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|  | **MINISTRY OF EDUCATION AND TRAINING** |

**FPT UNIVERSITY**

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| Capstone Project Document | |
| **Face Detection For Delivery Payment** | |
| **Group 5 - IS** | |
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# **D. Report No. 4 Software Design Description**

# **1. Design Overview**

# **SystemArchitecture 2. System Architectural Design**

Figure System Architectural Design

## **2.1 Web application architecture description**

* In web application, the system is developed under MVC architecture style. We choose this architecture for Web application because of following advantages:
  + - Business code is separated with View and Controller that make easy to maintain and easy to understand.
    - Model is used to get and update data from database.
    - Controller takes request from web browser and makes a call to business logic layer.

**2.2 Mobile application architecture description**

* The activity in Mobile client act like a controller to redirect command from view in mobile.
* It takes HTTP Response from server and makes call HTTP Request.

# **3. Component Diagram**

Figure Component Diagram

|  |  |
| --- | --- |
| **Component Dictionary: Describe component** | |
| **Component Name** | **Description** |
| Mobile Application | Mobile Application package. |
| Web Application | Web Application package: controller, view. |
| Restful Service | Provide API for Mobile Application. |
| Business Logic | Handle business operation for each component. |
| Model Component | Mapping data from database. |
| User Component | Component to handle User activities in the system. |
| Manager Component | Component to handle Manager activities in the system. |
| Customer Component | Component to handle Customer activities in the system. |
| Shipper Component | Component to handle Shipper activities in the system. |

Table Component Dictionary

# **4. Detail Description**

## **4.1 Class Diagram**

Figure Class Diagram

|  |  |
| --- | --- |
| **Class Dictionary** | |
| **Class Name** | **Description** |
| Payment Type | Abstract class that contains Payment type information. |
| Payment Information | Contain Payment Information |
| Price List | Contain Feedback information |
| Account | Contain Account information |
| Manager | Contain Manager information |
| Receptionist | Contain Receptionist information |
| Appointment | Contain Appointment information |
| ExportPaperDetail | Contain ExportPaperDetail information |
| ExportPaper | Contain ExportPaper information |
| Supply | Contain Supply information |
| SupplyType | Contain SupplyType information |
| ImportPaperDetail | Contain ImportPaperDetail information |
| ImportPaper | Contain ImportPaper information |
| Warehouse Keepper | Contain Warehouse Keepper information |
| Nurse | Contain Nurse information |
| SampleGetting | Contain SampleGetting information |
| Sample | Contain Sample information |
| SampleGroup | Contain SampleGroup information |
| Doctor | Contains Doctor information |
| Department | Contains Department information |
| Hospital | Contains Hospital information |
| Lab Technician | Contains Lab Technician information |
| Lab Test | Contains Lab Test information |
| TestProfile | Contains TestProfile information |
| TestProfileLabTestMapping | Contains TestProfileLabTestMapping information |
| ResultPaper | Contains ResultPaper information |
| HospitalSuggesting | Contains HospitalSuggesting information |
| HospitalDepartmentMapping | Contains HospitalDepartmentMapping information |

Table Class Dictionary

## **4.2 Class Diagram Explanation**

## **4.3 Interaction Diagram**

# **5. Interface**

## **5.1 Component interface**

## **5.2 User Interface Design**

## **5.3 Guest Interface Design**

# **6. Database Design**

## **6.1 Entity Relationship Diagram (ERD)**

Figure Entity Relation Diagram

## **6.2 Data Dictionary**

|  |  |  |
| --- | --- | --- |
| **Entity Data Dictionary: Describe content of all tables** | | |
| **No.** | **Table Name** | **Description** |
| 1 | Fr\_account | Contain account information |
| 2 | Fr\_city | Contain city information |
| 3 | Fr\_district | Contain district data of city |
| 4 | Fr\_order | Contain data of order’s list |
| 5 | Fr\_order\_detail | Contain data of order |
| 6 | Fr\_payment\_information | Contain data of payment |
| 7 | Fr\_payment\_type | Type of payment |
| 8 | Fr\_price\_level | Select price level for shipper |
| 9 | Fr\_product | Contain data of every product of store |
| 10 | Fr\_rating | Contain data rating of account for product and store |
| 11 | Fr\_role | Contain data role of member |
| 12 | Fr\_schedule | Contain open and close time of store |
| 13 | Fr\_shipper | Contain data of shipper |
| 14 | Fr\_source | Contain source of data |
| 15 | Fr\_store | Contain data of store |
| 16 | Fr\_weekday | Contian id for everyday (Monday, Tuesday, Sunday,…) |

# **7. Algorithms**