

**I VOLUNTEER SOCIAL NETWORK**

**DETAIL DESIGN DOCUMENT**

**Data Design**

**Project Code: IVSN**

**Document Code: IVSN\_Data Design\_v1.1\_EN**

**Record of Change**

\*A-Added M-Modified D-Deleted

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| Date | Item | A, M, D\* | Change Description | Version |
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| 2016/07/20 | Overview  Entity Relationship Diagram | M |  | V1.1 |

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# Introduction

## Purpose

I Volunteer Social Network data design document describes structure of database and file structure of system including internal file structure as well as interface file structure.

## Definitions, Acronyms and Abbreviations

|  |  |
| --- | --- |
| Abbreviations | Description |
| IVSN | I Volunteer Social Network |

## References

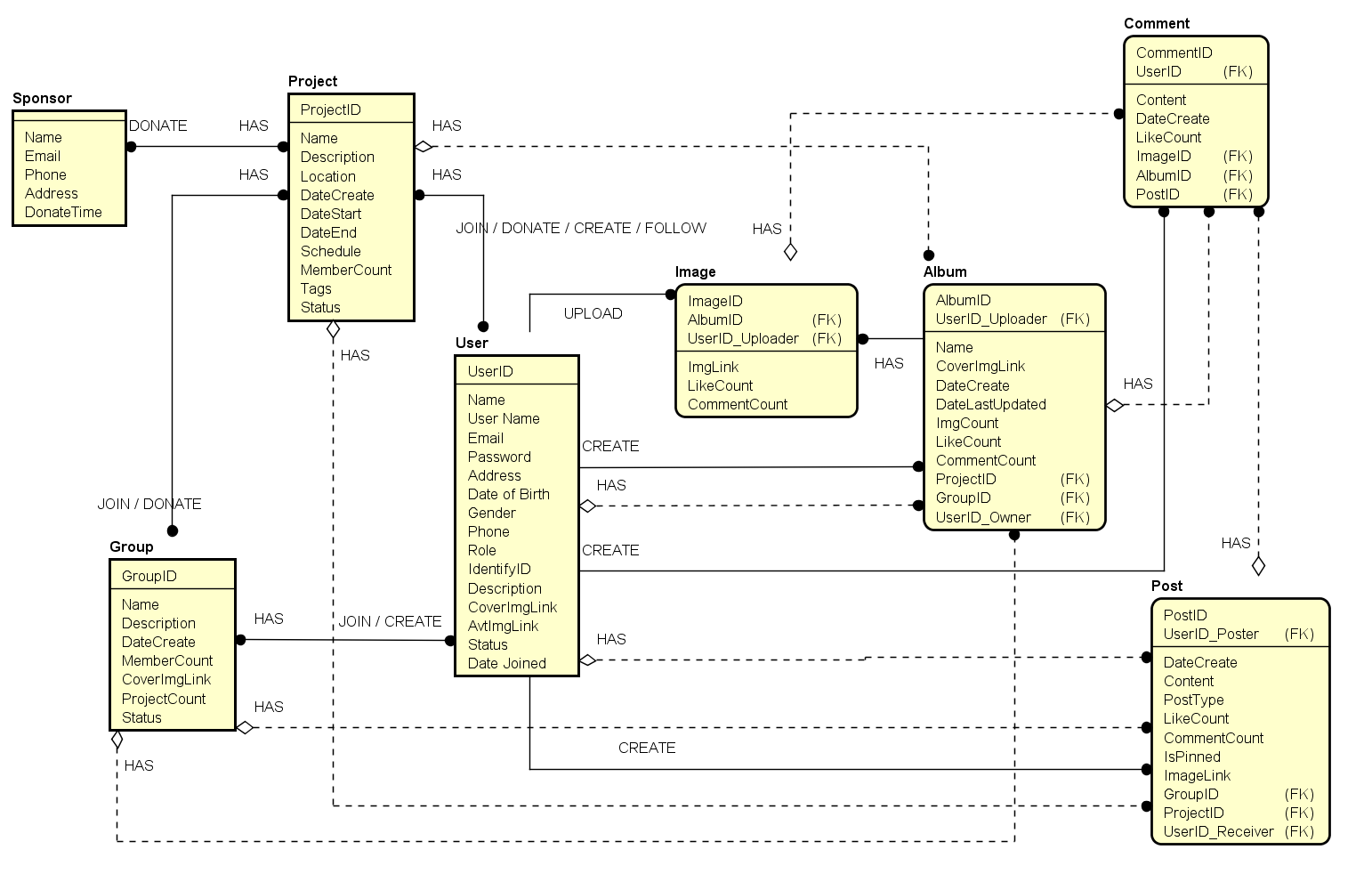
|  |  |
| --- | --- |
| Documen | Title |
| Class Design Document | IVSN\_Class Design\_v1.0\_EN |
| Architecture Design | IVSN\_Architecture Design\_v1.2\_EN |
| Software Requirement Specification | IVSN\_Software Requirement Specification\_v1.2\_EN |

