|  |
| --- |
|  |
| Capstone Project Document |

**DANDELION**

Report #2 – Data Design

|  |  |  |
| --- | --- | --- |
| **Dandelion** | | |
| **Group Members** | Vũ Công Chính | SE02585 |
| Lưu Ngọc Mạnh | SE02619 |
| Nguyễn Minh Huy | SE02723 |
| Dương Đức Anh | SE02700 |
| Vũ Ngọc Trung | SE02967 |
| Cao Thị Phương Mai | SE02908 |
| **Supervisor** | Mr. Nguyễn Văn Sang | |
| **Project code** | DDL | |

**- Hanoi, 09/2015 –**

# SIGNATURE PAGE

AUTHOR: Vũ Ngọc Trung 26/09/2015

Team member

REVIEWERS: Lưu Ngọc Mạnh 27/09/2015

Project manager

APPROVAL: Nguyễn Văn Sang --/--/--15

Supervisor

Record of change

\*A - Added M - Modified D – Deleted

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Effective Date | Changed Item | A,M,D | Change Description | Reason for Change | Rev. Number |
| 26/Sep/2015 | Create Data Design | A | Create Data Design | First version | 1.0 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Table Contents

[SIGNATURE PAGE 1](#_Toc431336712)

[1 INTRODUCTION 3](#_Toc431336713)

[1.1 Purpose 3](#_Toc431336714)

[1.2 Acronyms and Definitions 3](#_Toc431336715)

[1.3 References 3](#_Toc431336716)

[1.4 Overview 3](#_Toc431336717)

[2 Database 4](#_Toc431336718)

[2.1 Entity Relationship Diagram 4](#_Toc431336719)

[2.1.1 Entity Relationship Diagram 5](#_Toc431336720)

[2.1.2 Relationship 5](#_Toc431336721)

[2.2 Table Diagram 7](#_Toc431336722)

[2.2.1 User table 8](#_Toc431336723)

[2.2.2 UserInfo table 8](#_Toc431336724)

[2.2.3 Project table 9](#_Toc431336725)

[2.2.4 Question table 10](#_Toc431336726)

[2.2.5 Category table 10](#_Toc431336727)

[2.2.6 UpdateLog table 10](#_Toc431336728)

[2.2.7 Timeline table 11](#_Toc431336729)

[2.2.8 ReportProject table 11](#_Toc431336730)

[2.2.9 Remind table 11](#_Toc431336731)

[2.2.10 Backing table 12](#_Toc431336732)

[2.2.11 Comment table 12](#_Toc431336733)

[2.2.12 ReportUser table 13](#_Toc431336734)

[2.2.13 Slide table 13](#_Toc431336735)

[2.2.14 Conversation table 15](#_Toc431336736)

[2.2.15 Message table 15](#_Toc431336737)

[2.2.16 RewardPkg table 15](#_Toc431336738)

# 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** |
| DDL | Dandelion |
| FU | FPT University |
| Q&A | Question and Answer |

