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| --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  | | --- | --- | --- | --- | |  | | **MINISTRY OF EDUCATION AND TRAINING** | | | **FPT UNIVERSITY** | | |
| Capstone Project Document |
| Family Album Sharing System |
| |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | **Group 12** | | | **Group member** | Huỳnh Trần Minh Nhựt – Leader – SE60936  Tô Đình Tân – Member – SE60926  Trần Lê Tuấn – Member – 60350 | | **Supervisor** | Nguyễn Huy Hùng | | **Ext. Supervisor** | N/A | | **Capstone Project code** | FAMSAM | | |
| – Ho Chi Minh City, September 2014 – |

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# INTRODUCTION

## Project Information

* Project name: Family Album Sharing System
* Project code: FAMSAM
* Product Type: Web Application, Mobile Application

## Overview and solution

Nowadays, sharing photos through the internet has become more and more popular. At present, there are several service which provide photo album sharing feature like Facebook, Instagram, Flickr. However, they only support to share photos randomly, not fully support specific characteristics of each family. As result of the fact, users are on demands of a service for family to share their moment such as wedding, baby growing, and ceremonies.

Therefore, the system is created to provide functions like creating albums with stories, sharing albums with other families and users can comment on photos, albums or stories. Photos also can be taken by mobile’s camera and add to album instantly. The system will make families save their memorable moment and connect together easily.

# SOFTWARE PROJECT MANAGEMENT PLAN

## Problem Definition

### Name of this capstone project

Project official name is “Family Album Sharing System”. Project code is “FAMSAM”.

### Problem abstract

In order to satisfy users demand for a photo sharing system, this project is provide a website and mobile application that allow user to create or join families and share their stories/photos with others.

### Problem overview

#### The Current Systems

At moment, there are several services around the world which support photo album sharing as social network:

* Facebook (facebook.com): Facebook is a huge social network, which provide photo album and story sharing feature. However, when using Facebook, people tend to have many friends which they do not even know.
* Instagram (instagram.com): Instagram helps user to take and share picture to friends and family but all its feature only focus on mobile app.
* Flickr (flickr.com): Unlike Instagram, Flickr has rich feature user interface on both website and mobile app while it does not strongly support user to create story.

There are more photo album sharing system but after all, their services are not focus on family characteristic or groups of people that have strong relationship, who want to store, manage and share their specific moment through albums and stories.

#### The Proposed System

This product is a social network that support managing and sharing photo album among families. This also provide the most convenient and effective way to manage photo albums.

For more specific, the system supports the follow features:

* User can create, join or leave one or more families.
* User can request other family to make neighbor.
* While being a member of a family, user can create stories which contain photo albums for him/her family.
* User can manage their stories, also albums and photos.
* User can share their stories and albums with their neighbors.
* User can follow his/her neighbors to see if their added a new stories, albums.
* User can like, comment on stories, albums and photos.
* User can report bad photos to admin.
* User can add photos to an album directly by using phone’s camera.
* Admin can manage all registered user in the system.
* Admin can manage all the posts (photos, albums, stories) in the system.
* Admin can manage reports from users.
* The system can recommend similar posts (photos, albums, stories) for users based on their likes.
* The system can detect blur images added by user which caused by camera shaking, motion or low compressed.

#### Boundaries of the System

At current version, the system support for modern web browser as Chrome, Firefox and Internet Explorer 11.

Due to lack of time, the system does not include below features:

* Chat system.
* Image filter when upload.
* Multi-language.
* Auto detect and censor violent and obscene images.
* Finish admin function.

#### Development Environment

##### Hardware requirement:

* Ram: 2 GB.
* CPU: Intel Core i3 2.5 GHz.
* HDD: 100 GB.

##### Software requirement:

* + Windows 7 or Windows 8.
  + .NET Framework 4.5.
  + Android 4.

## Project Organization

### Software process model

Our project use **Scrum** as project model.

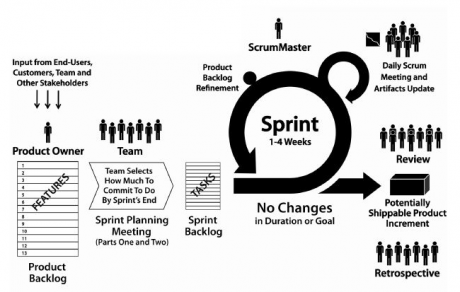


Figure 1 - Scrum Model [URL]

Due to Capstone Project characteristic, we decide each sprint takes one week. At the beginning of each sprint, we have sprint planning meeting, all team members will discuss to define sprint backlog which is suitable to be completed within a week. Daily report is operated through online conference meeting.

