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|  |
| Capstone Project Document |

**WingS**

Report #2 – Class Design

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**- Hanoi, 10/2016 –**

# SIGNATURE PAGE

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# Introduction

## Purpose

WingS class design document contains descriptions of all classes of the WingS. It includes: Class diagrams that describe the static relation of all classes in the system.

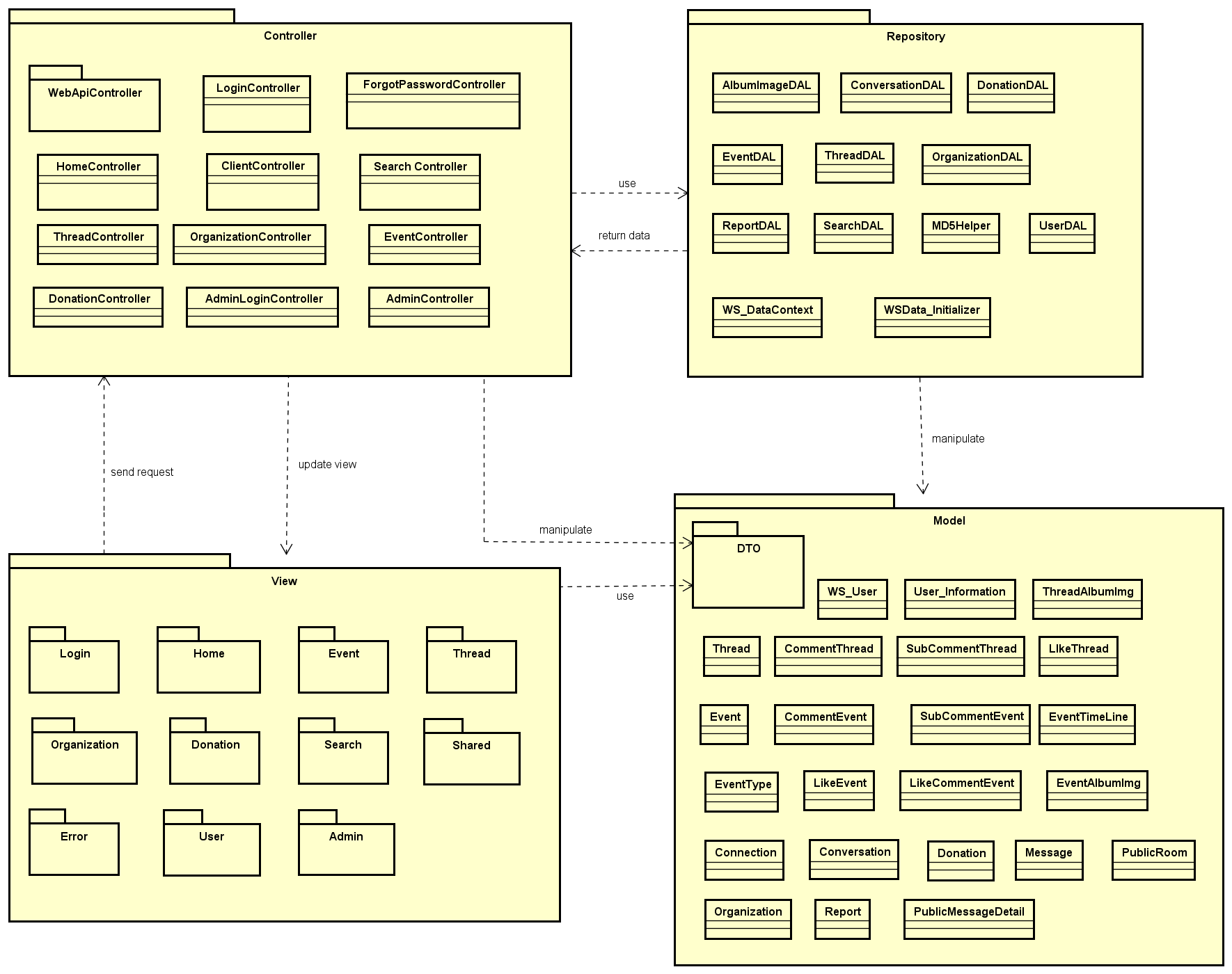
## Definitions, Acronyms and Abbreviations

|  |  |  |
| --- | --- | --- |
| Abbreviations | Description | Comment |
| WS | WingS |  |
| FAQ | Frequently Asked Question |  |

