

Class Design for VNPay Subsystem

VNPayAdapter <<control>>

Attributes:

- apiEndpoint: string
- timeout: int

Methods:

- + sendPaymentRequest(orderId: int, amount: float): PaymentResponse
- + verifyTransaction(transactionId: string): boolean

Responsibilities:

- Xu ly gui yeu cau thanh toan va xac minh giao dich voi he thong VNPay.
- Giao tiep voi VNPayAPI de gui/nhan du lieu tu he thong ben ngoai.

VNPayAPI <<entity>>

Methods:

- + callVNPayAPI(orderId: int, amount: float): PaymentResponse
- + callVerifyAPI(transactionId: string): boolean

Responsibilities:

- Dai dien cho he thong VNPay thuc te.
- Xu ly viec goi API de thuc hien va kiem tra giao dich.

PaymentResponse <<entity>>

Attributes:

- transactionId: string
- status: string
- message: string

Methods:

- + isSuccessful(): boolean

Responsibilities:

- Dong goi ket qua tra ve tu he thong VNPay.

- Hỗ trợ xác định giao dịch thành công hay thất bại.