

**ONLINE SHOPPING PLATFORM FOR STUDENTS, TEACHERS AT FPTU**

**Software Design Document**

– HoChiMinh, September 2022 –

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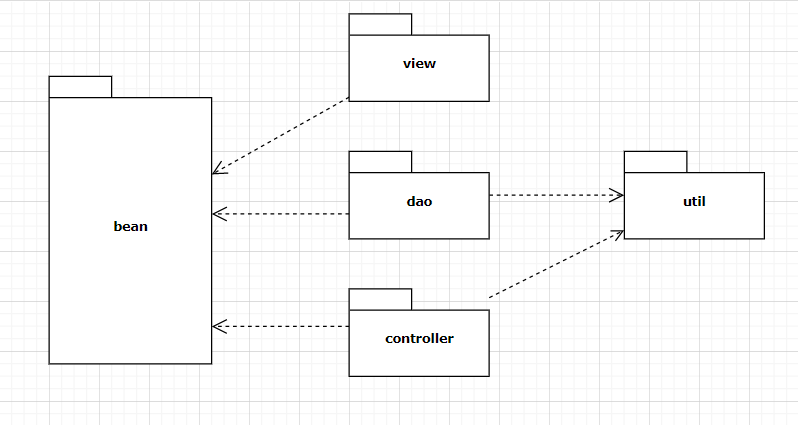
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# I. Overview

## 1. Code Packages/Namespaces

*[Provide the package diagram for each sub-system. The content of this section including the overall package diagram, the explanation, package and class naming conventions in each package. Please see the sample and description table format below – following Java project naming convention]*



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

|  |  |  |
| --- | --- | --- |
| **No** | **Package** | **Description** |
| 01 | bean | * Entity class * Classname + “DTO” (ex: ProductDTO.java) |
| 02 | view | * Is used for holds view for user and admin * lowerCase (ex:mainpage.jsp) |
| 03 | controller | * Is used for holds web controllers in MVC 2 models * Classname + “controller” (ex: HomeController.java) |
| 04 | dao | * Is used for holds class * Classname + “DAO” (ex: ProductDAO.java) |
| 05 | util | * The util methods should be moved to a helper or utility class or encapsulated within the class that uses them * Camelcase (ex: myToy.java) |

## 

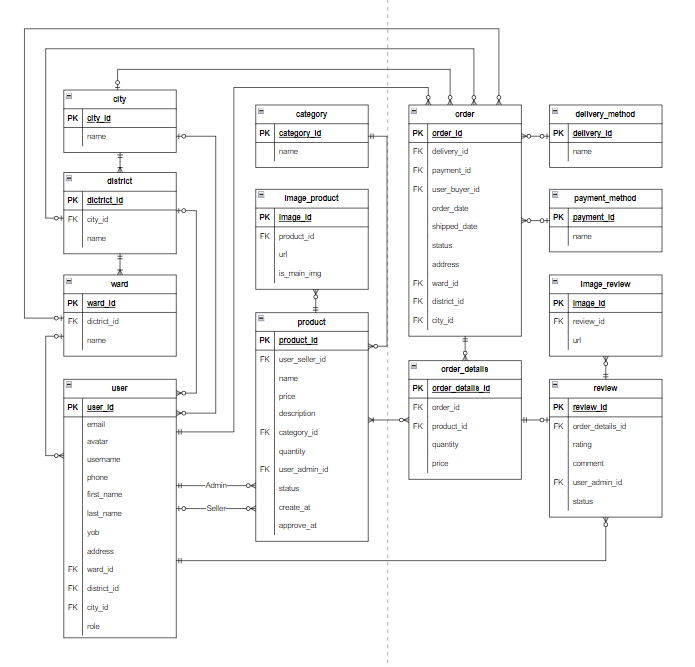
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## 

## 

## 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** |
| 1 | user | - Primary keys: user\_id  - Foreign keys: ward\_id, district\_id, city\_id |
| 2 | product | - Primary keys: product\_id  - Foreign keys: user\_seller\_id, category\_id, user\_admin\_id |
| 3 | order | - Primary keys: order\_id  - Foreign keys: delivery\_id, payment\_id, user\_buyer\_id, ward\_id, district\_id, city\_id |
| 4 | order\_detail | - Primary keys: order\_detail\_id  - Foreign keys: order \_id, product\_id, review\_id |
| 5 | category | - Primary keys: category\_id |
| 6 | image\_product | - Primary keys: image\_id  - Foreign keys: product\_id |
| 7 | delivery\_method | - Primary keys: delivery\_id |
| 8 | payment\_method | - Primary keys: payment\_id |
| 9 | review | - Primary keys: review\_id  - Foreign keys: user\_admin\_id, order\_detail\_id |
| 10 | image\_review | - Primary keys: image\_id  - Foreign keys: review\_id |
| 11 | ward | - Primary keys: ward\_id  - Foreign keys: district\_id |
| 12 | district | - Primary keys: district\_id  - Foreign keys: city\_id |
| 13 | city | - Primary keys: city\_id |

# 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…>