Table ‑: Acronyms and Definitions

## References

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

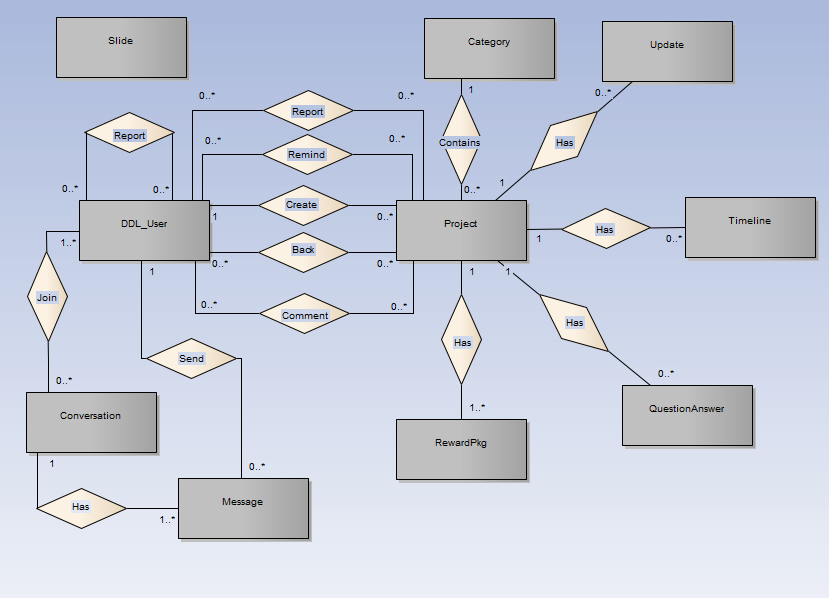
Table ‑: References

## Overview

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

# Database

## Entity Relationship Diagram



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

### Entity Relationship Diagram

|  |  |  |
| --- | --- | --- |
| **No** | **Entity** | **Description** |
|  | User | User is all people who using DDL feature |
|  | Project | A project which user created, includes content, schedule, photo, video to descripting. |
|  | Category | A category which user use to filter project |
|  | Update | A Update which user use to save/update change of project |
|  | Timeline | A Timeline which descript project’s schedule, when start phase 1, when backer can rewards… |
|  | QuestionAnswer | A QuestionAnswer which save questions and answers of project. |
|  | RewardPkg | A RewardPkg which user distribution rewards by packet |
|  | 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 |
|  | Slide | A Slide which admin created, changed the slider of homepage |

