TRƯỜNG ĐẠI HỌC FPT

# FLY AWAY PLUS

| | | |
|---|---|---|
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We would also like to thank the instructors at FPT University for all the classes. We hope you will find this project as a reflection of the knowledge and experiences you have given us during this period of four years.

Finally, we truly appreciate the random fellows on the internet who has discussed with us.

Without you, it would have likely been a real struggle to solve every tiny problem.

# CHAPTER 1: INTRODUCTION

## 1.1. Purpose

This document is created as the introduction for project Fly Away Plus – our Capstone Project at FPT University. In this document, we will descript the overview of some existing systems, the initial idea for our project, a brief description about our expected system and some potential risks, critical assumptions, constrains. Moreover, this document also shows opportunities what it offers for users.

## 1.2. Project Information

- Project name: **Fly Away Plus**
- Project code: **FAP**
- Project group name: **Fly Away Plus**
- Product type: **Website application**
- Timeline: **from 12th May 2015 to 28th August 2015**

## 1.3. The people

### 1.3.1. Supervisor

| | Fullname | Phone | Email | Title |
|---|---|---|---|---|
| Supervisor | Nguyễn Văn Sang | 0912210727 | SangNV@fpt.edu.vn | Lecturer |

Table 1-1: Supervisor information

### 1.3.2. Team members

| | Fullname | Phone | Email | Role |
|---|---|---|---|---|
| 1 | Hoàng Nghĩa Đức | 0985646611 | duchnse02882@fpt.edu.vn | Leader |
| 2 | Dương Thanh Hải | 0964046554 | haidtse02856@fpt.edu.vn | Member |
| 3 | Nguyễn Minh Hoàng | 01664250678 | hoangnmse02819@fpt.edu.vn | Member |
| 4 | Lê Minh Thúy | 0982732461 | thuylmse02881@fpt.edu.vn | Member |
| 5 | Trần Mạnh Hiếu | 0964551711 | hieutmse02778@fpt.edu.vn | Member |
| 6 | Phan Tiến Lực | 0982902298 | lucptse02923@fpt.edu.vn | Member |

Table 1-2: Team member's information

## 1.4. Abstract

Nowadays, there are many social networks are using by billions of people. Facebook, Twitter, Tumblr are the most famous social networks. As of the first quarter of 2015, Market leader Facebook was the first social network to surpass 1 billion registered accounts, tenth-ranked microblogging network Twitter had over 288 million monthly active accounts. Meanwhile, blogging service Tumblr had more than 230 million active blog users on their site. On social networks, every day we can see many people share photos, post about their trips around the world, between millions of other things like school, family, works etc… Our website is developed by travel-lovers with the aim of helping user share experiences about their trips, read others people's real opinion, keeps beautiful memories and connecting people to travel together.

## 1.5. Background

Facebook, Twitter and Tumblr etc… are popular social networks. However still have no social network are just specific about travelling. There are many websites about travelling, but most of them aim to booking tickets, flights, tours with good deals, or advertisements, people cannot

be connected and keeps memories about their own trips on these website. For example: wego.vn, budgettravel.com…

Figure 1: Social media total and country - use social media for travel related purposes

## Facebook

Figure 2: Facebook

Facebook is an online sial networking service, users can create a user profile, add other users as "friends", exchange messages, post status updates and photos, share videos and receive notifications when others update their profiles.

**Advantages:**

- Is a global social networking site available in various languages
- Helped a lot to create a personal brand for many individuals and for business.
- Easy to find friends, college, like-minded people
- Hosting site for images and videos
- Source of information and news

**Disadvantages:**

- Too many un-useful information
- Time consuming

**tumbrl.**

Figure 3: tumbrl

Tumblr is a microblogging platform and social networking website. Users can follow other users' blogs, as well as make their blogs private.

**Advantages:**

- Has friendly user interface; simply add content and click button to upload.
- Gives its users the option to incorporate Google analytics so they can track the effectiveness of their posts and visitor numbers.

