

VOLUNTARY NON-REMUNERATED BLOOD DONATION

DETAIL DESIGN DOCUMENT

Class Design

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SIGNATURE PAGE

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# Introduction

## Purpose

Voluntary non-remunerated blood donation class design document contains descriptions of all classes of the Voluntary non-remunerated blood donation system. It includes:

* Class diagrams that describe the static relation of all classes in the system.

## Definitions, Acronyms and Abbreviations

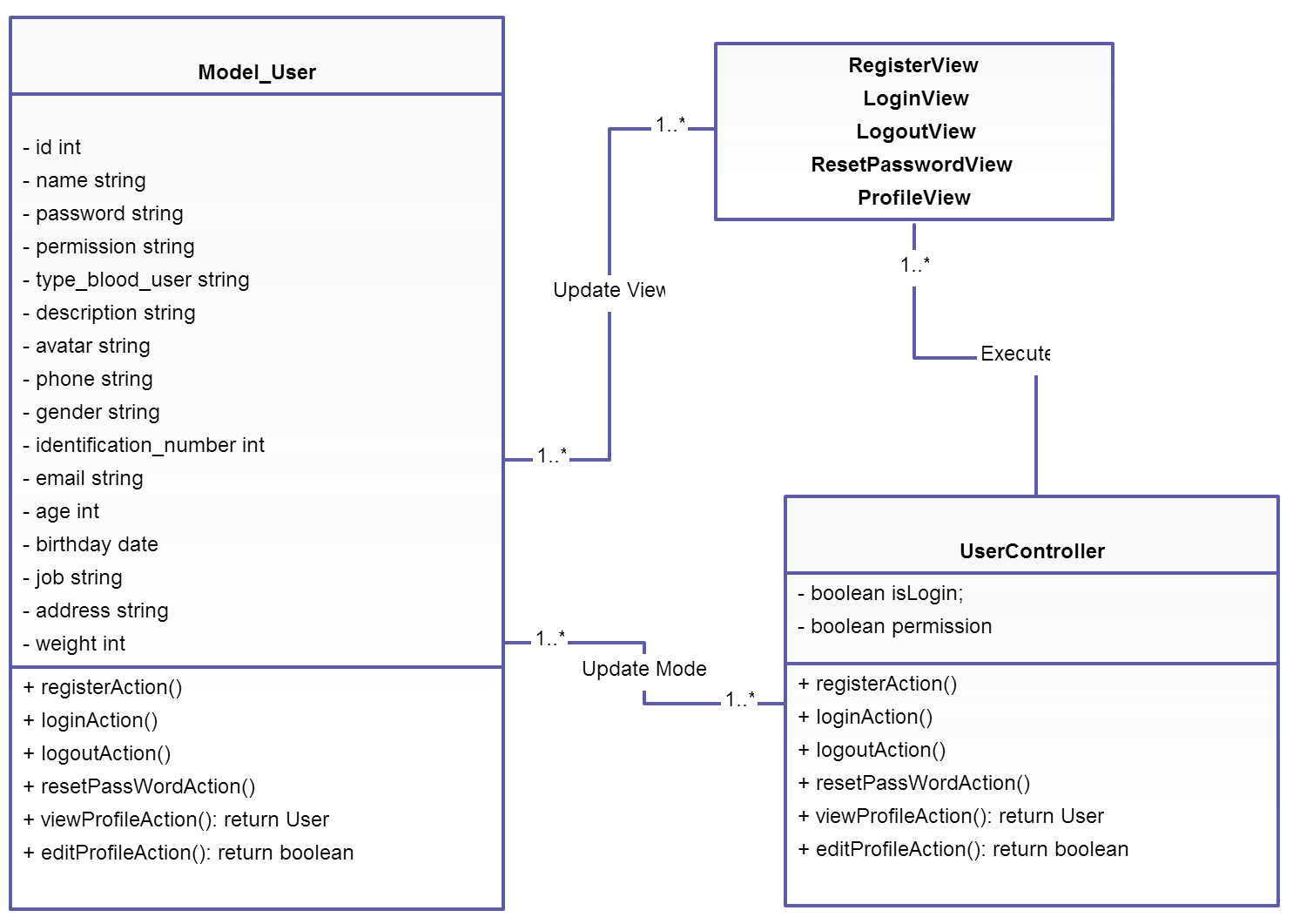
|  |  |  |
| --- | --- | --- |
| Abbreviations | Description | Comment |
| MVC | Model View Control model |  |
| D.A.O | Data Access Object |  |