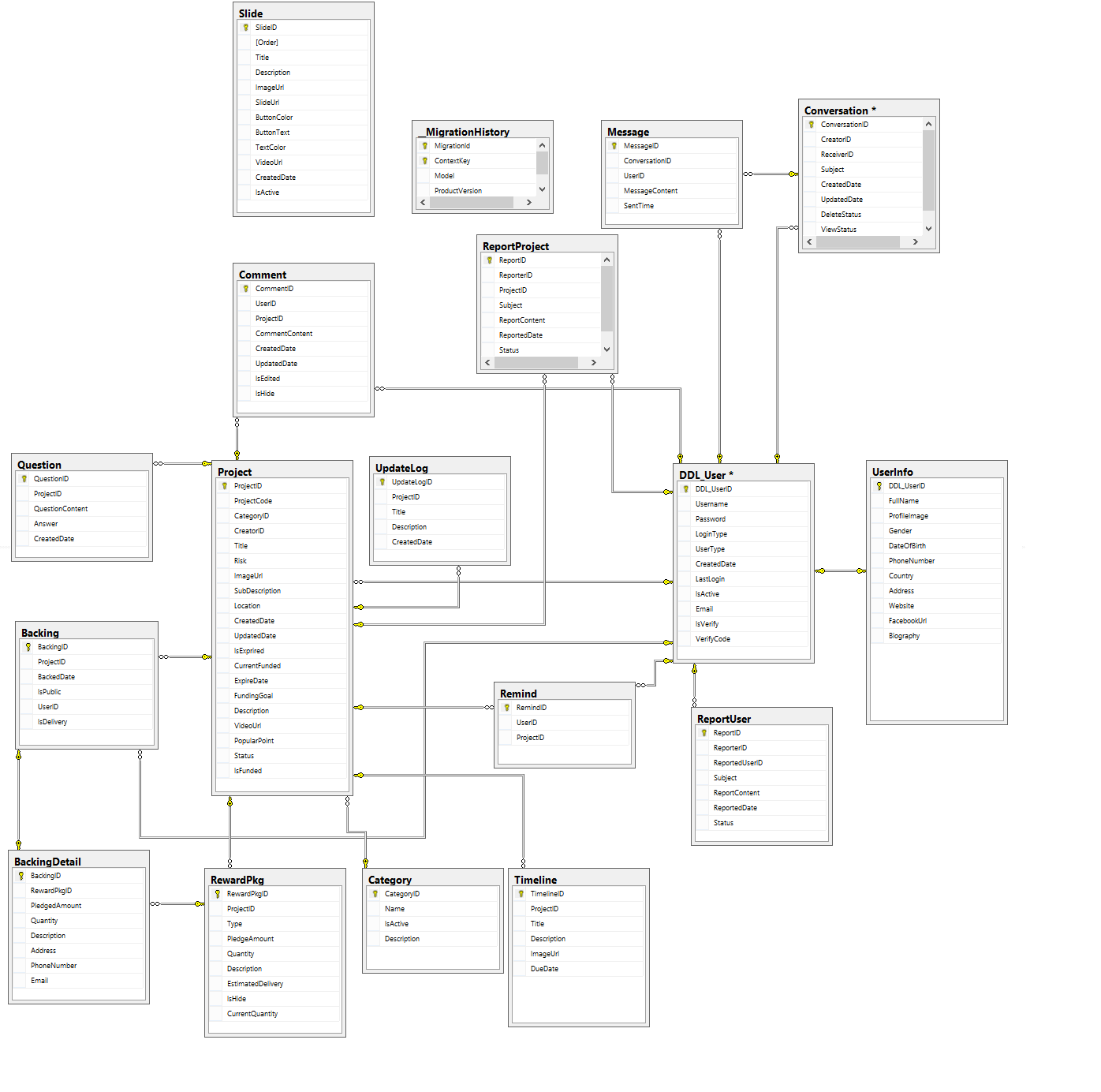
**Table 2-3:** Entity description

### Relationship

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Relation** | **Properties** | **From** | **To** | **Description** |
|  | CONTAINS | None | Category | Project | A category contains many projects |
|  | HAS | None | Project | Update | A update of project which was changed by creator |
|  | HAS | None | Project | Timeline | A timeline of project which description about project schedule |
|  | HAS | None | Project | QuestionAnswer | A common question and answer of use project which created by creator |
|  | HAS | None | Project | RewardPkg | A Reward packet of project which creator device to get funded |
|  | COMMENT | UserID  ProjectID | DDL\_User | Project | A Comment which user give to project |
|  | BACK | UserID  ProjectID | DDL\_User | Project | A project which user backing project |
|  | REMIND | UserID  ProjectID | DDL\_User | Project | A Remind which user bookmark a project. |
|  | REPORT | UserID  ProjectID | DDL\_User | Project | A Report which user report a project |
|  | CREATE | None | DDL\_User | Project | A Create which user created project |
|  | REPORT | ReportUseID  ReportedUseID | DDL\_User |  | A Report which User report another user |
|  | JOIN | None | User | Conversation | A Join which user joined or created a conversation |
|  | HAS | None | Conversation | Message | A Has which conversation has message(s) |
|  | SEND | None | DDL\_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 |
|  | Password | 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 |
|  | UserType | String |  | 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

### UserInfo table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | UserID | int | No | Person’s ID |
|  | FullName | String | No | Person’s full name |
|  | ProfileImage | String |  | Person’s profile image |
|  | Biography | String |  | Person’s biography |
|  | Address | 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 |
|  | Website | String |  | Person’s website |
|  | FacebookURL | String |  | Person’s facebook link |

Table ‑: Person table

### Project table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | ProjectID | int | No | Project’s ID |
|  | ProjectCode | String | No | Project’s code with fixed format |
|  | CategoryID | int | No | Project’s category |
|  | CreatorID | int | No | Project’s UserID who created project |
|  | ProjectTitle | String |  | Project’s title |
|  | Risk | String |  | Project’s risk |
|  | ImageURL | String |  | Project’s image link |
|  | SubDescription | String |  | Project’s sub description |
|  | Location | String |  | Project’s location created |
|  | IsExpired | bool |  | Is Project’s expired |
|  | CurrentFunded | int |  | Project’s funded status |
|  | IsFunded | bool |  | Is Project’s funded |
|  | CreatedDate | datetime |  | Project’s createdDate |
|  | ExpiredDate | datetime |  | Project’s expired date |
|  | FundingGoal | int |  | Project’s funding goal |
|  | Description | String |  | Project’s description |
|  | LinkVideo | String |  | Project’s video link |
|  | Story | String |  | Project’s story |
|  | PopularPoint | int |  | Project’s popular point |
|  | Status | String |  | Project’s status ( draft, pending, approved, suspended) |
|  | UpdatedDate | Datetime |  | Project’s updatedDate |

Table ‑: Project table

### Question table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | QuestionID | Int | No | question and answer’s ID |
|  | ProjectID | Int | No | question and answer’s project id |
|  | Question | String |  | question and answer’s question |
|  | Answer | String |  | question and answer’s answer |
|  | CreatedDate | Datetime |  | question and answer’s created date |

Table ‑: QuestionAnswer table

### Category table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | CategoryID | int | No | Category’s ID |
|  | Name | String |  | Category’s name |
|  | IsActive | bool |  | Category’s active status |
|  | Description | String |  | Category’s description |

