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**ThreeAsianGuys**

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**Mini Flickr  
Software Requirements Specification  
for Web Application**

**Version <1.0>**

MiniFlickr	Version: <1.0>
Software Requirements Specification	Date: 21/03/14
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## Revision History

Date	Version	Description	Author
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# Software Requirements Specification

## 1. Introduction

### 1.1 Purpose

The purpose of this document is to present a detailed description of the Mini Flickr System. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate and how the system will react to external stimuli. The document will also cover hardware, software, and various other technical dependencies.

### 1.2 Scope

This software system will be a Mini Flickr System for the people who want to have their own web spaces to share with others their pictures and thoughts.

Mini Flickr System asks photo submitters to organize images using tags, which enable searchers to find images related to particular topics, such as place names or subject matter. Mini Flickr System was also implement tag clouds, which provide access to images tagged with the most popular keywords.

Mini Flickr provides both private and public image storage. A user uploading an image can set privacy controls that determine who can view the image. A photo can be flagged as either public or private.

### 1.3 Definitions, Acronyms, and Abbreviations

Terms	Definition
SU(super user)	The administrator of the system
OU(ordinary users)	The people who register for the system
VI(visitor)	People who use the system but did not register for an account
Database	Collection of all the information monitored by this system
Software Requirements Specification	A document that completely describes all of the functions of a proposed system and the constraints under which it must operate. For example, this document.
Python	a dynamic, strongly typed, object oriented, multipurpose programming language
PHP	a server-side scripting language designed for web development but also used as a general-purpose programming language
HTML	Hypertext Markup Language, a standardized system for tagging text files to achieve font, color, graphic, and hyperlink effects on World Wide Web pages.
Django	a web framework designed to help you build complex web applications simply and quickly. It's written in the Python programming language.

### 1.4 References

IEEE. IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications.  
*IEEE Computer Society, 1998.*  
Wikipedia.org

## 1.5 Overview

The next chapter, the Overall Description section, of this document gives an overview of the functionality of the product. It describes the informal requirements and is used to establish a context for the technical requirements specification in the next chapter.

The third chapter, Requirements Specification section, of this document is written primarily for the developers and describes in technical terms the details of the functionality of the product.

Both sections of the document describe the same software product in its entirety, but are intended for different audiences and thus use different language.

## 2. Overall Description

### 2.1 Use-Case Model Survey

The use case diagram can be helpful for better understanding of any system. It shows the functionalities of our system and visualizes how users can interact with our system. In this section, we introduce the user cases diagram for our mini flickr system. We briefly explain about our system using use cases diagram, and we explain details in section 3.1.