1. Definitions, Acronyms and Abbreviations

# Package

## Package Diagram



1. Package Diagram

## Package Description

### Model

#### WS\_User

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Note | Description |
|  | UserID | int |  | public | User’s ID |
|  | UserName | String |  | public | User’s name |
|  | UserPassword | String |  | public | User’s password |
|  | AccountType | bool |  | public | User’s account type (user, admin) |
|  | IsActive | bool |  | public | User’s status (active or inactive) |
|  | IsVerify | bool |  | public | User’s account verify status (yes or not) |
|  | CreatedDate | Datetime |  | public | User’s created date |
|  | LastLogin | Datetime? |  | public | User’s last login time |
|  | Email | string |  | public | User’ email verify status |
|  | VerifyCode | string |  | public | User’s verify account code |

1. WS\_User model

#### User\_Information

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Note | Description |
|  | UserID | int |  | public | User’s ID |
|  | FullName | String |  | public | User’s full name |
|  | EFullName | String |  | public | User’s full name |
|  | ProfileImage | String |  | public | User’s profile image |
|  | UserAddress | String |  | public | User’s address |
|  | EUserAddress | String |  | public | User’s eaddress |
|  | PhoneNumber | String |  | public | User’s phone number |
|  | DoB | Datetime |  | public | User’s date of birth |
|  | Phone | String |  | public | User’s website |
|  | Gender | String |  | public | User’s gender |
|  | Country | String |  | public | User’s country |
|  | FacebookUrl | String |  | public | User’s facebook link |
|  | OrgnazationIDFollow | String |  | public | User’s OrgnazationIDFollow |
|  | UserSignature | String |  | public | User’s Signature |
|  | Point | Int |  | public | User’s point |

1. User\_Information model

#### Event

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Note | Description |
|  | EventID | int |  | public | Event’s ID |
|  | CreatorID | int |  | public | Event’s creator (userID) |
|  | EventType | int |  | public | Event’s type |
|  | EventName | String |  | public | Event’s name |
|  | Created\_Date | Datetime |  | public | Event’s date created |
|  | Finish\_Date | Datetime |  | public | Event’s finish date |
|  | Updated\_Date | Datetime |  | public | Event’s update timeline |
|  | ShortDescription | String |  | public | Event’s shortDescription |
|  | Description | String |  | public | Event’s description |
|  | Location | String |  | public | Event’s location |
|  | VideoUrl | String |  | public | Event’s video URL |
|  | TotalPoint | int |  | public | Event’s TotalPoint |
|  | Status | bit |  | public | Event’s status |
|  | Views | int |  | public | Event’s total views |
|  | Likes | int |  | public | Event’s total likes |
|  | ExpectedMoney | decimal |  | public | Event’s expected money |
|  | IsOpen | bool |  | public | Event’s activity status |

1. Event model

#### Organization Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Note | Description |
|  | OrganazationID | Int |  | public | Organization’s ID |
|  | OrganazationName | String |  | public | Organization’s Name |
|  | Introduction | String |  | public | Introduce about Organization |
|  | LogoUrl | String |  | public | Organization’s logo |
|  | Phone | String |  | public | Organization’s phone |
|  | Email | String |  | public | Organization’s email for contact |
|  | Address | String |  | public | Organization’s Address |
|  | Status | String |  | public | Organization’s Status |
|  | Point | int |  | public | Organization’s point |
|  | IsActive | bool |  | public | Organization’s activity status |
|  | IsVerify | bool |  | public | Organization’s creating request status |
|  | CreatedDate | DateTime |  | public | Organization’s created date |

1. Organization Model

#### Event Type model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Note | Description |
|  | EventTypeID | int |  | private | EventType’s ID |
|  | EventTypeName | String |  | private | EventType’s name |
|  | IsActive | bool |  | private | EventType’s active status |
|  | Content | String |  | private | EventType’s description |

1. Event Type Model

#### ReportEvent Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Note | Description |
|  | ReportID | int |  | public | Report ’s ID |
|  | UserID | int |  | public | Report ’s user id, who report project |
|  | Reason | String |  | public | Report ’s Reason |
|  | ReportTime | datetime |  | public | Report ’s report date |
|  | Type | String |  | public | Report ’s type |
|  | ReportTo | int |  | public | Report ’s to whom |
|  | Status | String |  | public | Report’s status (new, viewed, done) |
|  | UpdatedTime | DateTime |  | public | Report ’s update time |

1. Report Model

#### Donation Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Note | Description |
|  | DonationId | int |  | public | Donation’s ID |
|  | UserID | int |  | public | Back’s user id |
|  | EventId | int |  | public | Event’s project id |
|  | DonatedDate | Datetime |  | public | Donated’s date |
|  | IsPublic | bool |  | public | Is Back public |
|  | DonatedMoney | decimal |  | public | Amount money donate |
|  | TradeCode | string |  | public | Trade code |
|  | Content | string |  | public | Content of donate |