**Disadvantages:**

- Is mostly used for sharing images and video.
- Is known to have stability issues, resulting in a lot of downtime.
- Posts are difficult to optimize for Search Engine Optimization (SEO).

## Fly Away Plus

## WeGo.vn

Figure 4: WeGo.com

**Advantages:**

- Easy to find best deals for flight and hotel on many countries

**Disadvantages:**

- This website is only for booking, no sharing information or connecting to others
- User cannot read information or review about places, flight, hotel etc…
- Mostly used by Vietnamese

## 1.6. Proposal of system

This software is a social network with friendly and attractive interface, users can easily find out what they want without registration. User also can send opinion to admin if there is anything that needs to be modified.

FAP uses NET MVC5 as the core technology and we are planning to develop a mobile version for easily sharing and connecting.

Figure 5: Brief descriptions diagram of FAP system

### 1.6.1. System features

About the features of FAP, we focus to provide for users main features as searching, sharing posts, photos and videos, check-in, scheduling their trips, reading others' experiences via their posts, connecting and interacting with other travelers etc… Besides, there is an Administrator sub system which Admin can manage members, manage database, manage contribute database and manage Q&A.

In here, we focus on features which can help users can understand the best way what user want to have with features of FAP. There are the detailed features of FAP:

- **Search**: User search for places, experiences or friends and FAP will display results match with words user have searched. With searching features, user can easily search information of places they want to go, things they can experience at this places, and finding people who want to go to this place. The very new point and useful of FAP when compare with others is FAP is not only show the results match with words user have search but also show things related. User have the following searching option:
- **Registering:** User can register an account and login to use all features of FAP

- **Suggesting:** FAP can suggest places or friends for user
- **Look around:** User look around their position and see suggestion about places, experiences
- **Homepage:** User can see friends' sharing
- **Personal page:** User have their own page where displayed all their places, photos, videos and friends
- **Sharing:** User can share their trips, destinations, photos, videos or write review to their personal page, their post will appear on the Homepage.
- **Like/dislike and comment:** User can like/dislike and comment on others' post
- **Share:** User can share a post
- **Chat:** User can chat with other friends.
- **Report:** User can report a post to administrator
- **Connecting:** Registered user can connect with others
  - **Add friends:** User can add other users as friends, friend's posts will appear on user's Homepage.
  - **Tagging:** User can tag friends to a post
- **Room:** This is a new useful features of FAP for connecting users. In a room, user can discuss, share information and make a plan for their journey with others
- **Managing account:** User can manage their personal information
  - **Login/Logout**: User can login to use more features of FAP. User can register an account to login or login by using Facebook, Google account.
  - **Changing password/Forget password**: User can change new password or require new password if user forgot current password.
- **Managing member**: Admin can review report sent from users. If the report is reasonable, admin can delete post, send warning to user who has reported, admin can also lock/unlock users' account.

### 1.6.2. Benefits from project

#### 1.6.2.1.For our group

After developing and implementing this project, our group will get some benefits:

- Have more experiences of software project management how to manage plan, time, member and risk.
- Have more knowledge and skill about .NET programming
- Know how to communicate with team members and how to teamwork more effective.
- Have more knowledge about managing and travelling.

#### 1.6.2.2.For Community

Just need to have a device that connect to the internet and any web browser, user can:

- Easy join to a community of travel-lovers
- Easy search for places information and connect to friends
- Easy share and keep memories of their trips
- Create an online passport to show where they went to
- Find more friends
- Free for all users.

# CHAPTER 2: PROJECT MANAGEMENT

## 2.1. Project Process

Process of this project is performed follow to Software Development Process of FPT Software.