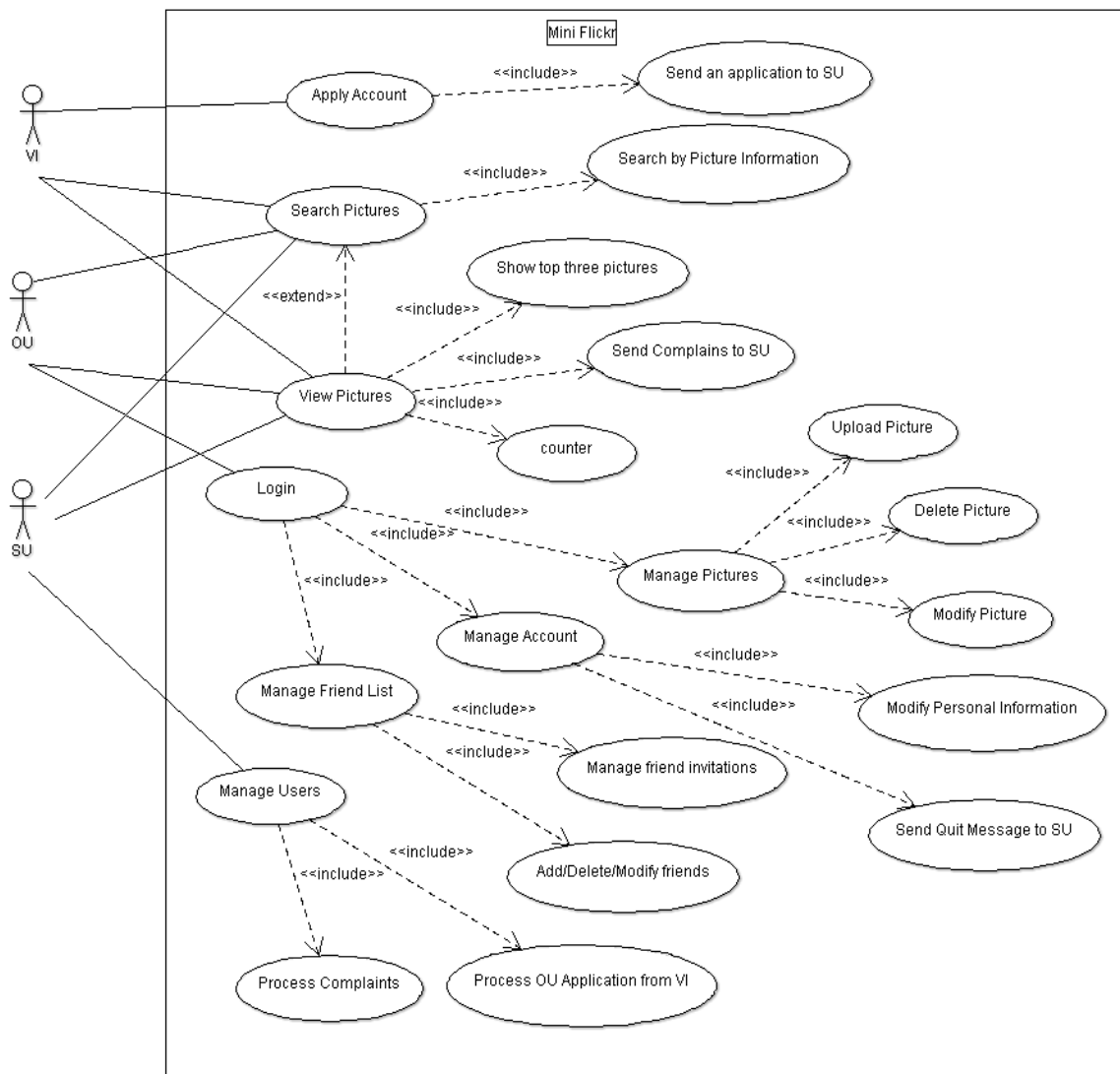


Figure1. The Use-Case Diagram for the System

There are three types of user in this system: super users(SU), ordinary users(OU), and visitors(VI).

The visitor is the user who did not register, they can view and search the picture, complain the picture by sent the message to the super user, in addition, they can register and become a ordinary user.

The ordinary user can do the thing the visitor could do, in addition they can manage their account and the picture, even the relationship between other ordinary user.

The super user is the administrator of the system, they handle the complains, approve the register, ban the user who is not following the rule.

## 2.2 Assumptions and Dependencies

The existing Mini Flickr Software which reside on the server will continue to be supported until at least 2025.

The external interface of the Mini Flickr interface are as defined and will not be altered.