# Packages

|  |  |  |  |
| --- | --- | --- | --- |
| No | Package | Language | Description |
| 1. 01 | User | PHP | Store all information of User, or perform register, reset password. |
|  | Post | PHP | Store news or search text in post. |
|  | Comment | PHP | Comment of Users. |
|  | QA | PHP | Q&A of Users and answer Q&A. |
|  | Admin | PHP | Manage User, post, Q&A, comment. |

## User Package

### Class diagram



**Figure 1: Class diagram user package**

|  |  |  |
| --- | --- | --- |
| No | Class Name | Description |
| 1 | Model\_User |  |
| 2 | UserController |  |

### Model\_User class

#### Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attribute | Type | Default | Note | Description |
| 1. 1 | Id | Int |  | private |  |
|  | Name | String |  | private |  |
|  | Password | String |  | Private |  |
|  | Permission | Int |  | private |  |
|  | Type\_blood\_user | String | Null | private |  |
|  | Description | String | Null | Private |  |
|  | Avatar | String | Null | private |  |
|  | Phone | String |  | private |  |
|  | Gender | String |  | Private |  |
|  | Identification\_number | Int |  | private |  |
|  | Email | String |  | private |  |
|  | Age | Int |  | Private |  |
|  | Birthday | Datetime |  | Private |  |
|  | Job | String | Null | private |  |
|  | Address | String |  | private |  |
|  | Weight | Int |  | Private |  |

#### Methods

|  |  |  |
| --- | --- | --- |
| No | Method | Description |
|  | registerAction() | Interact with database |
|  | loginAction() | Interact with database |
|  | logoutAction() | Interact with database |
|  | resetPasswordAction() | Interact with database |
|  | viewProfileAction() | Interact with database |
|  | editProfileAction() | Interact with database |