## Overview

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

# Database SQL

## Entity Relationship Diagram



*Entity Relationship Diagram part 1*

*Entity Relationship Diagram part 2*

### Entity Description

|  |  |  |
| --- | --- | --- |
| No. | Entity | Description |
|  | User | User is all people who registered and using IVSN |
|  | Post | A post which user published, contain content, photos. |
|  | Album | Photos Album that is created in Project/Group. |
|  | Image | Image(s) which user attached in a post while creating |
|  | Sponsor | Sponsor is guest, who made donation to Project. |
|  | Project | A volunteering project that created in IVSN the system. |
|  | Group | A volunteering group that created by user in IVSN system. |
|  | Comment | A comment which user created, is placed in and associated to a post |

### Relationship

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No. | Relation | Properties | From | To | Description |
|  | DONATE | None | Sponsor | Project | Guest made a donation to a Project. |
|  | DONATE | None | Group | Project | Group made a donation to a Project. |
|  | JOIN | None | Group | Project | Group joined a Project. |
|  | JOIN | None | User | Group | User joined a Group. |
|  | CREATE | None | User | Group | User created a Group. |
|  | CREATE | None | User | Project | User created a Project. |
|  | FOLLOW | None | User | Project | User followed a Project. |
|  | JOIN | None | User | Project | User joined a Project. |
|  | DONATE | None | User | Project | User made a donation to Project. |
|  | UPLOAD | None | User | Image | User uploaded an image to album. |
|  | CREATE | None | User | Album | User created an album. |
|  | CREATE | None | User | Post | User wrote a post in Project/Group. |
|  | CREATE | None | User | Comment | User commented in a Post. |

### Entity Detail

* + - 1. Sponsor

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Attribute | Type | Mandatory | Description |
|  | Sponsor ID | Number | Y | Sponsor’s id |
|  | Name | Number | Y | Sponsor’s name |
|  | Email | String | Y | Sponsor’s email |
|  | Address | String | Y | Sponsor’s address |
|  | Phone | Number | Y | Sponsor’s phone |
|  | Donate Time | Number | Y | Sponsor’s donate time |

#### Project

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Mandatory | Description |
|  | Project ID | Number | Y | Project’s id |
|  | Name | String | Y | Project’s name |
| 3 | Description | String | Y | Project’s description |
| 4 | Location | String | Y | Project’s location |
| 5 | Date Created | Date | Y | Project’s date created |
| 6 | Date Start | Date | Y | Project’s date start |
| 7 | Date End | Date | Y | Project’s date end |
| 8 | Schedule | String | Y | Project’s schedule |
| 9 | Member Count | Number | Y | Project’s member count |
| 10 | Tags | String | Y | Project’s tags |
| 11 | Status | Number | Y | Project’s status |

#### Group

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Mandatory | Description |
|  | Group ID | Number | Y | Group’s id |
|  | Name | String | Y | Group’s name |
|  | Description | String | Y | Group’s description |
|  | Date Created | Date | Y | Group’s date created |
|  | Member Count | Number | Y | Group’s member count |
|  | Cover Img Link | String | Y | Group’s cover img link |
|  | Project Count | Number | Y | Group’s project count |
|  | Status | String | Y | Group’s status |

#### Post

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Mandatory | Description |
|  | Post ID | Number | Y | Post’s id |
|  | Content | String | Y | Post’s content |
|  | Date Create | Date | Y | Post’s date create |
|  | User ID Poster | Number | Y | Post’s user id poster |
|  | Post Type | String | Y | Post’s post type |
|  | Like Count | Number | Y | Post’s like count |
|  | Comment Count | Number | Y | Post’s comment count |
|  | Is Pinned | Boolean | Y | Post’s is pinned |
|  | Image Link | String | Y | Post’s image link |
|  | Group ID | Number | Y | Post’s group id |
|  | Project ID | Number | Y | Post’s project |
|  | UserID Receiver | Number | Y | Post’s userid reciver |