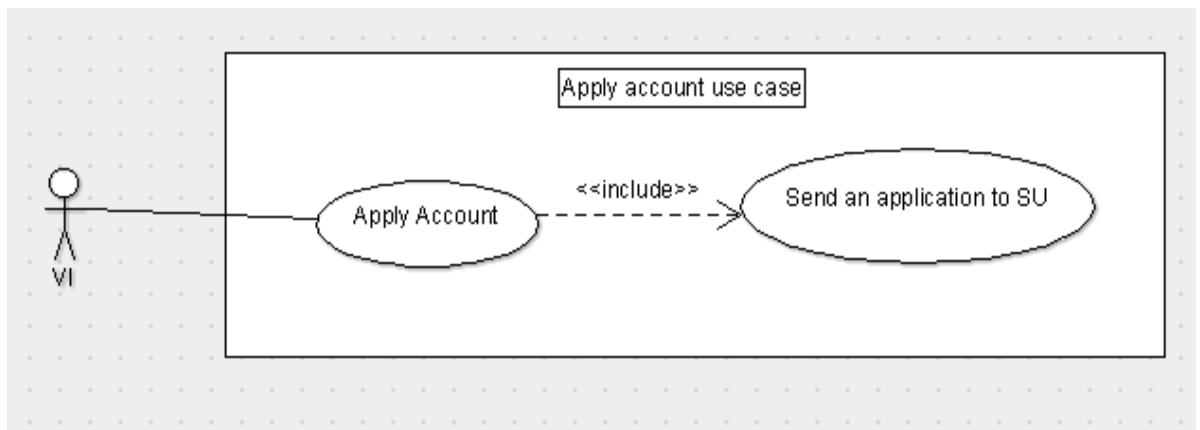
It is assumed that there are enough web space to store the pictures for all the user, and the server will handle huge amount of data, also the server can handle many request in real time.

## 3. Specific Requirements

### 3.1 Use-Case Reports

Use case: Apply account

Diagram:



Brief Description: Only visitor can apply account

Initial Step-By-Step Description:

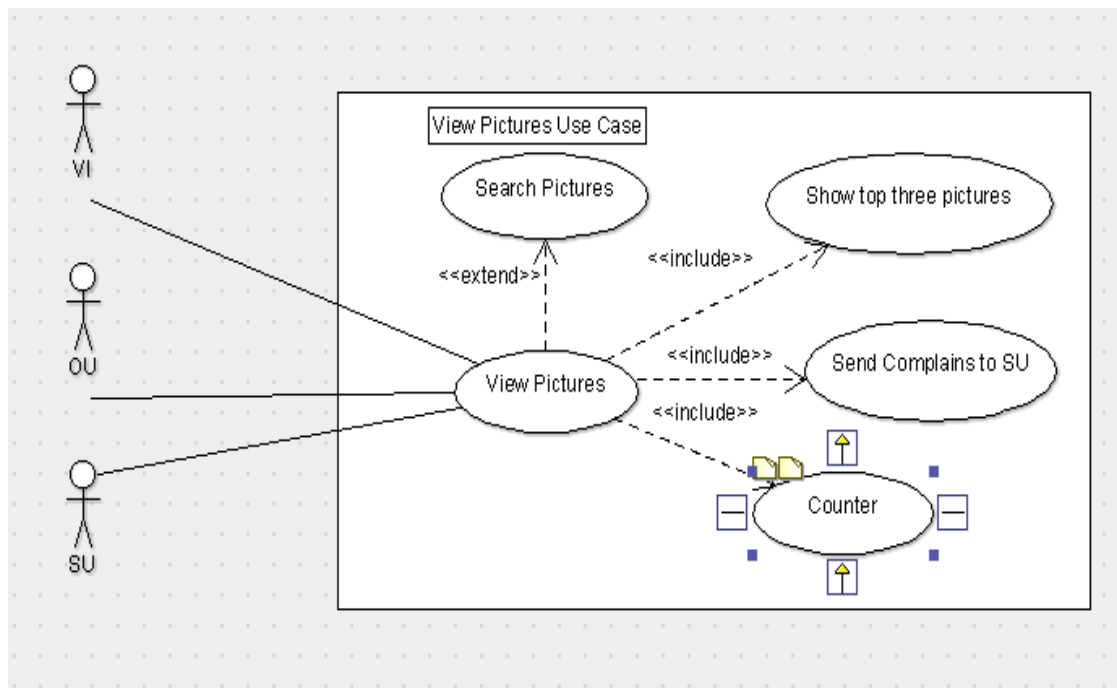
Before this use case can be initiated, the VI or OU has already connected to our Mini Flickr Website.

The register is only for the visitor who want to become a ordinary user.