1. Donation Model

#### EventTimeLine Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Note | Description |
|  | TimeLineId | int |  | public | Event’s schedule |
|  | EventId | int |  | public | EventID |
|  | Content | string |  | public | Event’s timeline content |
|  | FromDate | DateTime |  |  | Starting date |
|  | ToDate | DateTime |  |  | End date |
|  | Status | bool |  |  | Sub event’s status |

1. EventTimeLine Model

#### CommentEvent Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Note | Description |
|  | CommentEventId | int |  | public | Comment’s ID |
|  | UserID | int |  | public | Comment’s user id |
|  | EventID | int |  | public | Comment’s Event id |
|  | CmtContent | String |  | public | Comment’s content |
|  | CmtDate | Datetime |  | public | Comment’s date |
|  | Status | bool | true | public | Comment’s status |

1. CommentEvent Model

#### SubcommentEvent Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Note | Description |
|  | SubCommentEventId | int |  | public | SubCommentEvent’s ID |
|  | CommentEventId | int |  | public | CommentEvent’s ID |
|  | UserId | int |  | public | UserID who comment |
|  | Content | string | 0 | public | SubCommentEvent’s content |
|  | CommentDate | Datetime | 1 | public | SubCommentEvent’s date |
|  | Status | bool |  | public | SubCommentEvent’s status |

1. SubcommentEvent Model

#### LikeEvent Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Note | Description |
|  | LikeId | int |  | public | Like’s ID |
|  | UserId | int |  | public | Like’s user id |
|  | EventId | int |  | public | Like’s event id |
|  | Status | bool |  | public | Like’s status |

1. LikeEvent Model

#### LikeCommentEvent Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Note | Description |
|  | LikeCommentId | int |  | public | LikeComment’s ID |
|  | CommentId | int |  | public | LikeComment’s comment id |
|  | UserId | int |  | public | LikeComment’s user id |
|  | Status | bool |  | public | LikeComment’s status |

1. LikeCommentEvent Model

#### EventAlbumImage Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Note | Description |
|  | ImageId | int |  | public | Image’s Id |
|  | EventId | int |  | public | Event’s ID |
|  | ImageUrl | String |  | public | Image URL link |
|  | Status | bool |  | public | Image’s status |

1. EventAlbumImage Model

#### Thread Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Note | Description |
|  | ThreadId | int |  | public | Thread’s ID |
|  | UserId | Int |  | public | user id of user who create slide |
|  | Title | String |  | public | Thread’s title |
|  | [Content] | String |  | public | Thread’s content |
|  | ShortDescription | String |  | public | Thread’s short description |
|  | VideoUrl | String |  | public | Thread’s url link |
|  | CreatedDate | datetime | true | public | The date which thread has been created |
|  | UpdatedDate | datetime |  | public | Last update of thread |
|  | Status | bool |  | public | Thread’s status |

1. Thread table

#### CommentThread Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Note | Description |
|  | CommentThreadId | int |  | public | CommentThread’s ID |
|  | UserID | int |  | public | Comment’s user id |
|  | ThreadID | int |  | public | Comment’s Thread id |
|  | CmtContent | String |  | public | Comment’s content |
|  | CmtDate | Datetime |  | public | Comment’s date |
|  | Status | bool | true | public | Comment’s status |

1. Comment Thread table

#### SubCommentThread Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Note | Description |
|  | CommentThreadId | int |  | public | CommentThread’s ID |
|  | UserID | int |  | public | Comment’s user id |
|  | ThreadID | int |  | public | Comment’s Thread id |
|  | CmtContent | String |  | public | Comment’s content |
|  | CmtDate | Datetime |  | public | Comment’s date |
|  | Status | bool | true | public | Comment’s status |

1. Comment Thread table

#### LikeThread Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Note | Description |
|  | LikeId | int |  | private | Like’s ID |
|  | UserId | int |  | private | Like’s user id |
|  | ThreadId | int |  | private | Like’s thread id |
|  | Status | String |  | private | Like’s status |

1. Like Thread Model

#### ThreadAlbumImage Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Note | Description |
|  | ImageId | int |  | public | Image’s Id |
|  | ThreadId | int |  | public | Thread’s ID |
|  | ImageUrl | String |  | public | Image URL link |
|  | Status | bool |  | public | Image’s status |

1. ThreadAlbumImage Model

#### Connection Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Note | Description |
|  | ConnectionId | int |  | public | Connection’s Id |
|  | UserId | int |  | public | User’s ID |
|  | ConnectionString | String |  | public | Connection string of each user when connect to WS system |