#### Image

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Description |
|  | Image ID | Number | Y | Image’s id |
|  | Album ID | String | Y | Image’s album id |
|  | UserID Uploader | Number | Y | Image’s user id uploader |
|  | Image Link | String | Y | Image’s link |
|  | Like Count | Number | Y | Image’s like count |
|  | Comment Count | Number | Y | Image’s comment count |

#### Album

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Mandatory | Description |
|  | Album ID | Number | Y | Album’s id |
|  | User ID Uploader | String | Y | Album’s path |
|  | Date create | Date | Y | Album’s date created |
|  | Name | String | Y | Album’s name |
|  | Cover Image Link | String | Y | Album’s cover img link |
|  | Date Last Update | Date | Y | Album’s date last update |
|  | Image Count | String | Y | Album’s Image count |
|  | Like Count | Number | Y | Album’s like count |
|  | Comment Count | Number | Y | Album’s comment count |
|  | Project ID | Number | Y | Album’s project id |
|  | Group ID | Number | Y | Album’s group id |
|  | User ID Owner | Number | Y | Album’s userid owner |

#### Comment

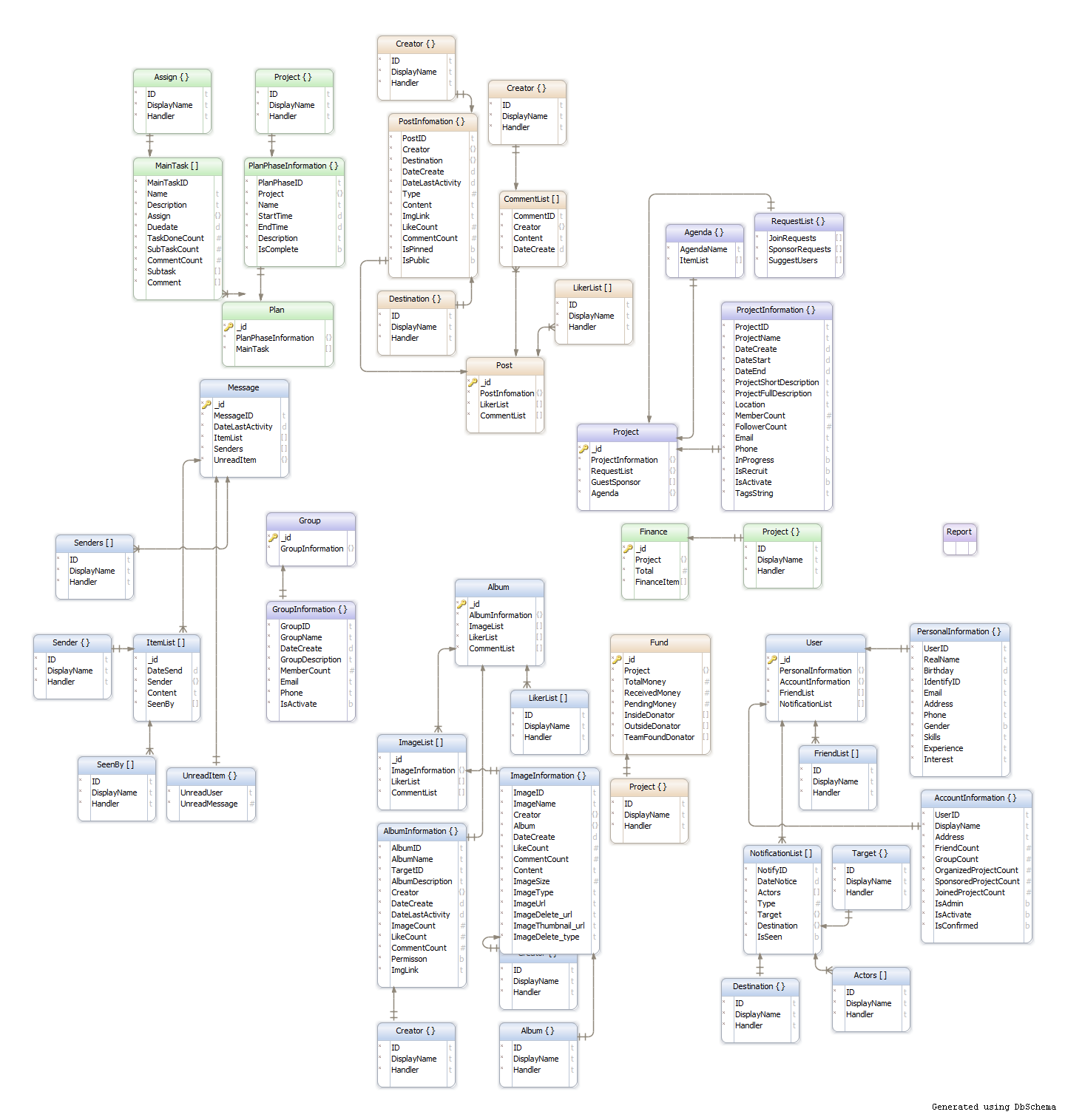
|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Mandatory | Description |
|  | Comment ID | Number | Y | Comment’s id |
|  | Content | String | Y | Comment’s content |
|  | Date Created | Date | Y | Comment’s date created |
|  | User ID | Number | Y | Comment’s user id |
|  | Like count | Number | Y | Comment’s like count |
|  | Image ID | Number | Y | Comment’s image id |
|  | Album ID | Number | Y | Comment’s album id |
|  | Post ID | Number | Y | Comment’s post id |