1. The visitor should first pass an image annotation test to prove s/he is serious in this application.
2. Apply to be an OU with a suggested password.
3. Wait for the Super user's approval.
4. If the super user approve the register, the account should create for the user

Use case: View the picture

Diagram:



Brief Description: Both visitor and ordinary can view the picture

Initial Step-By-Step Description:

Before this use case can be initiated, the VI or OU has already connected to our Mini Flickr Website.

For View picture:

1. The top three most popular pictures and OUs are show cased in the top page dynamically
2. Only display the public picture which allow to be show on the view.
3. If user view the picture The View Counter of the picture increase by 1.
4. If the user down load the picture, the down load picture counter is increase by 1
5. Only the OU can common the picture
6. Only the OU can rate the picture, and the rate should be update if so

For Counter:

1. Download counter remember number of downloads
2. Rate counter remember number averaging rate
3. View counter remember number of visitor

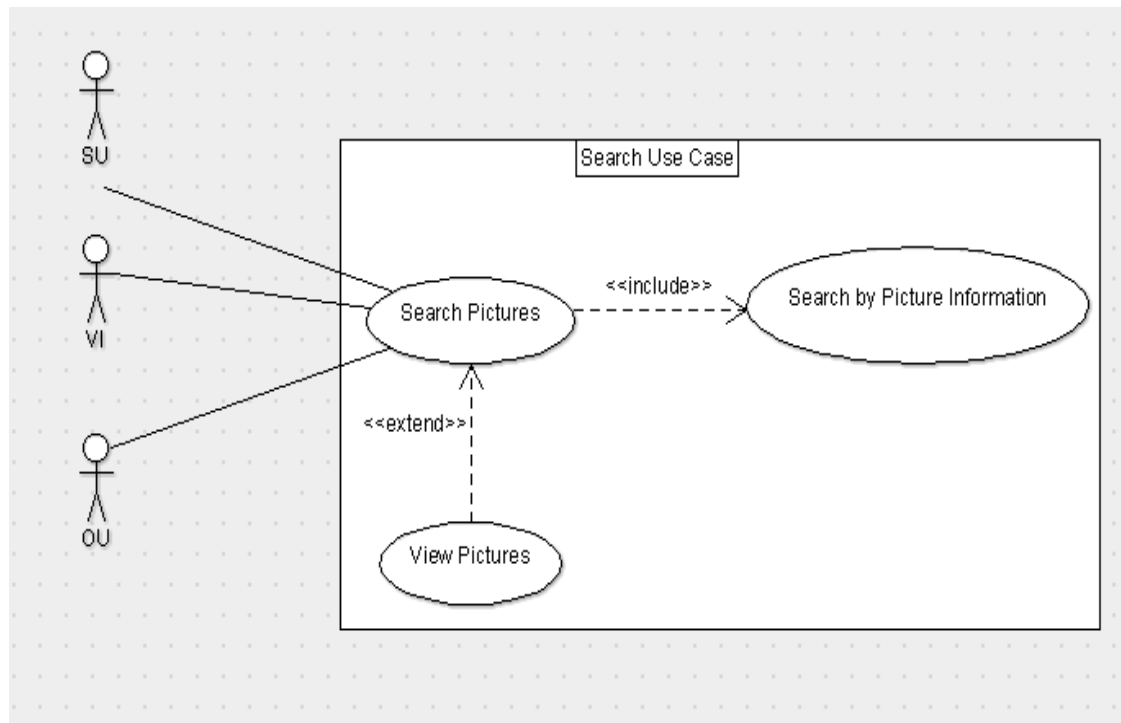
For complain:

The complaint is for the VI and OU who want to complaint the picture

1. The user can complain about the picture and other OU
2. The complain message would sent to the super user for view
3. the super user must replay to the complain message
4. If the complain is reasonable the warning message should sent to the OU who get the complain and the OU's outstanding warning is increase by one

Use case: Search the picture

Diagram:



Brief Description: All user can search for the picture.