### 2.1.1. FPT Software Process Model

Figure 6: FPT Software process model

The software lifecycle is broken into cycles, each cycle working on a new generation of the product. The FPT Software process divides one development cycle in six consecutive phases:

1. Initiation phase
2. Definition phase
3. Solution phase
4. Construction phase
5. Transition
6. Termination

## 2.2. Project Organization

### 2.2.1. Organization Structure

### 2.2.2. Project Team

| Role | Responsibility | Full name | Effort (%) | Start date | End date |
|---|---|---|---|---|---|
| PM | Have overall responsibility of the project:<br>- Project planning and scheduling<br>- Task assignment and tracking processing<br>- Review documents<br>- Reporting to supervisor | Hoang Nghia Duc | 100 | 12-5-2015 | 30-8-2015 |
| PTL | PTL is responsible for the technical project execution | Duong Thanh Hai | 100 | 12-5-2015 | 30-8-2015 |
| Dev #1 | Coder | Nguyen Minh Hoang | 100 | 12-5-2015 | 30-8-2015 |
| Test Leader | - Create test plan, test case, test report, quality report<br>- Execute test. | Le Minh Thuy | 100 | 12-5-2015 | 30-8-2015 |
| Tester #1 | - Support creating test plan, test case, test report, quality report<br>Execute test. | Tran Manh Hieu | 100 | 12-5-2015 | 30-8-2015 |

| | | | | | |
|---|---|---|---|---|---|
| Tester #2 | - Support creating test plan, test case, test report, quality report<br>Execute test. | Phan Tien Luc | 100 | 12-5-2015 | 30-8-2015 |

### 2.2.3. Infrastructure

| Item | Description | Expected Availability by | Note |
|---|---|---|---|
| **Development Environment** | | | |
| Operating System | Window 8.1 (32 bit, 64 bit) | | |
| Browser | Chrome (30 or above), Firefox (20 or above) | | |
| Development language | .NET C# | | |
| **Technology** | | | |
| Development language | .NET C# | | |
| Database | Neo4j 2.2.3 | | |
| **Hardware Requirement** | | | |
| Hardware Configuration | 2GB workspaces on server | | |
| **Equipment & Tools** | | | |
| Source Version Control | TortoiseGit 1.8 | Definition stage | |
| Task Tracking | MS Project Professional 2013 | Initiation stage | |
| SRS | Microsoft Office Word 2013, Microsoft Office Excel 2013, Microsoft Office Visio 2013 | Initiation stage | |

## 2.3.Project Management Plan

### 2.3.1. Task

Refer to FAP_ProjectSchedule_vW1.2_EN.mpp

| | | | |
|---|---|---|---|
| Fly Away Plus | 76 days | Wed 13-05-15 | Wed 26-08-15 |
| Initiation | 15 days | Wed 13-05-15 | Tue 02-06-15 |
| Form up | 1 day | Wed 13-05-15 | Wed 13-05-15 |
| Project Clarification | 1.5 days | Wed 13-05-15 | Thu 14-05-15 |
| Environment | 1.5 days | Thu 14-05-15 | Fri 15-05-15 |
| Technology research | 9 days | Mon 18-05-15 | Thu 28-05-15 |
| Project Introduction | 5.5 days | Mon 18-05-15 | Mon 25-05-15 |
| Kick-off meeting | 0.5 days | Mon 25-05-15 | Mon 25-05-15 |
| Q&A sheet | 1.5 days | Mon 25-05-15 | Tue 26-05-15 |
| Project Plan | 12 days | Mon 18-05-15 | Tue 02-06-15 |
| Requirement | 4 days | Mon 25-05-15 | Fri 29-05-15 |
| Solution | 25 days | Wed 03-06-15 | Tue 07-07-15 |
| Sofware Requirement Specification | 14 days | Wed 03-06-15 | Mon 22-06-15 |
| System Architectural Design | 5 days | Wed 03-06-15 | Tue 09-06-15 |
| Detailed Design | 19 days | Thu 11-06-15 | Tue 07-07-15 |
| Project Management | 2 days | Wed 10-06-15 | Thu 11-06-15 |
| Test | 7 days | Wed 03-06-15 | Thu 11-06-15 |
| Construction | 29 days | Tue 07-07-15 | Mon 17-08-15 |
| Design | 3 days | Wed 08-07-15 | Fri 10-07-15 |
| Coding | 21 days | Thu 16-07-15 | Thu 13-08-15 |
| Testing | 29 days | Tue 07-07-15 | Mon 17-08-15 |
| User Manual | 2 days | Fri 14-08-15 | Mon 17-08-15 |
| Manage development | 5 days | Thu 16-07-15 | Wed 22-07-15 |
| Termination | 7 days | Tue 18-08-15 | Wed 26-08-15 |
| Pre-Closing | 2 days | Tue 18-08-15 | Wed 19-08-15 |
| Closing | 4 days | Fri 21-08-15 | Wed 26-08-15 |