1. Connection Model

#### Conversation Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Note | Description |
|  | ConversationID | int |  | public | Conversation’s ID |
|  | CreatorID | int |  | public | Conversation’s creator id |
|  | ReceiverID | int |  | public | Conversation’s receiver |
|  | Title | String |  | public | Conversation’s title |
|  | CreatedDate | Datetime |  | public | Conversation’s created date |
|  | UpdatedDate | Datetime |  | public | Conversation’s update date |
|  | isHidden | bool |  | public | Conversation’s showing status |
|  | isRead | bool |  | public | Conversation’s reading status |
|  | Status | bool |  | public | Conversation’s status |

1. Conversation Model

#### Message Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Note | Description |
|  | MessageID | int |  | public | Message’s ID |
|  | ConversationID | int |  | public | Message’s conversation id |
|  | UserID | int |  | public | Message’s user id |
|  | CreatedDate | Datetime |  | public | Message’s sent time |
|  | Content | String |  | public | Message’s content |
|  | Status | bool |  | public | Message’s status |

1. Message Model
2. Conversation Model

#### PublicMessageDetail Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Note | Description |
|  | Id | int |  | public | PublicMessage’s ID |
|  | UserId | int |  | public | UserID who send message |
|  | EventId | int |  | public | Event id which contain message |
|  | Message | String |  | public | Message’s content |
|  | CreatedDate | Datetime |  | public | Message’s sent time |
|  | Status | bool |  | public | Message’s status |

1. Public Message Detail Model

#### PublicRoom Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Note | Description |
|  | PublicRoomId | int |  | public | PublicMessage’s ID |
|  | ConnectionId | int |  | public | Connection ID of room chat |
|  | EventId | int |  | public | Event’s id which contain room chat |

1. Public Room Model

### DTOs

Contain many data transfer object classes.

### View

Contain many .cshtml files to display user interface.

### DataAcess

#### UserDAL

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | AddNewUser | WS\_User | GetUserByUserNameOrEmail | Add new user to database |
|  | CountTotalUser |  | string | Count number of user |
|  | CountTotalEvent |  | string | Count number of event |
|  | CountTotalThread |  | string | Count number of thread |
|  | GetAllUser |  | listUser | Get all user by list |
|  | GetFullInforOfUserAsBasicUser | int | currentUser | Get all basic information of user account by user ID |
|  | GetByUserNameOrEmail | string, string | WS\_User | Get user by username, email and password |
|  | GetByUserNameOrEmail | string | WS\_User | Get user by username or email |
| 9 | GetNewUser |  | List<Ws\_User> | get the new user who recently registered |
| 10 | GetTopNumberRankingUser | int | List<UserBasicInfoDTO> | Get list top users who have highest point |
| 11 | GetTopNumberThreadCreator | int | List<UserBasicInfoDTO> | Get list top threads which have highest point |
| 12 | GetUserInformation | int | User\_Information() | Get the user information |
| 13 | RegisterFacebook | dynamic | WS\_User | Register new user from facebook information |
| 14 | UpdateUser | WS\_User | WS\_User | Update information of a user |

1. UserDAL

#### AlbumImageDAL

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | AddEventAlbum | EventAlbumImageDTO | string | Add new event album |
|  | AddNewAlbum | ThreadAlbumImageDTO | string | Add new thread album |
|  | CreateEmptyEventAlbum |  | string | Create empty event album |
|  | CreateEmptyThreadAlbum |  | string | Create empty thread album |