### Roles and responsibilities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Full name | Team Role | Scrum Team Role | Responsibilities |
| 1 | Nguyễn Huy Hùng | Supervisor | Product Owner | * Outline work in scrum backlog * Prioritize work * Answer question and deliver direction |
| 2. | Huỳnh Trần Minh Nhựt | Team Leader | Scrum Master | * Facilitate productivity – maximize team performance * Complete all individual work |
| 3. | Tô Đình Tân | Team Member | Scrum Team Member | * Commit individual product on time * Support each other to complete team work |
| 4 | Trần Lê Tuấn | Team Member | Scrum Team Member | * Commit individual product on time * Support each other to complete team work |

### Tools and techniques

##### Tools:

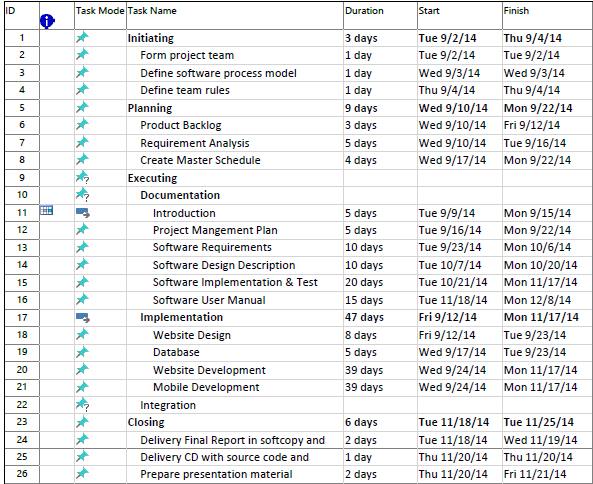
* Visual Studio 2013 Professional.
* TortoiseSVN.
* Google Code SVN.
* Microsoft Visio 2013.

##### Techniques

|  |  |
| --- | --- |
| Server | * ASP .NET Web API 2 as web service on server. * Microsoft SQL Server 2012 as database. * Entity Framework 6 as ORM. |
| Web Client | * AngularJS 1.2 |
| Mobile Client | * Use Ionic Framework + AngularJS to develop mobile app by HTML and Javascript. * Apache Cordova to build and deploy app on mobile. |

## Project Management Plan

### Tasks



### Risk assessment

* Misunderstand user requirement.
* Study process may expand task’s duration.

### Deliverables

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Deliverable | Delivery date | Delivery location | Note |
| 1 | Introduction Document | 15/9/2014 | FU – CMS | Report No. 1 |
| 2 | Software Project Management Plan | 22/9/2014 | FU – CMS | Report No. 2 |
| 3 | Software Requirements Specification | 06/10/2014 | FU – CMS | Report No. 3 |
| 4 | Software Design Description | 10/20/2014 | FU – CMS | Report No. 4 |
| 5 | Software Implementation & Test | 17/11/2014 | FU – CMS | Report No. 5 |
| 6 | Software User Manual | 17/11/2014 | FU – CMS | Report No. 6 |
| 7 | Completed version of Report No. 1 to Report No. 6 | 08/11/2014 | Classroom  FU – CMS | Final version |
| 9 | CD contains all Source code and installable system | 08/11/2014 | Classroom | Final version |

### All meeting minutes

## Coding Convention

<https://famsam.googlecode.com/svn/doc/Standard_CSharp%20Coding%20Convention.pdf>

# Software Requirements Specifications

## User Requirement Specification

[…]