Table ‑: Category table

### UpdateLog table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | UpdateID | int | No | Update’s ID |
|  | ProjectID | Int | No | Update’s project id |
|  | Title | String |  | Update’s title |
|  | Description | String |  | Update’s description |
|  | CreatedDate | datetime |  | Update’s created date |

Table ‑: Update table

### Timeline table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | TimelineID | int | No | Timeline’s ID |
|  | ProjectID | int | No | Timeline’s project id |
|  | Title | String |  | Timeline’s title |
|  | Description | String |  | Timeline’s description |
|  | DueDate | datetime |  | Timeline’s due date |
|  | ImageUrl | string |  | Timeline’s Image Url |

Table ‑: Timeline table

### ReportProject table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | ReportID | int | No | Report ’s ID |
|  | ProjectID | int | No | Report ’s project id |
|  | UserID | int | No | Report ’s user id, who report project |
|  | Subject | String |  | Report ’s subject |
|  | ReportContent | String |  | Report ’s report content |
|  | ReportDate | datetime |  | Report ’s report date |
|  | Status | String |  | Report’s status |

Table ‑: ReportPost table

### Remind 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 ‑: Remind table

### Backing table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | BackingID | int | No | Back’s ID |
|  | UserID | int | No | Back’s user id |
|  | ProjectID | int | No | Back’s project id |
|  | BackedDate | Datetime |  | Back’s date |
|  | Description | String |  | Back’s description |
|  | IsPublic | bool |  | Is Back public |

Table ‑: Backing table

### Comment table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | CmtID | int | No | Comment’s ID |
|  | UserID | int | No | Comment’s user id |
|  | ProjectID | int | No | Comment’s project id |
|  | CmtContent | String |  | Comment’s content |
|  | CmtDate | Datetime |  | Comment’s date |
|  | IsHide | bool |  | Is Comment’s hide |
|  | UpdatedDate | Datetime |  | Comment’s updated date |
|  | IsEdited | bool |  | Is Comment’s edit |

Table ‑: Comment 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 |
|  | Subject | String |  | Report ’s subject |
|  | ReportContent | String |  | Report’s content |
|  | ReportDate | datetime |  | Report’s date |

Table ‑: ReportUser table

### Slide table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | SlideID | int | No | Slide’s ID |
|  | UserID | Int |  | user id of user who create slide |
|  | SlideTitle | String |  | Slide’s title |
|  | Order | int |  | Slide’s order |
|  | Description | String |  | Slide’s description |
|  | ImageLink | String |  | Slide’s image link |
|  | IsActive | bool |  | Slide’s is Active status |
|  | SliderURL | String |  | Slide’s slide URL |
|  | ButtonColor | String |  | Slide’s button color |
|  | CreatedDate | datetime |  | Slide’s created date |
|  | ButtonText | String |  | Slide’s button text |

Table ‑: Slide table

### Conversation table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | ConversationID | int | No | Conversation’s ID |
|  | CreatorID | int | No | Conversation’s creator id |
|  | ReceiverID | int | No | Conversation’s receiver |
|  | Subject | String |  | Conversation’s subject |
|  | CreatedDate | Datetime |  | Conversation’s created date |
|  | UpdatedDate | Datetime |  | Conversation’s update date |
|  | DeleteStatus | String |  | Conversation’s user delete status |
|  | ViewStatus | String |  | Conversation’s user view status |

Table ‑: Conversation table

### Message table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | MessageID | int | No | Message’s ID |
|  | ConversationID | int | No | Message’s conversation id |
|  | UserID | int | No | Message’s user id |
|  | MessageContent | String |  | Message’s content |
|  | SentTime | Datetime |  | Message’s sent time |

Table ‑: Message table

### RewardPkg table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Allow Null** | **Description** |
|  | RewardID | int | No | Reward’s ID |
|  | ProjectID | int | No | Reward’s project id |
|  | LimitedQuantity | int |  | Reward’s limited quantity |
|  | Type | String |  | Reward’s type |
|  | Description | String |  | Reward’s description |
|  | EstimatedDeliveryDate | datetime |  | Reward’s estimated delivery date |
|  | IsHide | bool |  | Is Reward hide |
|  | CurrentQuantity | int |  | Reward’s current quantity |
|  | PledgeAmount | int |  | Reward’s PledgeAmount |

Table ‑: reward packet table