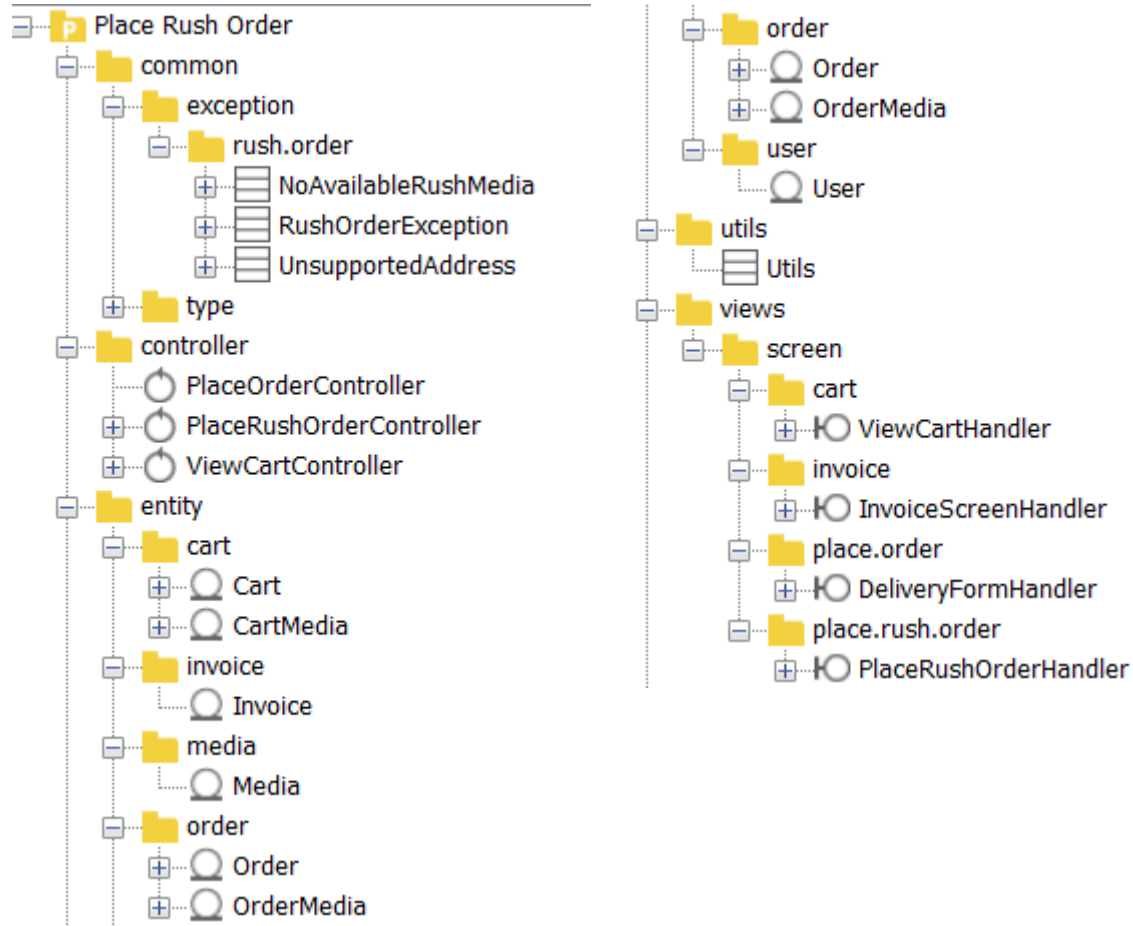
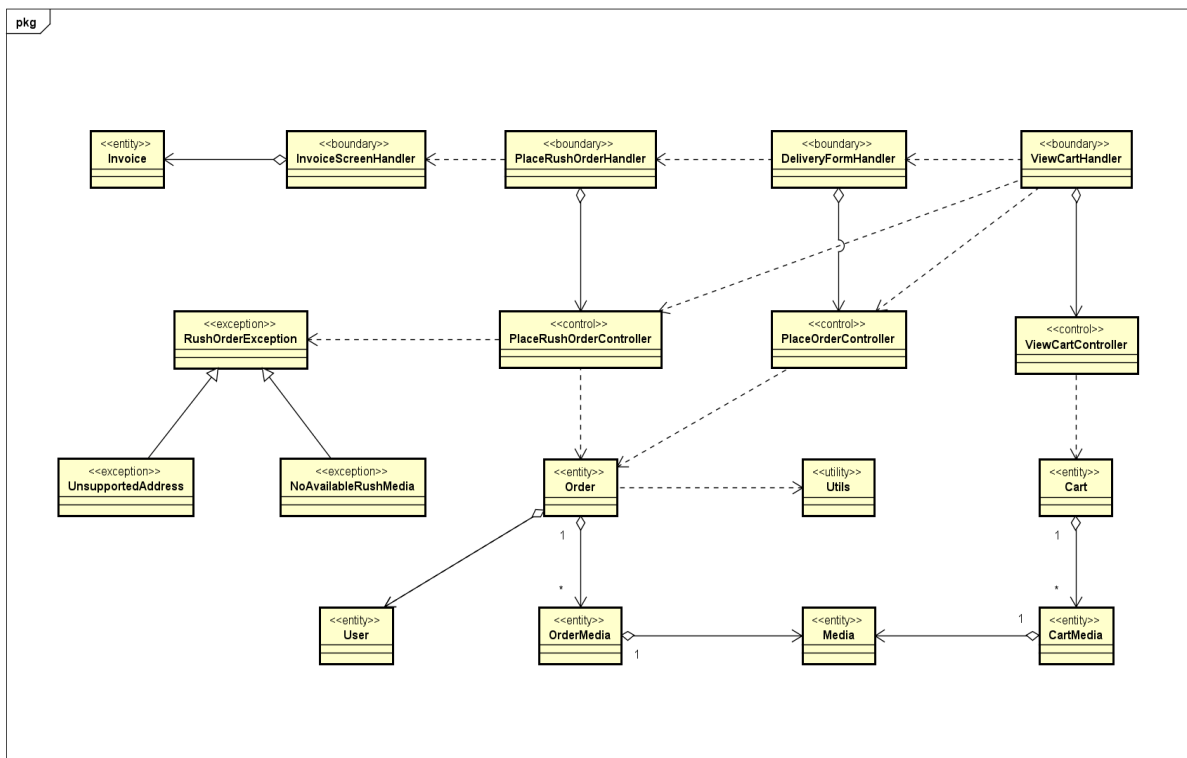