### UserController class

#### Attributes

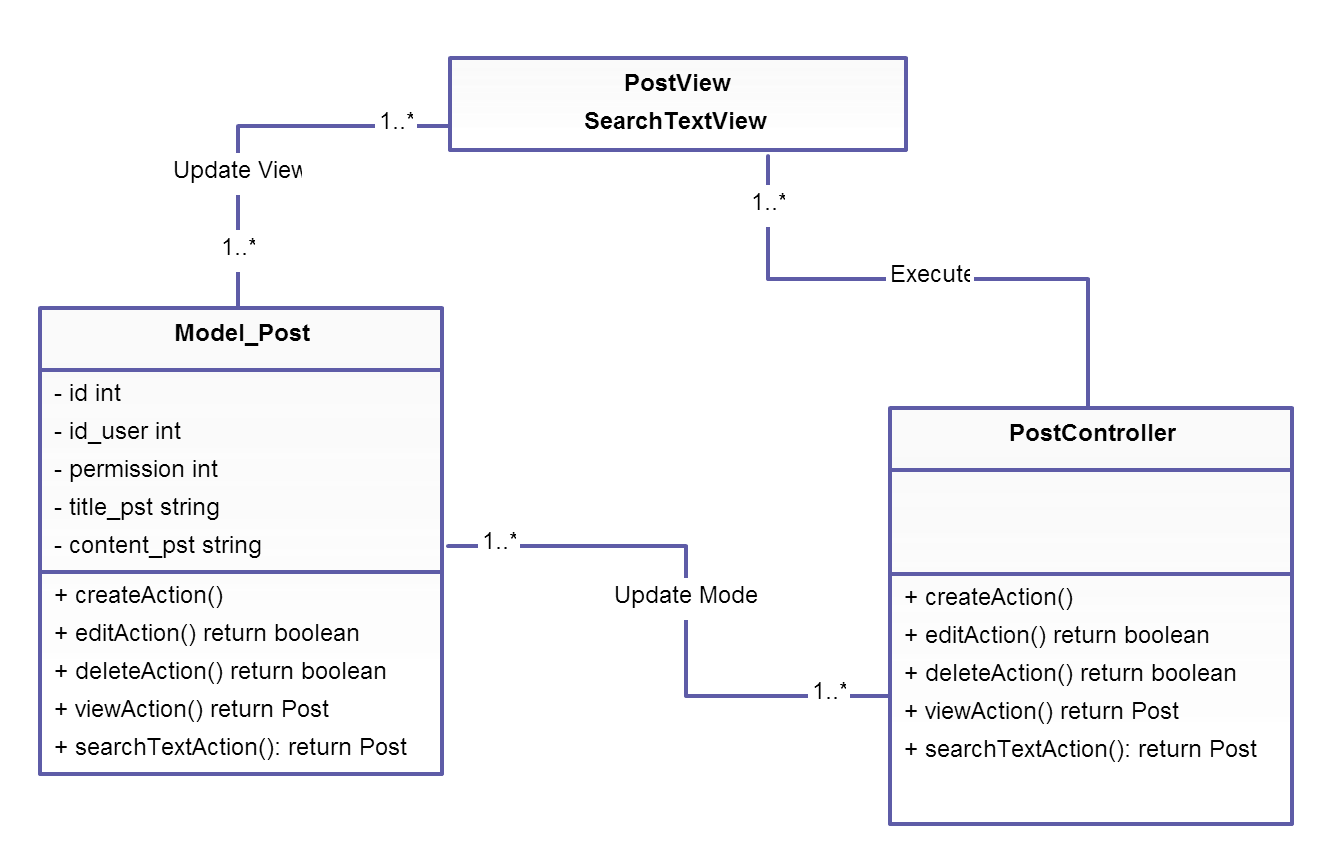
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attribute | Type | Default | Note | Description |
| 1 | Islogin | boolean |  |  | Check authentication |
| 2 | permission | Int |  |  | Check permission of user |

#### Methods

|  |  |  |
| --- | --- | --- |
| No | Method | Description |
|  | registerAction() | Register member |
|  | loginAction() | Login website |
|  | logoutAction() | Logout website |
|  | resetPasswordAction() | Reset password of user |
|  | viewProfileAction() | View profile user |
|  | editProfileAction() | Edit profile user |

## Post Package

### Class diagram



**Figure 2: Class diagram post package**

|  |  |  |
| --- | --- | --- |
| No | Class Name | Description |
| 1 | Model\_Post |  |
| 2 | PostController |  |

### Model\_Post class

#### Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attribute | Type | Default | Note | Description |
| 1. 1 | Id | Int |  | private |  |
|  | Id\_user | Int |  | private |  |
|  | Permission | Int |  | Private |  |
|  | Title\_pst | String |  | private |  |
|  | Content\_pst | String |  | private |  |

#### Methods

|  |  |  |
| --- | --- | --- |
| No | Method | Description |
|  | CreateAction() | Interact with database |
|  | editAction() | Interact with database |
|  | deleteAction() | Interact with database |
|  | viewAction() | Interact with database |
|  | searchTextAction() | Interact with database |