Initial Step-By-Step Description:

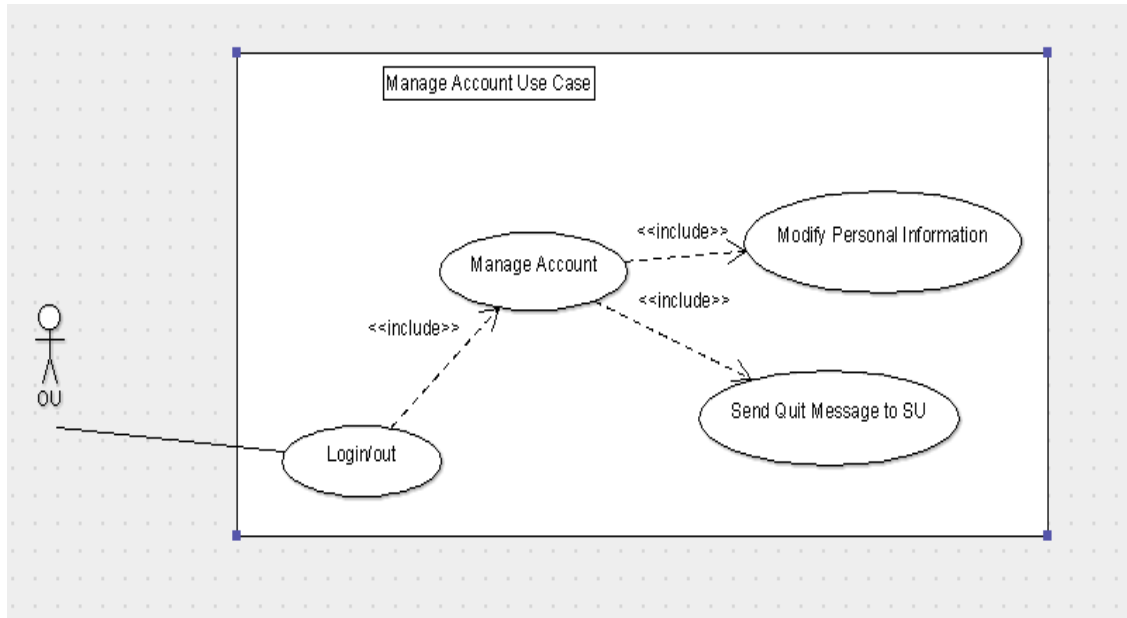
Before this use case can be initiated, the VI or OU has already connected to our Mini Flickr Website.

1. The user can search for pictures based on title, place where the picture is taken, time when the picture was taken, annotations, rating and popularity.
2. The return picture should be ordered by combining the relevance of the searching criteria.
3. Only picture that are allowed by the owners can be shown.
4. For each return picture the information of the owner, number of downloads, and the full set of information should be given
5. Each page presents up to 10 pictures, if there are more than 10, additional pages are needed for the user to navigate.

Use case: Manage Account

Diagram:





Brief Description: Manage account include: modify personal information, send quit message to SU

Initial Step-By-Step Description:

Before this use case can be initiated, the VI or OU has already connected to our Mini Flickr Website.

For Log in:

The login is for the ordinary user and super user

1. The user must have an account to use login
2. Provide the right user name and password
3. The user should pass an image annotation test to prove s/he is human being
4. a personalized page with specific information for this ou should be displayed by the top three most popular pictures and the top three highest rated pictures belong to him/her.

For Log out:

Logout is for the ordinary user and super user who already login to the system

1. The user must have an account to use log out
2. The user must already login to the system

For Personal information:

Personal information is for the ordinary user, to change the setting of his account

1. the user must already log in to the system
2. the user can modify the information on the personal information
3. the user must save the change in order to change the information

For Change password:

Change password is under the personal information this function is for the ordinary user and super user who want to change the password

1. The user must already log in to the system
2. the user must provide the old password to change the password
3. The user should pass an image annotation test to prove s/he want to change password
4. the user should enter the new password twice in order to avoid the error
5. the system should change the password after all 4 steps are complete, and the user press save

button.