Class Design

1. Create Initial Design Classes

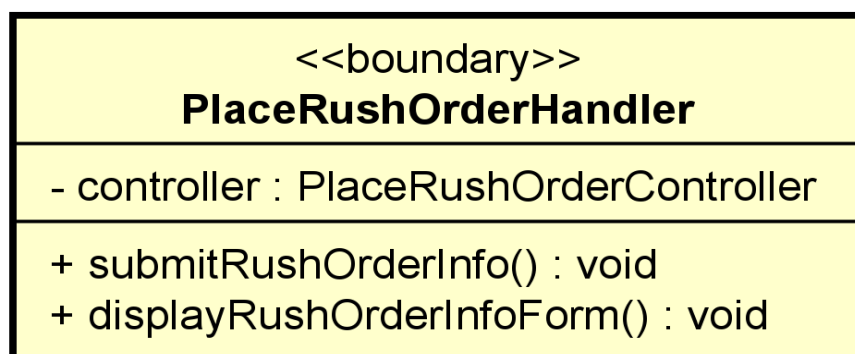


2. Define Relationships Between Classes



3. Class Design

3.1. Class “PlaceRushOrderHandler”



Attribute

| # | Name | Data type | Default value | Description |
|---|------------|--------------------------|---------------|-----------------------|
| 1 | controller | PlaceRushOrderController | NULL | the screen controller |

Operation

| # | Name | Return type | Description |
|---|--------------------------|-------------|---|
| 1 | submitRushOrderInfo | void | handle user click form submit button |
| 2 | displayRushOrderInfoForm | void | rendering the rush delivery form for user to fill |

Parameter:

None

Exception:

None

Method

None

State

None

3.2. Class “PlaceRushOrderController”

| <<control>> PlaceRushOrderController | |
|--|--|
| + requestRushOrder() : void + processRushOrder(info : HashTable) : void + <<exception>> validateRushOrder(info : HashTable<String, String>) : void + changeShippingFeeFormula(order : Order) : void | |

Attribute

None

Operation

| # | Name | Return type | Description |
|---|--------------------------|-------------|---|
| 1 | requestRushOrder | void | display form |
| 2 | processRushOrder | void | receive rush order info |
| 3 | validateRushOrder | void | check address and media supportivity and throws exception |
| 4 | changeShippingFeeFormula | void | re-calculate shipping fee with new formula |