### PostController class

#### Attributes

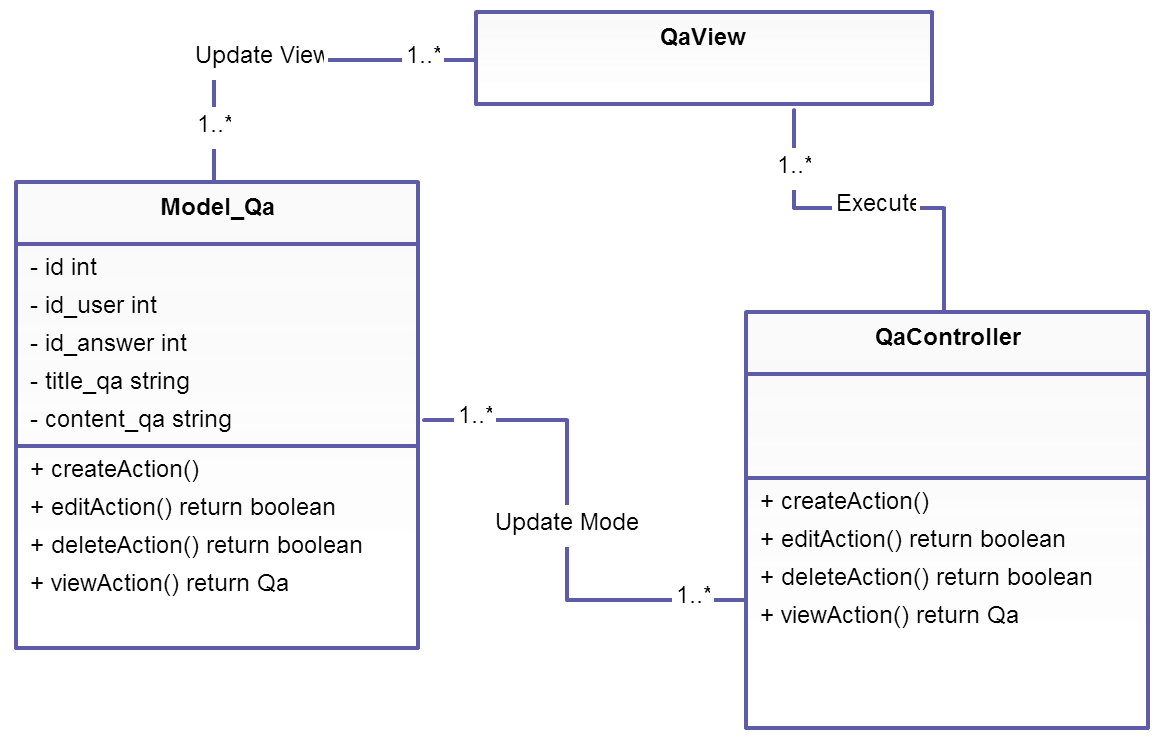
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attribute | Type | Default | Note | Description |
|  |  |  |  |  |  |

#### Methods

|  |  |  |
| --- | --- | --- |
| No | Method | Description |
|  | CreateAction() | Create post |
|  | editAction() | Edit post |
|  | deleteAction() | Delete post |
|  | viewAction() | View post |
|  | searchTextAction() | Search text |

## Qa Package

### Class diagram



**Figure 3: Class diagram Qa package**

|  |  |  |
| --- | --- | --- |
| No | Class Name | Description |
| 1 | Model\_Qa |  |
| 2 | QaController |  |

### Model\_Qa class

#### Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attribute | Type | Default | Note | Description |
| 1. 1 | Id | Int |  | private |  |
| 1. 2 | Id\_user | Int |  | private |  |
| 1. 3 | Id\_answer | Int | Null | Private | Mark Id QA which is answered |
| 1. 3 | Title\_qa | String |  | private |  |
| 1. 3 | Content\_qa | String |  | private |  |

#### Methods

|  |  |  |
| --- | --- | --- |
| No | Method | Description |
|  | CreateAction() | Interact with database |
|  | editAction() | Interact with database |
|  | deleteAction() | Interact with database |
|  | viewAction() | Interact with database |