1. AlbumImageDAL

#### EventDAL

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | AddNewEvent | string, string, string |  | Create a project report function |
|  | AddNewEventTimeLine | string, string, string |  | Create a user report function |
|  | AddNewComment |  | List<ReportProjectDTO> | Get list project report |
|  | AddNewSubComment | int, string |  | Change status of a project report |
|  | ChangelikeState | int, string | Bool | Change status of a user report |
|  | ChangelikeStateForComment | Int, string | Bool | Check like status of comment |
|  | CheckUserIsLikedOrNot | Int, string | Bool | Check user liked or not |
|  | CountCommentInEvent | int | int | Count total comments in event |
|  | CountDonatedUserOfEvent | int | int | Count number user donated in event |
|  | UpdateEvent | String | GetEventTypeById | Update event |
|  | CountLikeInCommentEvent | int | int | Count number like in a comment |
|  | CountNumberEventRelateAnEventType | int | int | Count number event relate an event type to group by |
|  | CreateEmptyEvent |  | eventInfo | Crate an empty event |
|  | CreateEventType |  | string | Create an event type |
|  | CreateEmptyEventTimeLine |  | eventInfo | Create an empty event timeline |
|  | DeleteComment | Int, string | bool | Delete a comment |
|  | DeleteSubComment | Int, string | Bool | Delete a sub comment |
|  | GetAllCommentIdAndSubCommentId |  | List | Get all comment and sub comment |
|  | GetAllCommentInEvent | Int, string | List | Get all comment in event |
|  | GetAllEvents |  | List | Get all events |
|  | GetAllEventType |  | List | Get all event type |
|  | GetAllImageEventById | int | List | Get all image event by id of event |
|  | GetAllPublicMessage | int | List | Get all public message in chat room |
|  | GetAllSubCommentInEvent |  | List | Get all sub comment in event |
|  | GetDonatorInEvent | Int | List | Get donors list |
|  | GetEventBasicInfoById | Int | EventBasicInfo | Get event basic information |
|  | GetEventById | int | string | Get an event |
|  | GetEventNameById | int | string | Get event name by event id |
|  | GetEventsBelongToCreator | int | List | Get event’s creator |
|  | GetEventsBelongToCreatorByPoint | Int | List | Get event belong to creator by point |
|  | GetEventsBelongToCreatorByStatus | Int,  bool | List | Get event belong to creator by status |
|  | GetEventSortByPoint |  | List<Event> | Get event list and Sort event by point |
|  | GetEventSortByNumberOfDonator |  | List<Event> | Get event list and Sort event by donors |
|  | GetEventTimeLineByEventId | int | String | Get event time line |
|  | GetEventType |  | EventTypeDropList | Get event types |
|  | GetEventTypeById | int | EventType | Get event types |
|  | GetEventTypeInfomation |  | EventBasicInfo | Get event type’s information |
|  | GetFullEventBasicInformation | int |  | Get full event basic information |
|  | GetMainImageEventById | int | EventAlbumImage | Get Main Image Event By Id |
|  | GetNewestEventByCreatedDate |  | List<Event> | Get Newest Event By Created Date |
|  | GetOrganizationById | Int | String | Get Organization By Id |
|  | GetSubCommentInEventById | Int,  String | List<BasicCommentThread> | Get Sub Comment In Event By Id |
|  | GetTopEventSortByMoneyDonateIn | int | List<EventBasicInfo> | Get Top Event Sort By Money Donate In |
|  | GetTopFourEventByPoint | int | List<EventBasicInfo> | Get Top Four Event By Point |
|  | GetTopNewEvent |  | List<EventBasicInfo> | Get Top New Event |
|  | GetTopOneEventOfOrganization | int | List<Event> | Get Top One Event Of Organization |
|  | GetTotalRaisedMoneyOfEvent | int | decimal | Get Total Raised Money Of Event |

1. EventDAL

#### ThreadDAL

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | AddNewComment | CommentThread |  | Add new comment in thread |
|  | SubCommentThread | string string |  | Get sub comment thread |
|  | AddNewThread | CreateThreadInfo, string | GetThreadById | Add new thread |
|  | ChangelikeState | int, string |  | Change like status |
|  | CheckUserIsLikedOrNot | int, string |  | Check user liked or not |
|  | CountCommentInThread | int, | int | Count number comment in thread |
|  | CountLikeInThread | int | int | Count like in thread |
|  | CountNewThread |  | int | Count new thread |
|  | CountThreadIsBan |  | int | Count thread banned |
|  | CountTotalThread |  | int | Count all thread |
|  | CreateEmptyThread |  |  | Create an empty thread |
|  | GetAllCommentIdAndSubCommentId |  | list | Get all comment and sub comment in thread |
|  | GetAllCommentInThread | int | list | Get all comment in thread |
|  | GetAllImageThreadById | Int | list | Get all image thread |
|  | GetAllSubCommentInThread |  | list | Get all sub comment |
|  | GetAllThread |  | list | Get all thread |
|  | GetFullThreadBasicInformation | Int | ThreadBasicInfo | Get full thread information |
|  | GetMainImageThreadById | Int | ThreadAlbumImage | Get main image thread |
|  | GetNewestNumberThread | Int | list | Get newest number thread |
|  | GetNewestThreadByCreatedDate |  | List | Get newest thread by created date |
|  | GetNewThread |  | List | Get new thread by created date |
|  | GetNumberOfPostPerUser | Int | Int | Get number thread of user |
|  | GetSubCommentInThreadById | Int | List | Get sub comment of thread |
|  | GetThreadById | Int |  | Get thread information |
|  | GetThreadsOfUser | Int | List | Get thread by user owned |
|  | GetTopLikeNumberThread | Int | List | Get top like thread |
|  | GetTopThreadByCreatedDate | Int | List | Get top thread by created date |
|  | UpdateThread | thread | thread | Update thread |