### Guest Requirement

### Web User Requirement

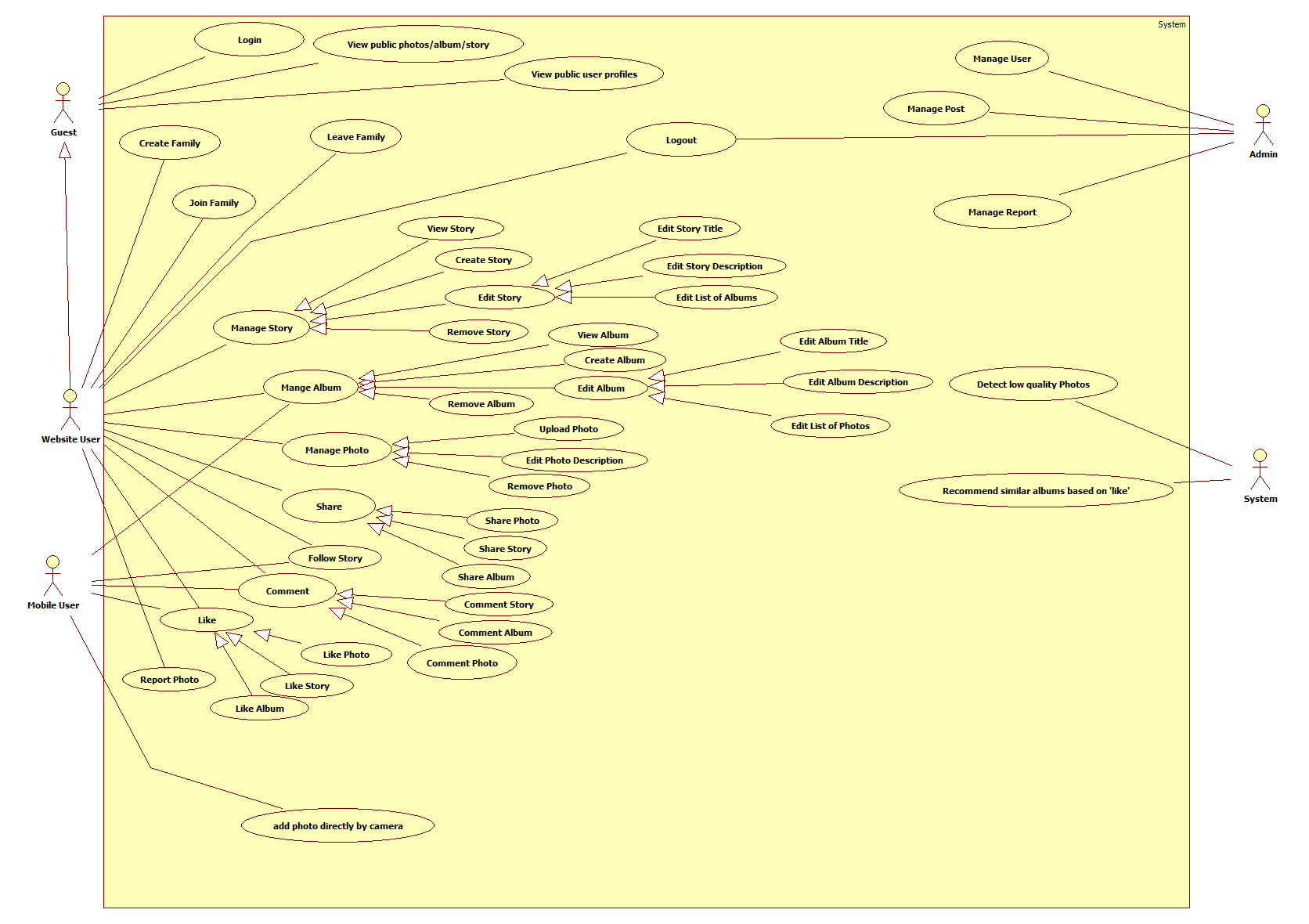
### Mobile User Requirement

### Administrator Requirement

### System Requirement

## System Requirement Specification

### System Features



### User Case Diagram and Use Case Specification

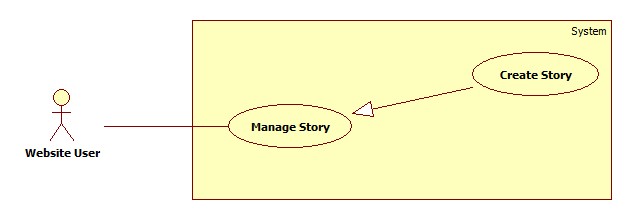


Figure 1: <Website User> Create Story Use Case

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE – WU???** | | | |
| **Use Case No.** | WU??? | **Use Case Version** | 2.0 |
| **Use Case Name** | Create Story | | |
| **Author** | Tran Le Tuan | | |
| **Date** | 30/09/2014 | **Priority** | Normal |
| **Actor:** Website User  **Summary:**  This use case allow website user to create story.  **Goal:**  Create a story success.  **Triggers:**   * User can create new story * On Home page, click on link “Create Story” in menu bar.   **Preconditions:**   * User must logged in the system with the role is website user.   **Post Conditions:**   * **Success:** The story will be added from server and database * **Fail:** No story added   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click menu item“Create Story” | Redirect to Create Story page, contains :   * Name: label * Description : label * Share with: combobox * Button “Add Albums” * Button “Done” | | 2 | Fill information and click on “Add Albums” button | Show a dialog to choose albums to add. | | 3 | Click “Share with: “ combobox | Show a combobox to choose type share. | | 4 | Click “Add” button.  [Alternative 1] | Redirect to Create Story page. | | 5 | Click “Done” button. | An message is display: “Are you sure to create this story ?”. | | 6 | Click “Ok” button | The story will add into server and database.  An message is display: “Your story created success.”. |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | [Alternative 1]  Click “Cancel” button. | Albums will not choose. Redirect to Create Story page. | | 3 | [Alternative 2]  Click “Cancel” | The story will not create. Redirect to Create Story page. |   **Exceptions:** N/A  **Relationships:** Manage Story.  **Business Rules:** N/A | | | |