### QaController class

#### Attributes

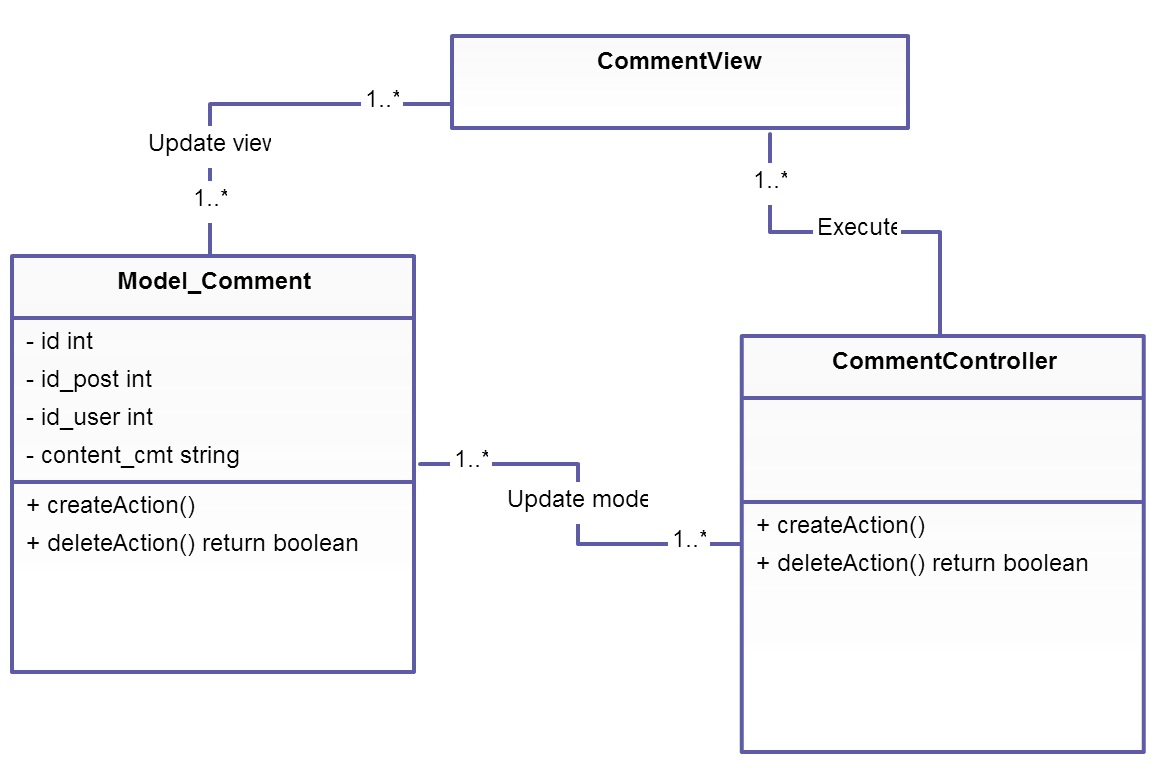
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attribute | Type | Default | Note | Description |
|  |  |  |  |  |  |

#### Methods

|  |  |  |
| --- | --- | --- |
| No | Method | Description |
|  | CreateAction() | Create Q&A |
|  | editAction() | Edit Q&A |
|  | deleteAction() | Delete Q&A |
|  | viewAction() | View Q&A List |

## Comment Package

### Class diagram



**Figure 4: Class diagram Comment package**

|  |  |  |
| --- | --- | --- |
| No | Class Name | Description |
| 1 | Model\_Comment |  |
| 2 | CommentController |  |

### Model\_Comment class

#### Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attribute | Type | Default | Note | Description |
| 1. 1 | Id | Int |  | private |  |
| 1. 2 | Id\_user | Int |  | private |  |
| 1. 3 | Id\_post | Int |  | Private |  |
| 1. 3 | Content\_cmt | String |  | private |  |

#### Methods

|  |  |  |
| --- | --- | --- |
| No | Method | Description |
| 1 | CreateAction() | Interact with database |
| 2 | deleteAction() | Interact with database |