1. ThreadDAL

#### OrganizationDAL

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | AddNewOrganization | CreateOrganization,  string | GetOrganizationById | Add new organization |
|  | CountOrganizationActiveOrNot | bool | int | Count Organization by active or inactive |
|  | CountOrganizationVerifyOrNot | Bool | int | Count number of organization by verify |
|  | CountTotalOrganization |  | int | Count total number of organization |
|  | CreatEmptyOrganization |  | Organizations | Create an empty organization |
|  | EditOrganization | organizationBasic, string | bool | Edit organization |
|  | GetAllOrganization |  | List | Get all organization |
|  | GetFullOrganizationBasicInformation | Int | OrganizationBasic | Get all organization information |
|  | GetNewestCreatedOrgzation |  | List | New list new created organization |
|  | GetOrganizationById | Int |  | Get organization by ID |
|  | GetOrganizationOrderByDecendingPoint |  | List | List organization order by descending point |
|  | GetStatisticAboutOrgaization |  | StatisticManageBasicInforDTO | Get statistic about organization |
|  | GetTopOrganization | Int | List | Get the top organizations |
|  | GetTopThreeOrganizations | int | List | Get the 3 top organizations |
|  | UpdateOrganization | Organization | Organization | Update organization |

1. OrganizationDAL

#### DonationDAL

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | AddNewDonation | DonationDTO | bool | Add new donation |
|  | GetFullInformationOfDonation | Int | DonationDTO | Get full information of donations |
|  | GetLastDonateInformation | Int | Donation | Get the information of last donation |
|  | GetNumberEventDonatedInByUsingUserId | int | Int | Get the number event donated by an user |
|  | GetTopNumberDonator | int | List | The list top donors |
|  | GetTopRecentlyDonator | int, | List<DonationDTO> | Get top recently donors |
|  | GetTotalMoneyDonatedInByUsingUserId | int | decimal | List total money donated by an user |

1. DonationDAL

#### SearchDAL

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | GetAllImageThreadById | Int | List<ThreadAlbumImage> | List all image of a thread |
|  | GetMainImageEventById | int | EventAlbumImage | Get avatar of thread |
|  | GetUserInfoById | Int,  string |  | Get user information |
|  | GetUserNameById | int | string | Get user name by user ID |
|  | SearchEvent | string | List<Event> | Search event |
|  | SearchOrganizations | string | List<Organization> | Search Organization |
|  | SearchThreads | string | List<Thread> | Search Thread |
|  | SearchUserInfo | string | List<User\_Information> | Search User information |
|  | SearchUsers | string | List<Ws\_User> | Search User account |

1. SearchDAL

#### ConversationDAL

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | AddNewConversation | Conversation | Conversation | Add a new conversation |
|  | AddNewMessage | Message | Message | Add new message in conversation |
|  | GetAllConservationByUserId | string | List<ConservationBasicInfoDTO> | List all conversation of an user |
|  | GetAllMessageByConservationId | int | List<MessageBasicInfoDTO> | List all message of conversation |
|  | GetConservationById | int | Conversation | Get conversation |
|  | UpdateTime | Conversation |  | Update time |

1. ConversationDAL

#### ReportDAl

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | AddNewReport | Report | Report | Add new report |
|  | CheckCurrentUserReportedOrNot | String, int, string | bool | Check current user has been reported or not |

1. ReportDAL

#### MD5Helper

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | MD5Encrypt | string | string | Encrypt password string to md5 string |

1. MD5Helper

### Controller

#### LoginController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | AuthenFacebook |  | ActionResult | Use to request login to Facebook |
|  | FacebookCallback | string | ActionResult | Function callback, get data from Facebook |
|  | ChangePass | String, string | ActionResult | Encrypt user password to MD5 string and save to database |
|  | Login | LoginInfoDTO | ActionResult | Login user to WS system |
|  | ValidateUser | String, String, bool | ActionResult | Receive request login with form data included user name, password and account type. |
|  | Logout |  | ActionResult | Logout current user from WS. |
|  | CheckExistedUserNameOrEmail | String, string | ActionResult | Receive user account information and check if existence. |
|  | CheckVerifyCode | Object, string | ActionResult | Receive user account information and check if verify. |
|  | Register | UserRegisterDTO | ActionResult | Receive user information register request. |
|  | Active | string, string | ActionResult | Verify email account, active new account with code. |

1. Login Controller

#### HomeController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | Index |  | ActionResult | Display main page of WS client. |
|  | AdminIndex |  | ActionResult | Display main page of WS admin. |
|  | Error |  | ActionResult | Display error page |