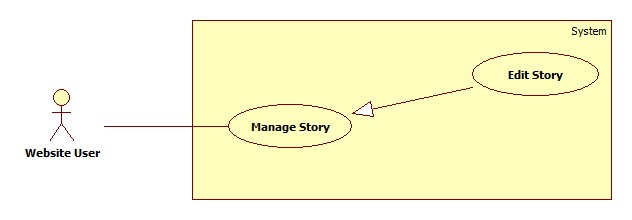


Figure 1: <Website User> Edit Story Use Case

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE – WU???** | | | |
| **Use Case No.** | WU??? | **Use Case Version** | 2.0 |
| **Use Case Name** | Edit Story | | |
| **Author** | Tran Le Tuan | | |
| **Date** | 30/09/2014 | **Priority** | Normal |
| **Actor:** Website User  **Summary:**  This use case allow website user to create story.  **Goal:**  Edit a story success.  **Triggers:**   * User can edit a story * User must do these step to edit a story: * On Home page, click on “Manage Photos” in menu bar.   **Preconditions:**   * User must logged in the system with the role is website user.   **Post Conditions:**   * **Success:** The story will be edit and save from server and database. * **Fail:** No story edited.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click menu item“Manage Photos” | Redirect to story timeline page. | | 2 | Choose story to edit. | Rediect to edit story page. | | 3 | Fill information into table: | Table contain:   * Name: label * Description : label * Share with: combobox * Button “Add Albums” * Button “Done” | | 4 | Fill information and click on “Add Albums” button | Show a dialog to choose albums to add. | | 5 | Click “Add” button.  [Alternative 1] | Redirect to Edit Story page. | | 6 | Click “Done” button. | An message is display: “Are you sure to change this story ?”. | | 7 | Click “Ok” button | The story will add into server and database.  An message is display: “Your story edited success.”. |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | [Alternative 1]  Click “Cancel” button. | Albums will not choose. Redirect to Edit Story page. | | 3 | [Alternative 2]  Click “Cancel” | The story will not create. Redirect to Edit Story page. |   **Exceptions:** N/A  **Relationships:** Manage Story.  **Business Rules:** N/A | | | |

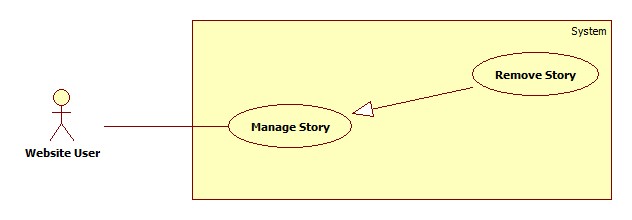


Figure 1: <Website User> Remove Use Case

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE – WU???** | | | |
| **Use Case No.** | WU??? | **Use Case Version** | 2.0 |
| **Use Case Name** | Remove Story | | |
| **Author** | Tran Le Tuan | | |
| **Date** | 30/09/2014 | **Priority** | Normal |
| **Actor:** Website User  **Summary:**  This use case allow website user to remove story.  **Goal:**  Remove a story success.  **Triggers:**   * User can remove story. * User must do these step to remove story: * On Home page, click on “Manage Photos” in menu bar.   **Preconditions:**   * User must logged in the system with the role is website user.   **Post Conditions:**   * **Success:** The story will be removed. * **Fail:** No story added   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click menu item“Manage Photos” | Redirect to Manage Photos page. | | 2 | Choose story to delete. Click “Delete”.  [Alternative 1] | An message is display: “Are you sure to delete this story ?”. | | 3 | Click “Ok” button.  [Alternative 1] | The story will add into server and database.  An message is display: “Your story deleted success.”. | |  |  |  | |  |  |  |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | [Alternative 1]  Click “Cancel” button. | Story will not detele. Redirect to Manage Photos page. | |  |  |  |   **Exceptions:** N/A  **Relationships:** Manage Story.  **Business Rules:** N/A | | | |

### Software System Attributes

### Entity Relationship Diagram

[To be Continued]