### 2.3.2. Meeting minutes

All meeting minutes will be written follow this template

| | | | |
|---|---|---|---|
| **Project:** | Fly Away Plus | **Project Code:** | FAP |
| **Project Manager:** | Hoàng Nghĩa Đức | **Conductor:** | Nguyễn Văn Sang |
| | | **Secretary:** | Dương Thanh Hải |
| **Date:** | 2015-05-08 | **Time:** | 02:30 PM – 04:00 PM |
| **Venue:** | B1 | | |
| **Topic of meeting:** | Weekly Project Meeting | | |
| **Attendees:** | | | |

| **No** | **Full name** | **Unit/Group** | **Position** | **Attendance** |
|---|---|---|---|---|
| 1 | Nguyễn Văn Sang | FPT | Supervisor | Present |
| 2 | Hoàng Nghĩa Đức | JS | PM | Present |

| | | | | |
|---|---|---|---|---|
| 3 | Dương Thanh Hải | JS | Technical leader | Present |
| 4 | Nguyễn Minh Hoàng | JS | Developer | Present |
| 5 | Trần Mạnh Hiếu | JS | Developer | Present |
| 6 | Phan Tiến Lực | JS | Tester | Present |
| 7 | Lê Minh Thúy | JS | Tester | Present |

1. Objectives
2. Agenda
3. Contents

### 2.3.3. Coding convention

Refer to:

- CodingConventions_C#_Slide.pptx
- Html5&CSSCodingConventions.doc
- JavaScriptCodingConventions.doc
- Code structure guide line.xlsx

### 2.3.4. Risk Management Plan

| No. | Risk | Probability | Prevention | Correction | Impact |
|---|---|---|---|---|---|
| R1 | Key member leaving | Low | Team building to connect member with each other's. Make each member don't want to leave | Persuade the key member don't leave the project by talking, meet his/her needs. | High |
| R2 | Member un-cooperating | Medium | Team building to connect member with each other's. | Finding root conflict (social relationship, private conflict) | High |
| R3 | Hardware problems | Medium | Hardware replacement | Repair damaged hardware | High |
| R4 | Data lost | Low | Backup data frequently | Each member should own copies | High |

| | | | | | |
|---|---|---|---|---|---|
| R5 | Time shortage | High | PM should create more space time and calculate plus 20% buffer time | Lacking time is the fatal problem, can run project to failure. PM should analysis and has change on the next phase | Very high |
| R6 | Design Errors | Medium | The design should be reviewed very critically. | When the errors in the design are noticed PM should be consulted to help correct the design error as soon as possible. | High |
| R7 | Change requirement | Medium | Carefully brainstorm system's features among team member. Regularly hold meeting to define and discuss all feature of system. Design system carefully. Analyze all the possible cases to minimize the change | Team meeting with supervisor to determine whether new feature should be implementation or not. Team leader create implementation plan for implemented features and send to members. | High |
| R8 | Merging source code causes code losting | Medium | Traing member carefully about resolving conflicts when getting/commiting source code | Use features of TortoiseGit to recover lost code | Medium |