1. Home Controller

#### ClientController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | Home |  | ActionResult | Display home page |
|  | Register |  | ActionResult | Display Register page |
|  | RegisterSuccess |  | ActionResult | Display register successful page |
|  | ForgotPassword |  | ActionResult | Display ForgotPassword page |
|  | Message |  | ActionResult | Display message list page |
|  | Profile |  | ActionResult | Display Profile page |
|  | Search |  | ActionResult | Display Search page |
|  | Login |  | ActionResult | Display login page |
|  | Discussion |  | ActionResult | Display Discussion page |
|  | ThreadDetail |  | ActionResult | Display Thread Detail page |
|  | CreateDiscussion |  | ActionResult | Display Create Discussion page |
|  | Event |  | ActionResult | Display Event page |
|  | CreateEvent |  | ActionResult | Display Create Event page |
|  | EventDetail |  | ActionResult | Display Event Detail page |
|  | Organization |  | ActionResult | Display Organization page |
|  | OrganizationDetail |  | ActionResult | Display Organization Detail page |
|  | CreateOrganization |  | ActionResult | Display Create Organization page |
|  | EditOrganization |  | ActionResult | Display Edit Organization page |
|  | Donate |  | ActionResult | Display Donation page |
|  | DonationComplete |  | ActionResult | Display donation successful page |
|  | Error |  | ActionResult | Display error page |
|  | VerifyAccount |  | ActionResult | Display verify account page when user finish sign-up their account. |

1. ClientController

#### AdminController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | Dashboard |  | ActionResult | Display dashboard page. |
|  | AdminLogin |  | ActionResult | Display Project Dashboard page |
|  | UserDashBoard |  | ActionResult | Display Project List page |
|  | UserList |  | ActionResult | Display project detail page |
|  | UserProfile |  | ActionResult | Display slide page. |
|  | ThreadDashBoard |  | ActionRes | Display message list for admin. |
|  | ThreadList |  |  | Display message detail for admin. |
|  | ThreadDetail |  | ActionResult | Display User Dashboard project page |
|  | EventDashBoard |  | ActionResult | Display User List page |
|  | EventList |  | ActionResult | Display profile of a user page |
|  | EventType |  |  | Display backing list page. |
|  | EventDetail |  |  | Display category page. |
|  | OrganizationDashBoard |  |  | Display report user page. |
|  | OrganizationList |  |  | Display report project page |
|  | RegisterOrganization |  | ActionResult | Display Error page. |
|  | OrganizationDetail |  | ActionResult | Display 404 not found page. |
|  | DonationInfo |  |  |  |
|  | ReportUser |  |  |  |
|  | ReportUserDetail |  |  |  |
|  | ReportOrganization |  |  |  |
|  | ReportEvent |  |  |  |
|  | ReportThread |  |  |  |
|  | Index |  |  |  |

1. AdminPartialController

#### ForgotPasswordController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | ValidateUser | string | ActionResult | Receive user data and validate. |
|  | Index | string | ActionResult | Reset password to random string for a user and send to user’s email. |

Table 2-21: User ForgotPassword Controller

#### DonationController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | CheckOutNganLuong | Object | ActionResult | Get data from form and set to nganluongAPI |

Table 2-22: Donation Controller

#### EventPageController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | CreateEvent | Object,  Object | ActionResult | Receive creating information of event |

Table 2-22: EventController

#### ThreadController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | CreateDiscussion | Object, Object | ActionResult | Receive creating data of thread |

Table 2-22: Thread Controller

#### OrganizationController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | CreateOrganization | Object, Object | ActionResult | Receive creating data of organization |
|  | EditOrganization | Object, Object | ActionResult | Receive update data of organization |

Table 2-22: Organization Controller

#### SearchController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | Index |  | ActionResult | Display searching page |
|  | SearchResult | String,  string | ActionResult | Display search result below searching page |

Table 2-22: Search Controller

#### WebApiController

##### UserController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | CheckLoginStatus |  | IHttpActionResult | Check status login of user |
|  | GetCreatedThreadOfUser | string | IHttpActionResult | Get list thread created of current user |
|  | GetCurrentUser | string | IHttpActionResult | Get current user. |
|  | GetCurrentUserId |  | IHttpActionResult | Get current user id. |
|  | GeUsertDonationInformation | string | IHttpActionResult | Get information of user who donate |
|  | UpdateUserInfo | Object | IHttpActionResult | Update user information |