Parameter:

info – the info in the rush delivery form

order – the order to change fee

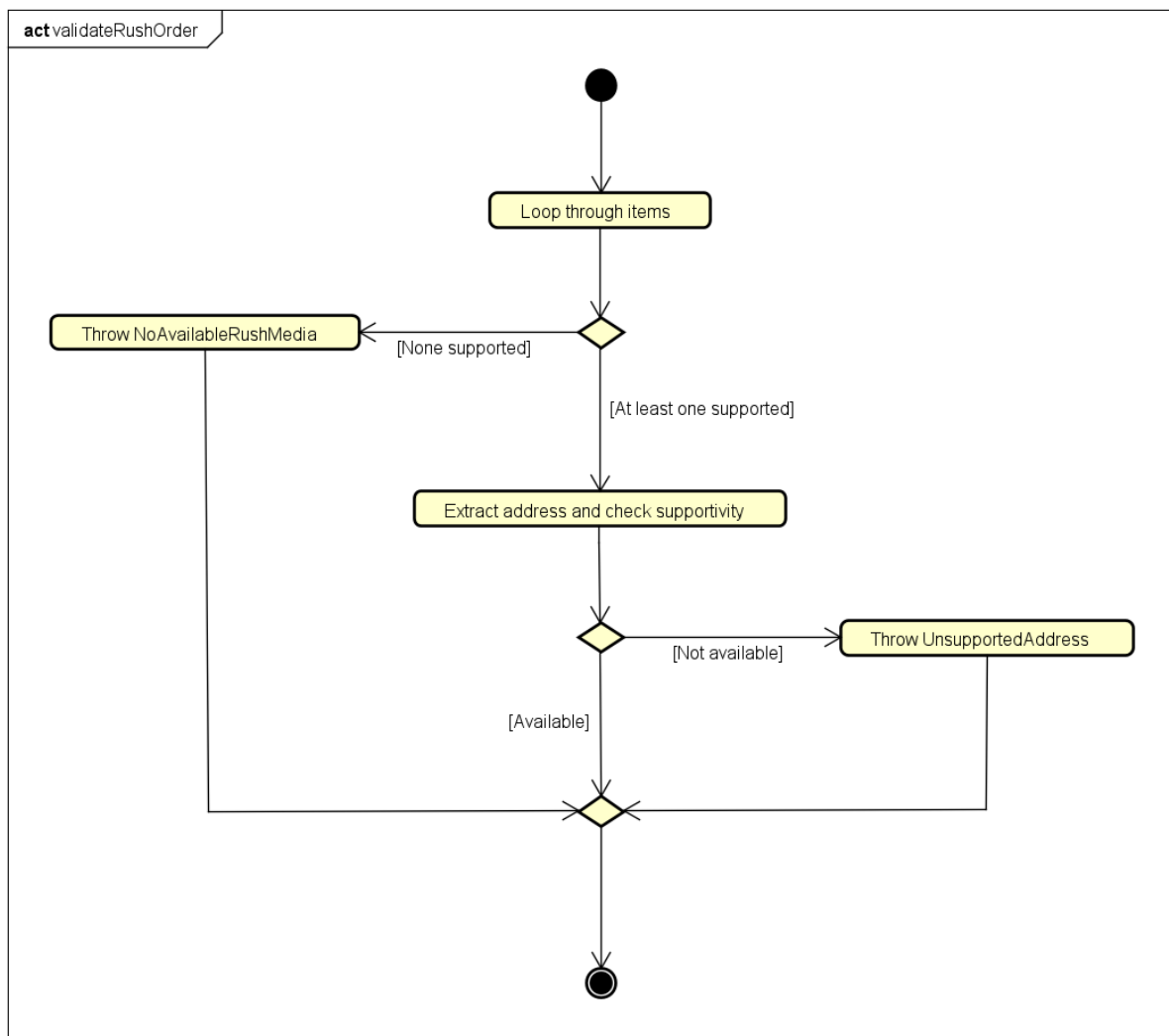
Exception:

NoAvailableRushMedia – throw when there is no supported media for rush delivery

UnsupportedAddress – throw if the address is not supported by rush delivery

Method

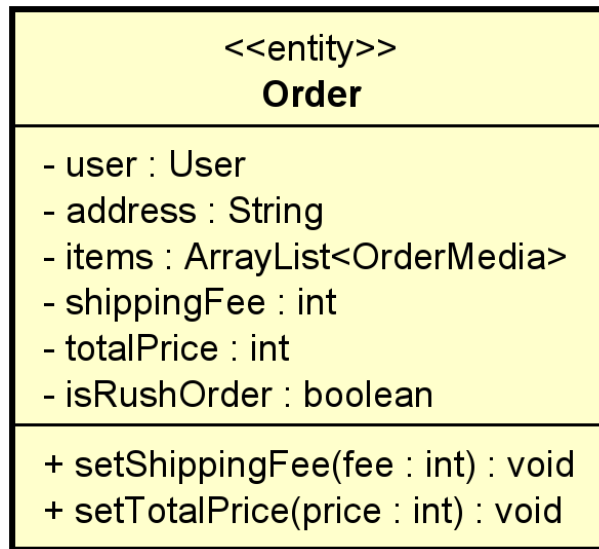
validateRushOrder:



State

None

3.3. Class “Order”



Attribute

| # | Name | Data type | Default value | Description |
|---|-------------|-----------------------|-----------------|---------------------------------|
| 1 | user | User | NULL | order's owner |
| 2 | address | String | NULL | shipping address |
| 3 | items | ArrayList<OrderMedia> | empty ArrayList | medias in the order |
| 4 | shippingFee | int | 0 | |
| 5 | totalPrice | int | 0 | total price include shipping |
| 6 | isRushOrder | Boolean | false | Whether user want rush delivery |

Operation

| # | Name | Return type | Description |
|---|----------------|-------------|---------------------|
| 1 | setShippingFee | void | update shipping fee |
| 2 | setTotalPrice | void | update total price |

Parameter:

fee – the new shipping fee

price – the new total price of the order

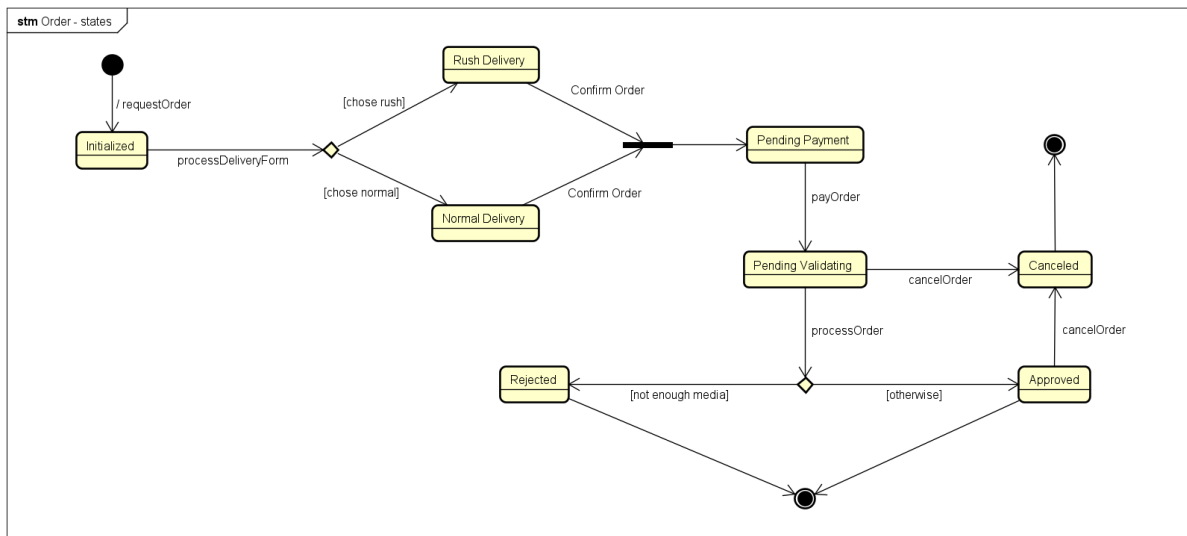
Exception:

None

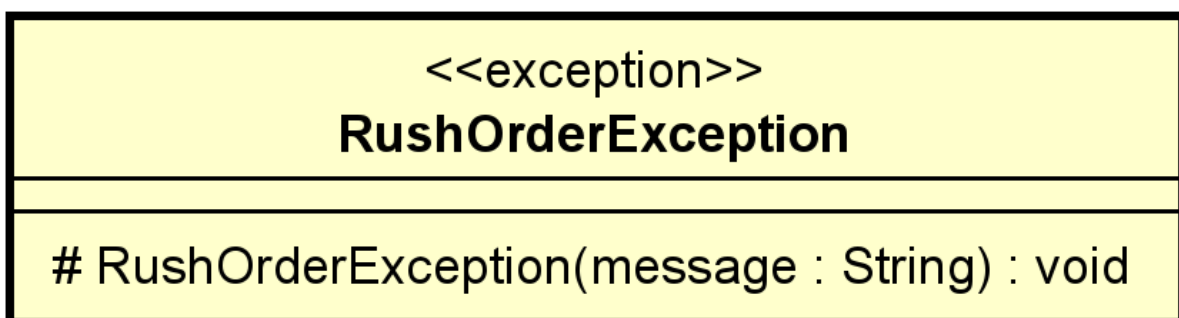
Method

None

State



3.4. Class “RushOrderException”



Attribute

None

Operation

| # | Name | Return type | Description |
|---|--------------------|-------------|---|
| 1 | RushOrderException | void | create a new exception message for rush order |

Parameter:

None

Exception:

None

Method

None

State

None

4. Class Diagram