### 2.3.5. Communication Plan

| Communication Type | Method/Tool | When | Information | Participants/ Responsible |
|---|---|---|---|---|
| **Project Task Tracking** | | | | |
| Task scheduling | MS Project Professional 2013 | At the beginning of every stage, and weekly<br>Refinement and rescheduling as necessary | | PM |
| Task assignment | MS Project Professional 2013 | Weekly | | PTL |
| Task status reporting | Daily Report | Daily | | Project Team members |
| **Project Meeting** | | | | |
| Kick-off Meeting | Face to face | Initiation stage | Project introduction; Project plan review; Risk identification; stakeholders identify. | PM, Project Team Members |
| Project Progress Review Meetings | Face to face | Weekly and on event | Communicate project status<br>Communicate and resolve any open issue, risks, and changes<br>Discuss any suggested improvement | PM, Project Team Members |
| Milestone Meetings | Face to face | 5 days after the completion of stages: Definition, Solution & Construction | Project objective review, evaluate project performance (quality, schedule, effort), Causal analysis, | PM, Project Team Members, QA, Supervisor |

| | | | | |
|---|---|---|---|---|
| | | | update project plan for next stage | |
| Transfer/Sharing of project documentation/information | TortoiseGit | When available | All project documentation and information | PM, Project Team Members, QA |
| **Supervisor Communication and Reporting:** | | | | |
| **Communication with Supervisor** | | | | |
| Project Report | Agreed FPT Software and FU standard format | 5pm Monday, Weekly | Project status report, Issue requiring clarifications, escalation, if any | PM |
| Project Meetings with supervisor | Face to face | 12h45 Friday, Weekly | As above | PM |
| Requirement gathering/clarification | Face to face meeting | During requirement analysis phase | As in Q&A list | PM |
| Review Project Plan & Project schedule | By attend project meeting | Significant changes to WO, PP and Project schedule (scope, objectives Organization, HR, major milestone, deliverables ) | | PM |
| Project Progress Review | By email and/or via Operation meeting at Group/Division level | Weekly | Project status report, Issue requiring clarifications, escalation, if any | PM |
| Project Milestone Review | By email and via project milestone review meeting | End of every stage | Project objective review, evaluate project performance (quality, schedule, | PM |

| | | | | |
|---|---|---|---|---|
| | | | effort), Causal analysis, update project plan for next stage | |

# CHAPTER 3: SOFTWARE REQUIREMENT

## 3.1. Purpose

This chapter outline functional and non-functional requirements requirement of our website. It also provides some format constraints in common requirements and project success criteria. All member will work (design, code, test) based on the information provided in this chapter

## 3.2. Use Case Diagram

Figure 7: Use case diagram

## 3.3. Product Features

| UC No. | Group of functions | Functions | Glossary |
|---|---|---|---|
| **FAP MEMBER MODULE** | | | |
| **Common Module** | | | |
| UC001 | Search | Search user | Tìm kiếm tên người dùng |
| UC002 | | Search place | Tìm kiếm tên địa điểm |
| UC003 | | Search room | Tìm kiếm tên phòng |
| UC004 | Help Center | Send question | Người dùng gửi các câu hỏi liên quan đến FAP |
| UC005 | | Basic guide | Hướng dẫn sử dụng cơ bản hệ thống FAP |
| UC006 | | Search question | Người dùng có thể tìm kiếm hướng dẫn sử dụng qua các câu hỏi thông thường |
| **FAP MEMBER MODULE** | | | |
| **Suggest Module** | | | |
| UC007 | Suggest | Suggest place | Gợi ý những địa điểm nằm trong xu hướng mới nhất trên FAP |
| UC008 | | Suggest friend | Gợi ý kết bạn với những người dùng có nhiều bạn chung/thông tin chung |
| UC009 | | Look around | Gợi ý những bài viết được chú ý nhất quanh địa điểm hiện tại của người dùng |
| **Social Module** | | | |
| UC0010 | Personal Page | Display user's personal page | Hiển thị các bài viết và ảnh của người dùng |
| UC0011 | | Display post list | Hiển thị các bài viết của bạn bè và các gợi ý cho các địa điểm/hoạt động v.v… |
| UC0012 | | View place | Hiển thị các bài viết liên quan đến một địa điểm |
| UC0013 | | Display post details | Hiển thị chi tiết một bài post (bao gồm cả video, ảnh) |