Table 2-23: UserController Controller

##### ThreadController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | AddComment | Object | IHttpActionResult | Add a comment to thread |
|  | AddSubComment |  | IHttpActionResult | Add a sub comment to thread |
|  | ChangeLikeState | int | IHttpActionResult | Change like status of thread |
|  | ChangeLikeStateForComment | int | IHttpActionResult | Change like status of comment |
|  | CheckCurrentUserIsLikedOrNot | int | IHttpActionResult | Check current like status of user |
|  | CheckExistedSubCommentOrNot | int | IHttpActionResult | Check current like status of sub comment |
|  | CountLikeInCommentThread | int | IHttpActionResult | Count number like of a comment |
|  | CountLikeInThread |  | IHttpActionResult | Count number like of a thread |
|  | DeleteComment |  | IHttpActionResult | Delete comment |
|  | DeleteSubComment |  | IHttpActionResult | Delete sub comment |
|  | GetAllComment |  | IHttpActionResult | List all comment in thread |
|  | GetAllSubComment |  | IHttpActionResult | List all sub comment in thread |
|  | GetNewestThread |  | IHttpActionResult | List all newest thread |
|  | GetSubCommentByCommentId |  | IHttpActionResult | List all sub comment by ID |
|  | GetThreadById |  | IHttpActionResult | List all thread by same creator |
|  | GetTopThreadByCreatedDate |  | IHttpActionResult | List top thread order by created date |

Table 2-23: Thread Controller

##### EventController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | AddComment | Object | IHttpActionResult | Add a comment to thread |
|  | AddSubComment |  | IHttpActionResult | Add a sub comment to thread |
|  | ChangeLikeState | int | IHttpActionResult | Change like status of thread |
|  | ChangeLikeStateForComment | int | IHttpActionResult | Change like status of comment |
|  | CheckCurrentUserIsLikedOrNot | int | IHttpActionResult | Check current like status of user |
|  | CheckExistedSubCommentOrNot | int | IHttpActionResult | Check current like status of sub comment |
|  | CountLikeInCommentEvent | int | IHttpActionResult | Count number like of a comment |
|  | CountLikeInEvent |  | IHttpActionResult | Count number like of a event |
|  | DeleteComment |  | IHttpActionResult | Delete comment |
|  | DeleteSubComment |  | IHttpActionResult | Delete sub comment |
|  | GetAllComment |  | IHttpActionResult | List all comment in event |
|  | GetAllSubComment |  | IHttpActionResult | List all sub comment in event |
|  | GetNewestEvent |  | IHttpActionResult | List all newest thread |
|  | GetSubCommentByCommentId |  | IHttpActionResult | List all sub comment by ID |
|  | GetEventById |  | IHttpActionResult | List all thread by same creator |
|  | GetTopEventByCreatedDate |  | IHttpActionResult | List top thread order by created date |
|  | GetpublicMessage | Int | IHttpActionResult | Get message in chat room |
|  | GetDonatorInEvent | int | IHttpActionResult | Get donor of event |
|  | OrderEventListOfOrganizationByPoint | int | IHttpActionResult | List event order by organization’s point |
|  | OrderEventListOfOrganizationByStatus | Int, bool | IHttpActionResult | List event order by organization status |

Table 2-25: Event Controller

##### OrganizationController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | GetAllOrganization |  | IHttpActionResult | List all organization |
|  | GetAllOrganizationWaitForAccept |  | IHttpActionResult | List all organizations waiting for accept |
|  | GetOrganizationSortByPoint |  | IHttpActionResult | List all organization order by activity point |
|  | GetOrganizationUsingId |  | IHttpActionResult | List organization by ID |
|  | GetRankOfOrganization |  | IHttpActionResult | List rank of organization |
|  | GetTopThreeOrganization |  |  | List top 3 organizations |

Table 2-24: Organization Controller

##### ReportApiController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | CheckCurrentUserReportedOrNot | String, string | IHttpActionResult | Check current user reported or not |
|  | GetReportContentForOrg |  | IHttpActionResult | Get report content for organization |
|  | GetReportContentForUser |  | IHttpActionResult | Get report content for User |
|  | ReportOrg | String, int | IHttpActionResult | Report organization |
|  | ReportUser | String, string | IHttpActionResult | Report user |

Table 2-24: Report Controller

# Function

## Common

### Class diagram

### Sequence diagram

#### Login

#### Logout

#### Register

#### Forgot Password

## Event management

### Class diagram

### Sequence diagram

#### Create event

## Thread management

### Class diagram

### Sequence diagram

#### Create thread

## Organization management

### Class diagram

### Sequence diagram

#### Create organization

#### Edit organization

## User information management

### Class diagram

### Sequence diagram

#### Edit profile

#### Change password

#### Active/ De-active user account

## Report management

### Class diagram

### Sequence diagram

#### Report event

#### Report user

#### Report thread

#### Report organization

#### Change report status

## Like management

### Class diagram

### Sequence diagram

#### Like/Un-like event

#### Like/Un-like comment event

#### Like/Un-like thread

#### Like/Un-like comment thread

## Message management

### Class diagram

### Sequence diagram

#### Send message

## Comment management

### Class diagram

### Sequence diagram

#### Post comment

#### Reply comment

#### Delete comment