LAB 06: CLASS DESIGN

# Initial Design Classes

Graphical user interface

Description automatically generated with medium confidence  
A picture containing timeline

Description automatically generated

# Define Relationships Between Classes

Diagram

Description automatically generated

# Class Design

## 3.1. Class “PlaceRushOrderController”

Text

Description automatically generated

### 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”

Diagram

Description automatically generated

### 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”

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### 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

Diagram

Description automatically generated

## 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

Diagram, schematic

Description automatically generated