| | | | |
|---|---|---|---|
| UC0014 | | Display photo list | Hiển thị danh sách tất cả các ảnh của người dùng |
| UC0015 | | Display video list | Hiển thị danh sách tất cả các video của người dùng |
| UC0016 | | Display place list | Hiển thị danh sách tất cả các place của người dùng |
| UC0017 | | Display notifications | Hiển thị thông báo mới |
| UC0018 | Post management | Add post | Thêm bài viết mới |
| UC0019 | | Edit post | Chỉnh sửa bài viết đã tồn tại |
| UC0020 | | Delete post | Xóa bài viết đã tồn tại và tất cả những nội dung liên quan |
| UC0021 | Share management | Share post | Chia sẻ một bài viết của một người dùng khác |
| UC0022 | Comment management | Add comment | Thêm một bình luận vào bài đăng hoặc ảnh |
| UC0023 | | Edit comment | Chỉnh sửa một bình luận |
| UC0024 | | Delete comment | Xóa một bình luận |
| UC0025 | Like management | Like/ Unlike | Thích/bỏ thích một bài đăng |
| UC0026 | | Dislike/ Un-dislike | Không thích/bỏ không thích một bài đăng |
| UC0027 | Wishlist | Add to wishlist | Thêm 1 địa điểm vào danh sách mong muốn đến |
| UC0028 | | Remove from wishlist | Xóa 1 địa điểm khỏi danh sách mong muốn đến |
| UC0029 | Report | Report a post | Báo cáo một bài đăng có nội dung vi phạm tới quản trị viên |
| UC0030 | | Report an user | Báo cáo một người dùng có hành vi vi phạm tới quản trị viên |
| UC0031 | Chat | Chat with others | Tán gẫu với người dùng khác |
| UC0032 | | Display message | Hiển thị message của người khác đến người dùng |
| UC0033 | | Add friend | Kết bạn với thành viên khác |

| | | | |
|---|---|---|---|
| UC0034 | Friend management | Unfriend | Hủy kết bạn với một thành viên |
| UC0035 | | Tag friend | Tag bạn bè vào bài đăng/ảnh |
| UC0036 | Room | Join room | Tham gia vào một phòng |
| UC0037 | | Leave room | Thoát khỏi một phòng đã tham gia |
| UC0038 | | Create room | Tạo một phòng |
| UC0039 | | Edit room's information | Chỉnh sửa thông tin một phòng đã tạo |
| UC0040 | | Add event | Thêm một sự kiện vào lịch |
| UC0041 | | Edit event | Sửa nội dung sự kiện |
| UC0042 | | Delete event | Xóa một sự kiện |
| UC0043 | | Add task | Thêm một công việc |
| UC0044 | | Edit task | Sửa nội dung công việc |
| UC0045 | | Delete task | Xóa một công việc |
| UC0046 | | View estimation budget | Xem bản ước lượng tài chính |
| UC0047 | | Add estimation item | Thêm ước lượng tài chính |
| UC0048 | | Export estimation | Xuất bản ước lượng tài chính ra file .pdf, .excel |
| UC0049 | | Search estimation item | Tìm kiếm bản ước lượng tài chính |
| UC0050 | | Approve request | Chỉnh sửa kế hoạch/lịch trình cho một chuyến đi trong phòng |
| UC0051 | | Add member | Thêm thành viên mới vào phòng |
| UC0052 | | Remove member | Mời một thành viên ra khỏi phòng |
| UC0053 | | Chat | Tán gẫu với thành viên phòng |
| **Account Management Module** | | | |
| UC0054 | Login | Login by social network's account | Đăng nhập bằng tài khoản Facebook/Google |
| | | Login by registered account | Đăng nhập bằng tài khoản được đăng ký trên FAP |

