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|  |
| Capstone Project Document |

**WingS**

Report #2 – Data Design

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**- Hanoi, 10/2016 –**

# SIGNATURE PAGE

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# INTRODUCTION

## Purpose

Fly Away Plus data design document describes structure of database and file structure of system including internal file structure as well as interface file structure.

## Acronyms and Definitions

|  |  |
| --- | --- |
| **Acronym & Abbreviation** | **Definition** |
| WS | WingS |
| FU | FPT University |
| Q&A | Question and Answer |

Table ‑: Acronyms and Definitions

## References

|  |  |
| --- | --- |
| **Document** | **Title** |
| Class Design Document | WS\_Class Design\_v1.0\_EN |
| Architecture Design | WS\_Architecture Design\_v1.0\_EN |
| Software Requirement Specification | WS\_Software Requirement Specification\_v1.0\_EN |

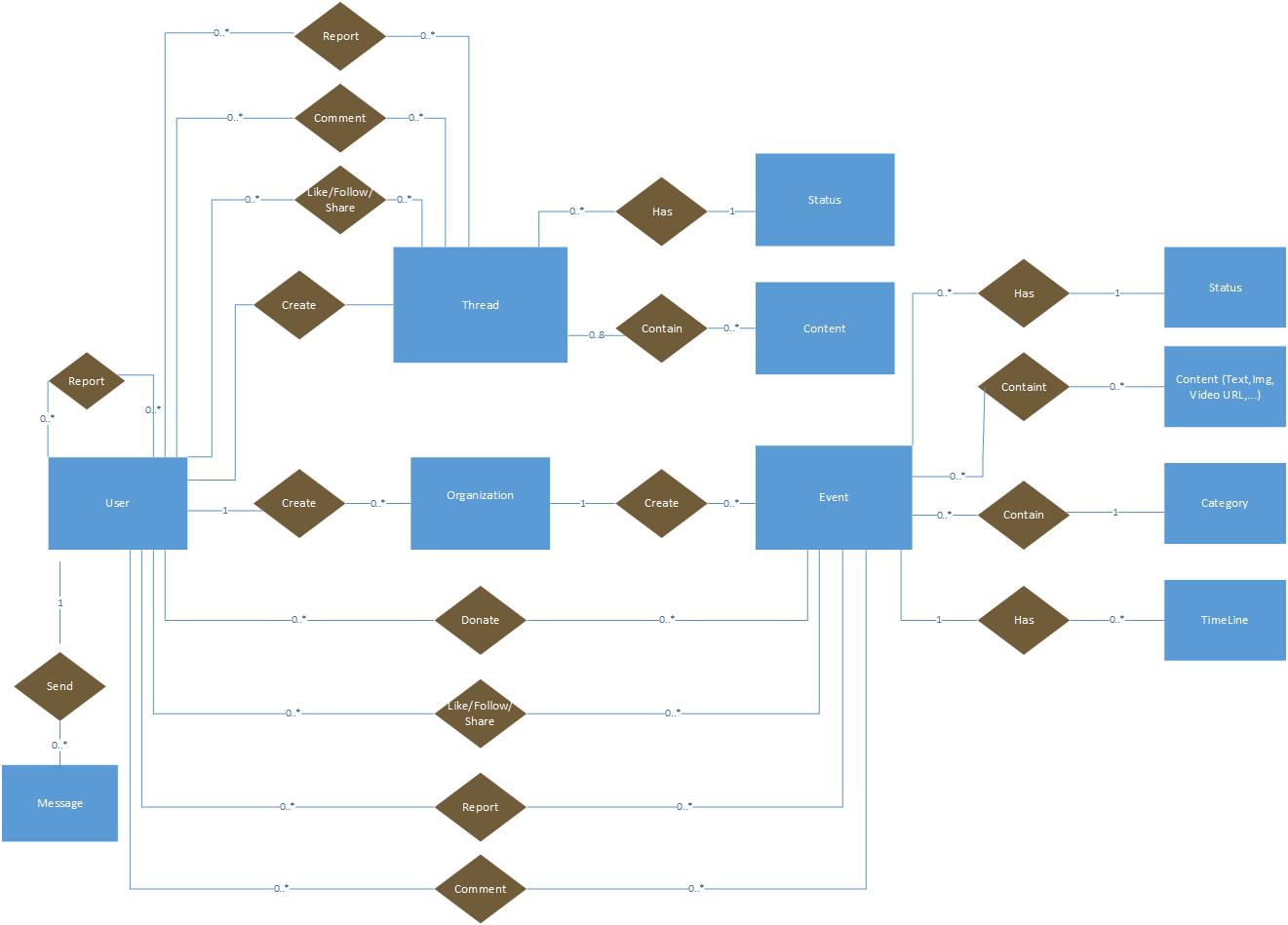
Table ‑: References

## Overview

This document describes relationship between entities and properties of each entity.

