

# Design concepts

## Coupling & Cohesion

### 1. Coupling

#### 1.1. Content coupling

Related modules	Description	Improvement

#### 1.2. Common coupling

Related modules	Description	Improvement

#### 1.3. Control coupling

Related modules	Description	Improvement
CartScreenHandler	Function requestToPlaceOrder(bool isRush) needs the boolean flag to determine which route to execute	Separate it into 2 functions, requestToPlaceOrder() and requestToPlaceRushOrder() with each responds to a different button

#### 1.4. Stamp coupling

Related modules	Description	Improvement

## 1.5. Data coupling

Related modules	Description	Improvement
cartMedia	Passing the whole Cart object to cartMedia is excessive	Only use the necessary params while passing into cartMedia: media, quantity, price

## 2. Cohesion

### 2.1. Coincidental cohesion

Related modules	Description	Improvement

### 2.2. Logical cohesion

Related modules	Description	Improvement
PlaceRushOrderController	The controller takes in the info and then validates, and then creates an invoice and a rush order controller based on the information. All the code for these functions is in the same component. Operations are related, but the functions are significantly different.	

### 2.3. Temporal cohesion

Related modules	Description	Improvement

## 2.4. Procedural cohesion

Related modules	Description	Improvement

## 2.5. Communication cohesion

Related modules	Description	Improvement
InterbankSubsytem	InterbankSubsystemController has pay and refund method, which both works on the same input and returns the same type PaymentTransaction of output data	

## 2.6. Sequential cohesion

Related modules	Description	Improvement
PlaceRushOrderController	In the validateDeliveryInfo method, we validate the data fields one by one with different methods	

## 2.7. Informational cohesion

Related modules	Description	Improvement

## 2.8. Functional cohesion

Related modules	Description	Improvement
-----------------	-------------	-------------

--	--	--