| | | | |
|---|---|---|---|
| UC0055 | | Logout | Đăng xuất |
| UC0056 | | Register | Đăng ký thành viên để sử dụng tất cả các chức năng của FAP |
| UC0057 | | Edit Profile | Chỉnh sửa thông tin cá nhân |
| UC0058 | | Forgot Password | Yêu cầu hệ thống giúp đỡ khi quên mật khẩu |
| **FAP ADMIN MODULE** | | | |
| UC0059 | Management Member's account | Admin login | Quản trị viên đăng nhập |
| UC0060 | | Admin logout | Quản trị viên đăng xuất |
| UC0061 | | Lock user's account | Khóa tài khoản của người dùng vi phạm |
| UC0062 | | Unlock user's account | Mở khóa tài khoản người dùng |
| UC0063 | | View all user | Hiển thị danh sách tất cả người dùng |
| UC0064 | | Statistics | Thống kê các thông tin về trang web |
| UC0065 | | Send warning | Gửi cảnh báo đến người dùng |
| UC0066 | | Review user | Kiểm tra một người dùng bị báo cáo vi phạm |
| UC0067 | | Review post | Kiểm tra một bài post bị báo cáo vi phạm |
| UC0068 | | Hide post | Xóa một bài post có nội dung vi phạm |

### 3.3.1. User Characteristics

There are three main actors that system support:

- **Member:** Have account on system, they can use all functions of website. For example: Searching, posting, connect to friends etc…
- **Administrator:** They can use all functions of normal member and have an Administrator control panel to manage all configuration of system.

## 3.4. Functional Requirements

### 3.4.1. Business Rules

| No | Description |
|---|---|
| B1 | Search textbox cannot be empty |
| B2 | Subject cannot be empty |
| B3 | Content cannot be empty |
| B4 | Subject is limited to 1000 characters |
| B5 | Content is limited to 1000 characters |
| B6 | Allowed file extension: .jpg, .png, .bmp |
| B7 | File size is limited to 500 MB |
| B8 | Comment is limited to 16384 characters |
| B9 | If user choose Others, textbox cannot be empty |
| B10 | Chat box cannot be empty |
| B11 | Friend must be chosen, cannot be entered |
| B12 | Name cannot be empty |
| B13 | Place must be chosen |
| B14 | Start date and end date must be chosen |
| B15 | Milestones must be chosen |
| B16 | Post lazy loading technique displays at most 10 each time |
| B17 | If user accesses to nonexistent page, FAP displays error message “Page not found” |
| B18 | User name must be at least 6 characters |
| B19 | Password must be at least 6 characters |
| B20 | Password cannot be same as user name |
| B21 | Email must content characters ‘@’ and ‘.’ |
| B22 | Date of birth must be chosen |
| B23 | Phone number must be number phrase |
| B24 | Locked user cannot comment |
| B25 | Locked user cannot create post |
| B26 | Information of each item in friend list includes: avatar (profile picture), friend name, “User” menu |
| B27 | Friend request has 3 states: “pending”, “accepted”, “declined” |
| B28 | The target user must be available, not locked or deleted |
| B29 | User mouse over menu includes: avatar (profile picture), user name, “User” menu |
| B30 | Room’s privacy is default set to Public |
| B31 | Milestones default status is Not passed |
| B32 | Allowed file extension: avi, mp4, flv |