### CommentController class

#### Attributes

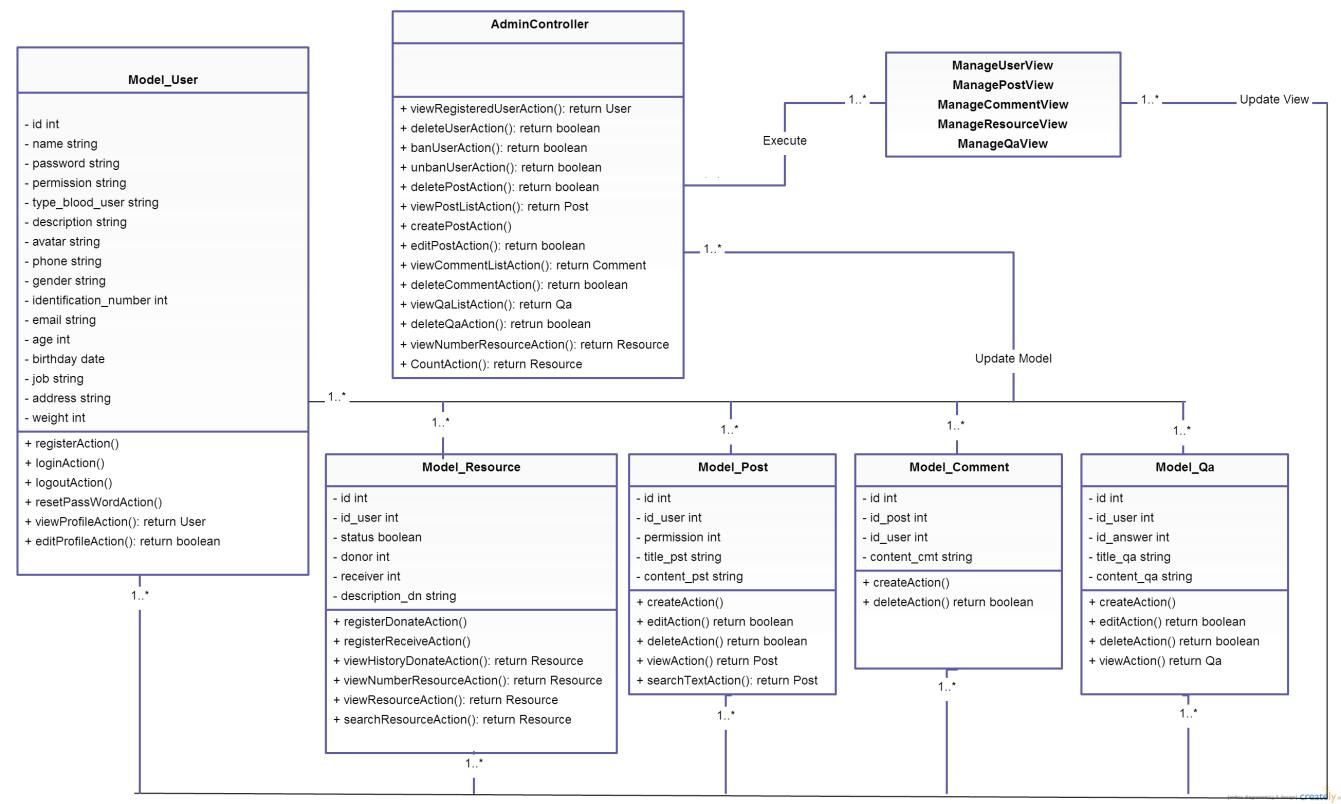
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attribute | Type | Default | Note | Description |
|  |  |  |  |  |  |

#### Methods

|  |  |  |
| --- | --- | --- |
| No | Method | Description |
|  | CreateAction() | Create comment |
|  | deleteAction() | Delete comment |

## Admin Package

### Class diagram



**Figure 5: Class diagram Admin package**

|  |  |  |
| --- | --- | --- |
| No | Class Name | Description |
| 1 | Model\_Comment |  |
| 2 | Model\_User |  |
| 3 | Model\_Qa |  |
| 4 | Model\_resource | function relate with database when user register donating or receiving blood |
| 5 | Model\_post |  |
| 6 | adminController | Perform permission for managing all of parts website, post, comment, user, Q&A. |