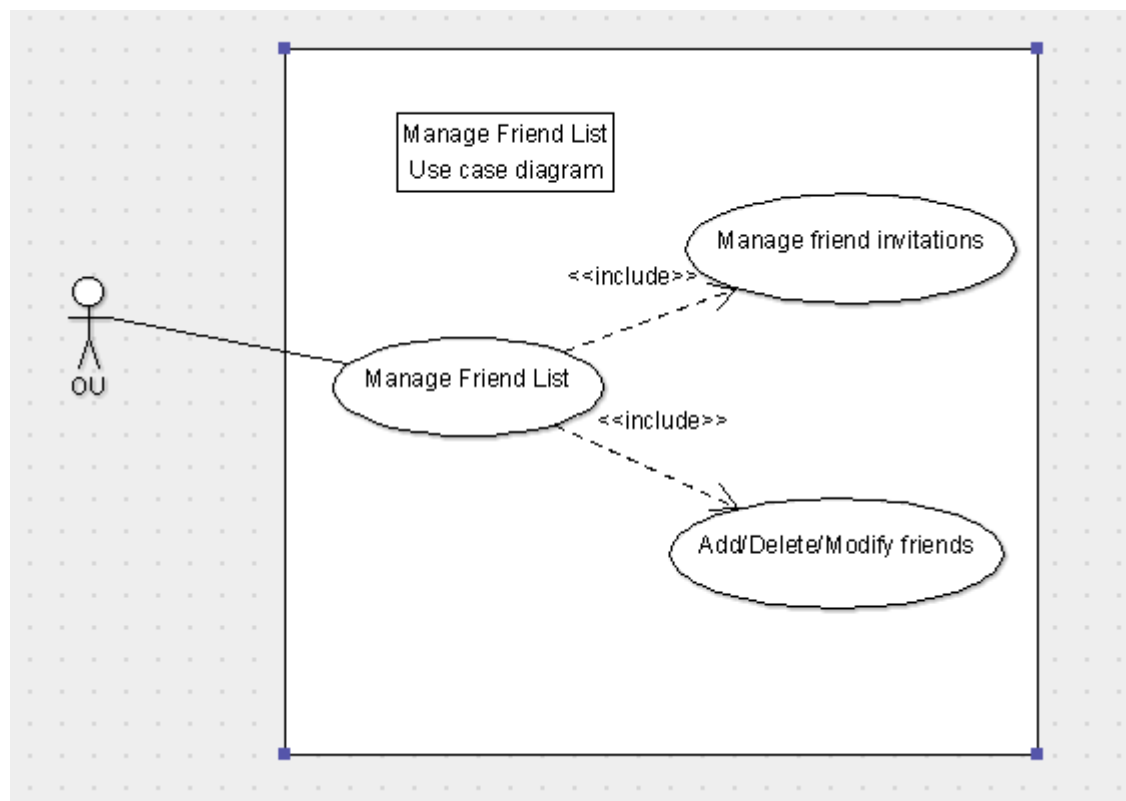
For quit message:

The Quit message is for the ordinary who want to quit the system

1. The user must login to the system
2. the user must confirm s/he want to quit the system
3. The quit message is sent to the super user for view
4. the super user should confirm the quit message
5. All the information include the account information, picture should be remove from the system

Use case: Manage Friend List

Diagram:



Brief Description: Manage Friend List: Manage friend invitations, add/delete/modify friends

Initial Step-By-Step Description:

Before this use case can be initiated, the VI or OU has already connected to our Mini Flickr Website.