#### User

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Mandatory | Description |
|  | User ID | Number | Y | User’s id |
|  | Name | String | Y | User’s name |
|  | User Name | String | Y | User’s user name |
|  | Email | String | Y | User’s email |
|  | Password | String | Y | User’s password |
|  | Address | String | Y | User’s address |
|  | Gender | String | Y | User’s gender |
|  | Phone Number | String |  | User’s phone number |
|  | Date of Birth | Date | Y | User’s date of birth |
|  | Identify ID | String | Y | User’s identify id |
|  | Status | String | Y | User’s status |
|  | Date Joined | Date | Y | User’s date joined |
|  | Role | String | Y | User’s role |
|  | Description | String | Y | User’s description |
|  | Cover Img Link | String | Y | User’s cover img link |
|  | Avt Img Link | String | Y | User’s avt img link |

# Database MongoDB

## Entity Relationship Diagram



## Entity Detail

### Project

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Mandatory | Description |
|  | \_id | ObjectId | Y |  |
|  | Project information | Object | Y |  |
| 3 | RequestList | Object | Y |  |
| 4 | GuestSponsor | Array | Y |  |
| 5 | Agenda | Object | Y |  |

#### Request List

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Mandatory | Description |
|  | Join Requests | Array | Y | Project’s Join Requests |
|  | SponsorRequests | Array | Y | Project’s Sponsor Requests. |
| 3 | Suggest Users | Array | Y | Project’s Suggest Users |

#### Agenda

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Mandatory | Description |
|  | Agenda Name | String | Y | Project’s Agenda Name |
|  | Item list | Array | Y | Project’s Item list |

### Budget

#### Budget Record Information

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Mandatory | Description |
|  | Budget Record ID | String | Y |  |
|  | Project | Object | Y |  |
|  | Name | String | Y |  |
|  | Total | Double | Y |  |

#### Item

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Mandatory | Description |
|  | Budget Record ID | ObjectId | Y |  |
|  | Content | String | Y |  |
|  | UnitPrice | Double | Y |  |
|  | Quantity | Int32 | Y |  |
|  | Unit | String | Y |  |
|  | Cost | Double | Y |  |

### Plan

#### Plan Phase Information

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Mandatory | Description |
|  | Plan Phase ID | String | Y |  |
|  | Project | Object | Y |  |
|  | Name | String | Y |  |
|  | Start Time | Date | Y |  |
|  | End Time | Date | Y |  |
|  | Descriptipn | String | Y |  |
|  | IsComplete | Bool |  |  |

#### Main task

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Mandatory | Description |
|  | Main task ID | ObjectId | Y |  |
|  | Name | String | Y |  |
|  | Description | String | Y |  |
|  | Assign | Object | Y |  |
|  | Due date | Date | Y |  |
|  | Task Done Count | Int32 | Y |  |
|  | Sub Task Count | Int32 | Y |  |
|  | Comment Count | Int32 | Y |  |
|  | Sub task | Array | Y |  |
|  | Comment | Array | Y |  |