2.3. Parameter

### 3.2.4. Exception

### 3.2.5. Method

### 3.2.6. State



## 3.3. Class “InvoiceHandler”

### 3.3.1. Attributes

### 3.3.2. Operation

#	Name	Return Type	Description
1	displayInvoiceScreen	void	display invoice screen and let user confirm payment
2	requestToPayOrder	void	request payOrder class to process payment
3	displaySuccessOrder	void	notify the order has been paid successfully

3.3.3. Parameter

3.3.4. Exception

3.3.5. Method

3.3.6. State

## 4. Class Diagram