### Model\_User class

#### Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attribute | Type | Default | Note | Description |
| 1. 1 | Id | Int |  | private |  |
|  | Name | String |  | private |  |
|  | Password | String |  | Private |  |
|  | Permission | Int |  | private |  |
|  | Type\_blood\_user | String |  | private |  |
|  | Description | String |  | Private |  |
|  | Avatar | String |  | private |  |
|  | Phone | String |  | private |  |
|  | Gender | String |  | Private |  |
|  | Identification\_number | Int |  | private |  |
|  | Email | String |  | private |  |
|  | Age | Int |  | Private |  |
|  | Birthday | Datetime |  | Private |  |
|  | Job | String |  | private |  |
|  | Address | String |  | private |  |
|  | Weight | Int |  | Private |  |

#### Methods

|  |  |  |
| --- | --- | --- |
| No | Method | Description |
|  | registerAction() | Interact with database |
|  | loginAction() | Interact with database |
|  | logoutAction() | Interact with database |
|  | resetPasswordAction() | Interact with database |
|  | viewProfileAction() | Interact with database |
|  | editProfileAction() | Interact with database |

### Model\_Post class

#### Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attribute | Type | Default | Note | Description |
| 1. 1 | Id | Int |  | private |  |
|  | Id\_user | Int |  | private |  |
|  | Permission | Int |  | Private |  |
|  | Title\_pst | string |  | private |  |
|  | Content\_pst | String |  | private |  |

#### Methods

|  |  |  |
| --- | --- | --- |
| No | Method | Description |
|  | CreateAction() | Interact with database |
|  | editAction() | Interact with database |
|  | deleteAction() | Interact with database |
|  | viewAction() | Interact with database |
|  | searchTextAction() | Interact with database |

### Model\_Qa class

#### Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attribute | Type | Default | Note | Description |
| 1. 1 | Id | Int |  | private |  |
| 1. 2 | Id\_user | Int |  | private |  |
| 1. 3 | Id\_answer | Int |  | Private | Mark Id QA which is answered |
| 1. 3 | Title\_qa | string |  | private |  |
| 1. 3 | Content\_qa | String |  | private |  |

#### Methods

|  |  |  |
| --- | --- | --- |
| No | Method | Description |
|  | CreateAction() | Interact with database |
|  | editAction() | Interact with database |
|  | deleteAction() | Interact with database |
|  | viewAction() | Interact with database |

### Model\_Comment class

#### Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attribute | Type | Default | Note | Description |
| 1. 1 | Id | Int |  | private |  |
| 1. 2 | Id\_user | Int |  | private |  |
| 1. 3 | Id\_post | Int |  | Private |  |
| 1. 3 | Content\_cmt | String |  | private |  |

#### Methods

|  |  |  |
| --- | --- | --- |
| No | Method | Description |
|  | CreateAction() | Interact with database |
|  | deleteAction() | Interact with database |

### AdminController class

#### Methods

|  |  |  |
| --- | --- | --- |
| No | Method | Description |
| 1 | viewRegisteredUserAction() | View registered Users |
| 2 | deleteUserAction() | Delete User |
| 3 | banuserAction() | Ban user |
| 4 | unbanuserAction() | Unban user |
| 5 | DeletepostAction() | Delete post |
| 6 | ViewpostListAction() | View list post |
| 7 | createPostAction() | Create new post |
| 8 | editPostAction() | Edit post |
| 9 | viewCommentListAction() | View list comment of users |
| 10 | deleteCommentAction() | View list comment |
| 11 | ViewQaListAction() | View list Q&A |
| 12 | DeleteQaAction() | Delete Q&A |
| 13 | viewNumberResourcAction() | View |

# Data access object and mVC model



***Figure 6: MVC Model***

Diagram describes combination between MVC and D.A.O

VNBD Project will use this model for all process code function of website. With D.A.O in each package will construct such as figure below:

