

**<<Project name>>**

**Software Design Document**

– Hanoi, August 2019 –

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# I. Overview

## 1. Code Packages/Namespaces

Diagram

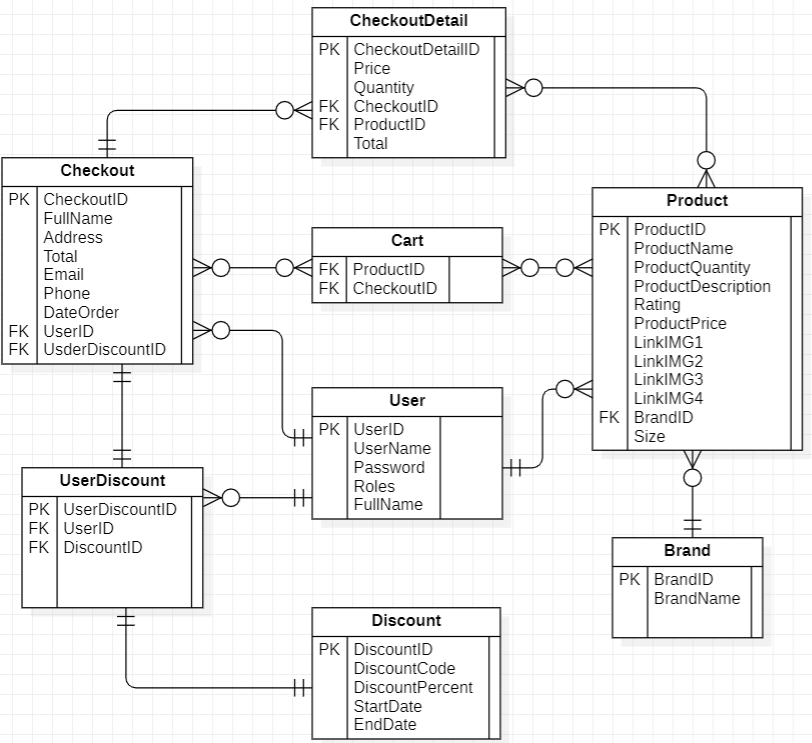
Description automatically generated

***Package descriptions & package class naming conventions***

|  |  |  |
| --- | --- | --- |
| **No** | **Package** | **Description** |
| *01* | *View* | *Web view for admin, host, user, guess* |
| *02* | *Controller* | *Controller of admin, host, user, website* |
| *03* | *DAO* | *List shose* |
| *04* | *Filter* | *Sort for admin, host, user* |
| *05* | *Ultils* | *Database sql* |
| *06* | *Model* | *ProductID, ProductName, ProductQuanity, ProductDescription, Rating, ProductPrice, BrandID, Size,....* |

## 2. Database Schema

*[Provide the tables relationship like example below – following MySQL database naming convention]*



***Table descriptions & package class naming conventions are as below***

|  |  |  |
| --- | --- | --- |
| **No** | **Table** | **Description** |
| *01* | *User* | *UserID, UserName, Password, Roles, FullName*  *- Primary keys: UserID*  *- Foreign keys: Roles* |
| *02* | *UserDiscount* | *UserDiscountID, UserID, DiscountID*  *- Primary keys: UserDiscountID*  *- Foreign keys: UserID, DiscountID* |
| *03* | *Checkout* | *CheckoutID, FullName, Address, Total, Email, Phone, DateOrder, UserID, UserDiscountID*  *- Primary keys: non*  *- Foreign keys: (CheckoutID, UserID, UserDiscountID)* |
| *04* | *CheckoutDetail* | *CheckoutDetailID, Price, Quantity, Total, CheckoutID, ProductID*  *- Primary keys: CheckoutDetailID*  *- Foreign keys: ProductID* |
| *05* | *Discount* | *DiscountID, DiscountCode, DiscountPercent, StartDate, EndDate*  *- Primary keys: DiscountID*  *- Foreign keys: non* |
| *06* | *Brand* | *BrandID, Name*  *- Primary keys: BrandID*  *- Foreign keys: Name* |
| *07* | *Product* | *ProductID, ProductName, ProductQuanity, ProductDescription, Rating, ProductPrice, LinkIMG1, LinkIMG2, LinkIMG3, LinkIMG4, BrandID, Size*  *- Primary keys: ProductID*  *- Foreign keys: BrandID* |
| *08* | *Cart* | *CheckoutID, FullName, Address, Total, Email, Phone, DateOrder, UserID, UserDiscountID*  *- Primary keys: UserID*  *- Foreign keys: UserDiscountID, CheckoutID* |

# II. Code Designs

## 1. <Feature/Function Name1>

*[Provide the detailed design for the function <Feature/Function Name1>. It include Class Diagram, Class Specifications, and Sequence Diagram(s)]*

### a. Class Diagram

*[This part presents the class diagram for the relevant feature]*



### b. Class Specifications

*[Provide the description for each class and the methods in each class, following the table format as below]*

#### XYZ Class

*[Provide the detailed description for the class methods]*

|  |  |  |
| --- | --- | --- |
| **No** | **Method** | **Description** |
| *01* | *<method name>* | *<Description of the method, including the inputs, outputs & internal method processing>* |
|  |  |  |

#### ABC Class

***Class Methods***

*[Provide the detailed description for the class methods]*

|  |  |  |
| --- | --- | --- |
| **No** | **Method** | **Description** |
| *01* | *<method name>* | *<Description of the method, including the inputs, outputs & internal method processing>* |
|  |  |  |

### c. Sequence Diagram(s)

*[Provide the sequence diagram(s) for the feature, see the sample below]*



### d. Database queries

*[Provide the detailed SQL (select, insert, update...) which are used in implementing the function/screen]*

## 2. <Feature/Function Name2>

…

# III. Database Tables

## 1. <Table name 1>

*[Give some lines about the table here>>*

*[Table fields, in the form of table format as below]*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Field name** | **Type** | **Size** | **Unique** | **Not Null** | **PK/FK** | **Notes** |
| 1 | Field name1 |  |  |  |  |  |  |
| 2 | Field name2 |  |  |  |  |  |  |

## 2. <Table name 2…>