# Database

## Entity Relationship Diagram



**Figure 2‑1:** Entity Relationship Diagram

### Entity description

|  |  |  |
| --- | --- | --- |
| **No** | **Entity** | **Description** |
|  | WS\_User | User is all people who using WS feature |
|  | Event | An event which user created, includes content, schedule, photo, video to descripting. |
|  | Time Line | Timeline detail of an event. |
|  | Category | A category which user use to filter event |
|  | Organization | An organization can be created by an user (If user or group qualify). Only group can create event |
|  | Thread | Post of user created. Where all user can discussion. |
|  | Status | A status of Event or Thread. Active or be banned. |
|  | Conversation | A Conversation which user created and joined to send and receive message together |
|  | Message | A Message which user send or receive to talk together |

**Table 2-3:** Entity description

### Relationship

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Relation** | **Properties** | **From** | **To** | **Description** |
|  | CONTAINS | None | Category | Event | A category contains many Event |
|  | HAS | None | Status | Event | A status contains many Event |
|  | HAS | None | Project | TimeLine | A event has one or more timelines, describe the detail of event |
|  | CONTAINS | None | Event | Content | An event contains many content (picture, text, video url…) |
|  | CREATE | None | User | Organization | An user can create organization if they want create event or group other users who have same idea. |
|  | CREATE | None | Organization | Event | An organization can create one or more event |
|  | COMMENT | UserID  EventID | User | Event | A Comment which user give to event |
|  | DONATE | UserID  EventID | User | Event | A event which user donate |
|  | FOLLOW | UserID  EventID | User | Event | A Remind which user bookmark an Event. |
|  | REPORT | UserID  EventID | User | Event | A Report which user report an Event |
|  | CONTAINS | None | Thread | Content | A thread contains many content (picture, text, video url…) |
|  | HAS | None | Status | Thread | A status contains many thread |
|  | CREATE | None | User | Thread | An user can create one or more thread |
|  | COMMENT | UserID  ThreadID | User | Thread | A Comment which user give to thread |
|  | FOLLOW | UserID  ThreadID | User | Thread | A Remind which user bookmark a thread. |
|  | REPORT | UserID  ThreadID | User | Thread | A Report which user report an thread |
|  | REPORT | ReportUseID  ReportedUseID | User |  | A Report which User report another user |
|  | HAS | None | Conversation | Message | A Has which conversation has message(s) |
|  | SEND | None | User | Message | A Send which User create and send message |

Table ‑: Relationship description

## Table Diagram



**Figure 2‑2:** Table Diagram

### User table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | UserID | int | No | User’s ID |
|  | UserName | String | No | User’s name |
|  | UserPassword | String | No | User’s password |
|  | IsActive | bool |  | User’s active status (inactive, active) |
|  | CreatedDate | Datetime |  | User’s created date |
|  | LoginType | String |  | User’s created type includes: normal, Facebook or both |
|  | LastLogin | Datetime |  | User’s last login |
|  | AccountType | Bit |  | User’s type (admin or nomal user) |
|  | IsVerify | bool |  | User’ email verify status |
|  | VerifyCode | String |  | User’s verify code |
|  | Email | String | No | User’s email |

Table ‑: User table

### UserInformation table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | UserID | int | No | Person’s ID |
|  | FullName | String |  | Person’s full name |
|  | ProfileImage | String |  | Person’s profile image |
|  | OrgnazationIDFollow | String |  | Person’s OrgnazationIDFollow |
|  | UserAddress | String |  | Person’s address |
|  | Gender | String |  | Person’s gender |
|  | PhoneNumber | String |  | Person’s phone number |
|  | DateOfBirth | Datetime |  | Person’s date of birth |
|  | Country | String |  | Person’s country |
|  | Phone | String |  | Person’s Phone |
|  | FacebookURL | String |  | Person’s facebook link |
|  | UserSignature | String |  | Person’s UserSignature |
|  | Point | Int | No | Person’s Point |