Add friend:

Add friend is for the ordinary user to create their group of friends

1. The user must already log in to the system
2. the user must first invite new friends
3. the invite must be prove by the people in order to become a friend
4. the people who become a friend should add to the friend list

Delete friend:

Delete friend is for the ordinary user to delete the friends

1. The user must already login to the system
2. the user must have the friend in their friend list
3. the user must click the delete button
4. the friend remove from the friend list for both user

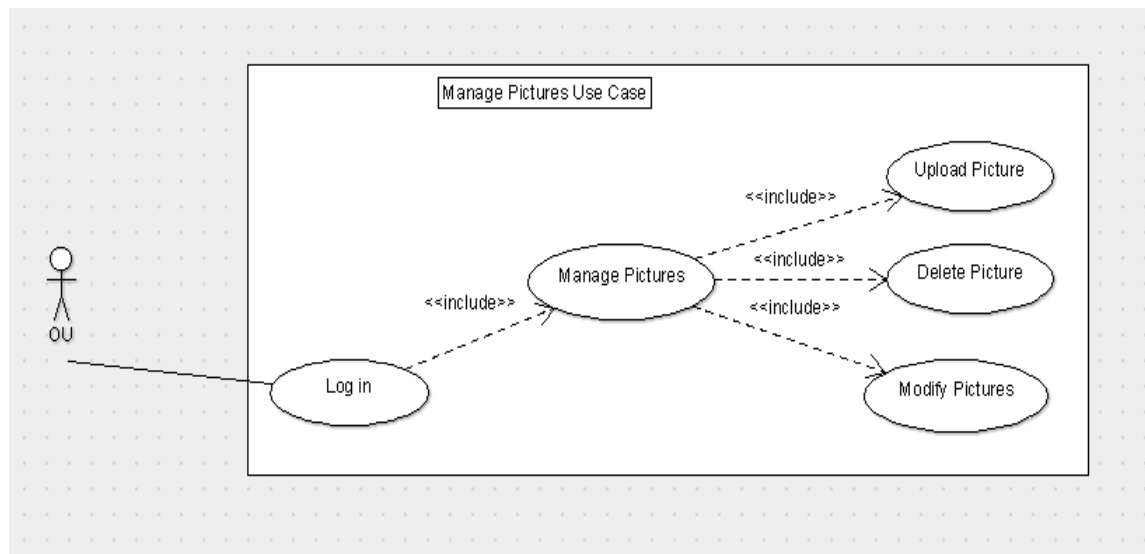
Black List:

The black list is for the ordinary user who want to ban the OU from their picture

1. The user must already login to the system
2. the user must notify the OU they want to ban
3. the OU is add to the black list
4. The OU who is in the black list is no longer see the user's picture

Use case: Manage Picture

Diagram:



Brief Description: Ordinary user can manage their picture's information, upload, or delete.

Initial Step-By-Step Description:

Before this use case can be initiated, the VI or OU has already connected to our Mini Flickr Website.

For upload picture:

1. Select the picture which the user want to upload
2. the user have to provide full set of information, including places where it was taken, time when it was taken, title, annotation(key words) should be defined.
3. Create a counter for the picture and set it to zero, this counter include: number of download and number averaging all ratings given by other OUs
4. The user have to specify the type of pictures. There are four types of pictures the owners can designate: public, registered, protected and private.
5. After all the steps the picture should store in the web space which we provide to the user
6. The picture should be seen by the people who have the power to access the picture.

For Delete Picture:

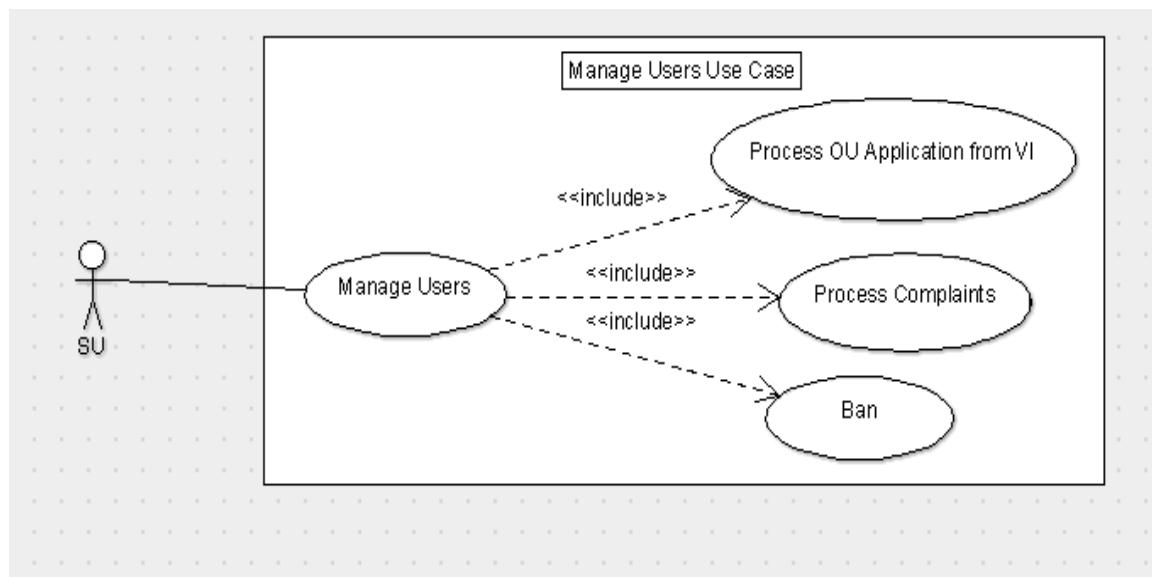
1. The user should specify the picture which s/he want to delete
2. The picture which deleted should be remove from the web space

For Modify the Picture

1. The user should specify the picture which s/he want to modify
2. The information including places, time, tile, annotation can be modify
3. The user can delete the common from other OUs
4. The user can change the type of the pictures.
5. The information should be save after user save the modify and apply it to the system

Use case: Manage User

Diagram:



Brief Description: Super user can mange other ordinary user. Process their request.

Initial Step-By-Step Description:

Before this use case can be initiated, the VI or OU has already connected to our Mini Flickr Website.

For Process complain:

The complaint is for the VI and OU who want to complain the picture

The user can complain about the picture and other OU

1. The complain message would sent to the super user for view
2. the super user must replay to the complain message
3. If the complain is right the warning message should sent to the OU who get the complain

For warning:

The warning is for the super user to warn the ordinary user about their action or picture

1. the super user first must receive the complaint against the OU
2. If the super user think the complaint is reasonable he should sent the warning message to the OU
3. the message should include the specific reason the OU to respond

4. The out stander warning is increase by one for the OU
5. If the OU response the warning for good super user should remove the out stander warning

For quit message:

The Quit message is for the ordinary who want to quit the system

1. The user must login to the system
2. the user must confirm s/he want to quit the system
3. The quit message is sent to the super user for view
4. the super user should confirm the quit message
5. All the information include the account information, picture should be remove from the system

For Ban:

The SU can ban the OU who is not follow the rule, or is hate by many people

1. The super user should ban the user who have three outstanding warning
2. The super user should ban the user who is in three OU's Black List
3. If the OU is ban s/he can log in to the system for one last time with clear flag in the webpage but can not change/add anything during the last visit
4. The entire account is delete after the final visit

### 3.2 Supplementary Requirements

In order to ensure the system can be long-term, safe, stable, reliable and efficient operation, the mini flickr system should meet the requirements below.

1. The accuracy and timeliness of the system processing

The accurate and timely treatment is necessary to the performance of the system. In the system design and development process, should fully consider the system may be subject to current and future workload, the system capacity and response time can meet the needs of user of information and request processing.

2. Open system and system scalability

The mini flickr system system in the development process, should fully consider the future scalability. For example, a user query demand will continue to update and improve the system. All of these, are required to adjust and expand the functions of the system to provide adequate means. To achieve this point, should be completed by the openness of the system, not only system should be an open system, as long as they meet certain specifications, can be simple addition and the module of the system is reduced, the configuration of system hardware. Through the software of repair, replace the complete system upgrade and update.

3. Easy to use and easy to maintenance system

Mini flickr system is to directly face the user which might not very familiar with computer. This requires that the system can provide friendly user interface, easy to use interface. To achieve this, requires that the system should try to use different language for different regions of people. The use problems may arise, to help enough online, shorten the process of system user familiar.

## 4. Supporting Information

This Software Requirements Specification includes:

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