## **DESIGN REVIEW**

# **Couplings**

## Content coupling

| No. | Related modules | Description | Improvement |
|-----|-----------------|-------------|-------------|
| -   | -               | -           | -           |

## Common coupling

| No. | Related modules | Description | Improvement |
|-----|-----------------|-------------|-------------|
| -   | -               | -           | -           |

#### Control coupling

| No. | Related modules | Description | Improvement |
|-----|-----------------|-------------|-------------|
| 1   |                 |             |             |

## Stamp coupling

| No. | Related modules                 | Description  | Improvement   |
|-----|---------------------------------|--|---|
| 1   | Cart , Media                    | Method checkMediaInCard(Media media) is in the stamp coupling, since we only need the media id, but pass all media object            | Only pass the media id as the only parameter        |
| 2   | Order ,<br>PlaceOrderController | Method calculateShippingFee(Order order) is in the stamp coupling, since we only need the amount of order, but pass all order object | Only pass the amount of order as the only parameter |

## Data coupling

| No. | Related modules | Description | Improvement |
|-----|-----------------|-------------|-------------|
|     |                 |             |             |

## Uncoupled

| No. | Related modules | Description | Improvement |
|-----|-----------------|-------------|-------------|
|     |                 |             |             |

# **Cohesion**

#### Coincidental

| No. | Related modules | Description | Improvement |
|-----|-----------------|-------------|-------------|
| 1   | Configs , Utils |             |             |

## Logical

| No. | Related modules | Description | Improvement |
|-----|-----------------|-------------|-------------|
|     |                 |             |             |

## Temporal

| No. | Related modules | Description | Improvement |
|-----|-----------------|-------------|-------------|
|     |                 |             |             |

## Procedural

| No. | Related modules          | Description                 | Improvement                      |
|-----|--------------------------|-----------------------------|----------------------------------|
| 1   | PlaceOrderController,    | Constructors of place order | Redesign the controller to       |
|     | PlaceRushOrderController | controllers has nested      | have better inheritance as well  |
|     |                          | relationships to serve the  | as introduce interfaces to solve |
|     |                          | need of initializing the    | the problem of re-call           |
|     |                          | controller                  | unnecessary constructors         |
| 2   | PlaceOrderController     |                             | validate data fields one-by-one  |
|     |                          |                             | with the validation methods      |

## Communicational

| No. | Related modules                        | Description   | Improvement |
|-----|--|---|-------------|
| 1   | InterbankSubsystem, PaymentTransaction | InterbankSubsystem both works on the same input and returns the same type PaymentTransaction of |             |
|     |  | output data   |             |
| 2   |  |   |             |

## Sequential

| No. | Related modules | Description | Improvement |
|-----|-----------------|-------------|-------------|
|     |                 |             |             |

## Informational

| No. | Related modules | Description | Improvement |
|-----|-----------------|-------------|-------------|
|     |                 |             |             |

#### **Functional**

| No. | Related modules | Description | Improvement |
|-----|-----------------|-------------|-------------|
|     |                 |             |             |