Table ‑: UserInformation table

### Event table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | ProjectID | int | No | Event’s ID |
|  | CreatorID | int | No | Event’s creator (userID) |
|  | EventType | int | No | Event’s type |
|  | EventName | String |  | Event’s name |
|  | Created\_Date | Datetime | No | Event’s date created |
|  | Finish\_Date | Datetime |  | Event’s finish date |
|  | Updated\_Date | Datetime | No | Event’s update timeline |
|  | Description | String | No | Event’s description |
|  | Location | String | No | Event’s location |
|  | VideoUrl | String | No | Event’s video URL |
|  | TotalPoint | int | No | Event’s TotalPoint |
|  | Status | bit |  | Event’s status |
|  | Views | int |  | Event’s total views |
|  | Likes | int |  | Event’s total likes |

Table ‑: Event table

### Organization table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | OrganazationID | Int | No | Organization’s ID |
|  | OrganazationName | String |  | Organization’s Name |
|  | Introduction | String |  | Introduce about Organization |
|  | LogoUrl | String |  | Organization’s logo |
|  | Phone | String |  | Organization’s phone |
|  | Email | String |  | Organization’s email for contact |
|  | Address | String |  | Organization’s Address |
|  | Status | String | No | Organization’s Status |
|  | Point | int | No | Organization’s point |

Table ‑: Organization table

### Category table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | CategoryID | int | No | Category’s ID |
|  | Name | String |  | Category’s name |
|  | [Content] | String |  | Category’s description |

Table ‑: Category table

### ReportEvent table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | ReportEventId | int | No | ReportEvent’s ID |
|  | EventId | int | No | Report ’s event id |
|  | UserID | int | No | Report ’s user id, who report event |
|  | Reason | String |  | Report ’s content |
|  | ReportTime | datetime | No | Report ’s time |
|  | Status | String | No | Report’s status |

Table ‑6 ReportEvent table

### FollowEvent table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | RemindID | int | No | Remind’s ID |
|  | ProjectID | int | No | Remind’s project id |
|  | UserID | int | No | Remind’s user id |

Table ‑7: Follow Event table

### Donate table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | DonationId | int | No | Donation’s ID |
|  | UserID | int | No | Back’s user id |
|  | EventId | int | No | Event’s project id |
|  | DonatedDate | Datetime |  | Donated’s date |
|  | IsPublic | bool | No | Is Back public |

Table ‑8: Donate table

### CommentEvent table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | CommentEventId | int | No | Comment’s ID |
|  | UserID | int | No | Comment’s user id |
|  | EventID | int | No | Comment’s Event id |
|  | CmtContent | String |  | Comment’s content |
|  | CmtDate | Datetime | No | Comment’s date |

Table ‑9: CommentEvent table

### ReportUser table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | ReportID | int | No | Report’s ID |
|  | ReportUserID | int | No | Report’s report user ID |
|  | ReportedUserID | int | No | Report’s reported user ID |
|  | Status | String |  | Report’s status |
|  | ReportContent | String |  | Report’s content |
|  | ReportDate | datetime |  | Report’s date |

Table ‑: ReportUser table

### Thread table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | ThreadId | int | No | Slide’s ID |
|  | UserId | Int | No | user id of user who create slide |
|  | Title | String |  | Thread’s title |
|  | [Content] | String |  | Thread’s content |
|  | VideoUrl | String |  | Thread’s url link |
|  | CreatedDate | datetime | No | The date which thread has been created |
|  | UpdatedDate | datetime | No | Last update of thread |
|  | Likes | int | No | Total likes of thread |
|  | Views | datetime | No | Total of views of thread |
|  | Status | bit | No | Thread’s status |

Table ‑11: Thread table

### CommentThread table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | CommentThreadId | int | No | Comment’s ID |
|  | UserId | int | No | UserID who comment |
|  | ThreadId | int | No | Comment’s ID |
|  | [Content] | String |  | Comment’s content |
|  | CommentDate | datetime | No | Comment date |
|  | Status | bit | No | Status of Thread (active or be banned) |

Table ‑: Comment thread table

### ReportThread table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
| 1 | ReportThreadtId | int | No | ReportThreadtId ID |
| 2 | UserId | int | No | UserId who report the thread |
| 3 | ThreadID | Int | No | ThreadID which thread is reported |
| 4 | Reason | String |  | Reason of user |
| 5 | ReportTime | datetime | No | Time when user sending the report |

Table ‑13: Report Thread table

### FollowThread table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | FollowThreadID | int | No | Follows ID |
|  | ThreadID | int | No | ThreadID |
|  | UserID | int | No | Follow’s user id |

Table ‑14: Follow Thread table