### 3.4.2. Use Cases

#### 3.4.2.1. Search

Figure 8 UC001 - Search

##### 3.4.2.1.1. UC001-Search

| | | | |
|---|---|---|---|
| **Use Case ID** | UC001 | **Version** | 1.1 |
| **Use Case Name** | Search | | |
| **Created by:** | HieuTM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allows user to search existing information stored on FAP by a phrase (name of places, food and drinks, friends…) | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User is logged in to FAP | | |
| **Trigger:** | User enters search phrase and click Search or press Enter | | |
| **Post conditions:** | List all results that matched with the keyword user enters will be displayed in the Search Details screen | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Enter search phrase to text box | |
| 2 | User | Click Search or press Enter | |
| 3 | FAP | Redirect to Search Result screen includes<br>- Header<br>- Room tab<br>- People tab<br>- Place tab | |
| 4 | FAP | List all results that matched with the keyword user entered | |
| **Alternative Flows:** | | | |
| **AT1** | At step 2 in the main flows, if user click other hyperlinks or buttons | | |
| **Step** | **Actor** | **Action** | |

| | | |
|---|---|---|
| 2.1 | FAP | Redirects user to chosen hyperlink or button |
| **Exceptions: N/A** | | |
| **Priority** | | High |
| **Frequency of Use:** | | High |
| **Business Rules:** | | B1 |
| **Other Information:** | | N/A |

#### 3.4.2.2. Help Center

Figure 9: Help Center Module

##### 3.4.2.2.1. UC002-Basic Guide

| | | | |
|---|---|---|---|
| **Use Case ID** | UC002 | **Version** | 1.1 |
| **Use Case Name** | Basic guide | | |
| **Created by:** | HieuTM | **Date Created:** | 09/06/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | A guide page to let user know how to use FAP website or frequently asked questions. | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User is logged in to FAP | | |
| **Trigger:** | User click Basic Guide in FAP website footer | | |
| **Post conditions:** | FAP display Basic Guide page | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Basic Guide | |
| 2 | FAP | Redirect user to Basic Guide page includes:<br>- Header<br>- Search textbox<br>- Search button<br>- FAQ paragraphs | |
| **Alternative Flows: N/A** | | | |

| | |
|---|---|
| **Exceptions: N/A** | |
| **Priority** | Normal |
| **Frequency of Use:** | Normal |
| **Business Rules:** | N/A |
| **Other Information:** | N/A |

#### 3.4.2.2.2. UC003-Search Question

| | | | |
|---|---|---|---|
| **Use Case ID** | UC003 | **Version** | 1.1 |
| **Use Case Name** | Search question | | |
| **Created by:** | HieuTM | **Date Created:** | 09/06/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allows user to search a question in frequently asked questions list | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User is logged in FAP<br>4. User browsed Basic Guide page | | |
| **Trigger:** | User enters search phrase and click Search while in Basic Guide page | | |
| **Post conditions:** | Question is displayed | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Enter search phrase to text box | |
| 2 | User | Click Search or press Enter | |
| 3 | FAP | Redirect user to question | |
| **Alternative Flows: N/A** | | | |
| **Exceptions:** | | | |
| **EC1** | At step 3 in the main flows, if there is no result matched the keywords | | |
| **Step** | **Actor** | **Action** | |
| 3.1 | FAP | Display Basic Guide page with text: “Nothing found :(” | |
| **Priority** | | Normal | |
| **Frequency of Use:** | | Normal | |
| **Business Rules:** | | N/A | |
| **Other Information:** | | N/A | |

### 3.4.2.3. Suggest

#### *3.4.2.3.1.* UC004-Suggest place

| | | | |
|---|---|---|---|
| **Use Case ID** | UC004 | **Version** | 1.1 |
| **Use Case Name** | Suggest place | | |
| **Created by:** | HieuTM | **Date Created:** | 09/06/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | N/A |
| **Description:** | FAP suggests places to user base on users traveled, viewed history, wish list and trends. | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User is viewing Homepage or Personal Page | | |
| **Trigger:** | User browses FAP website | | |
| **Post conditions:** | 1. Suggests is displayed | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click a post thumbnail | |
| 2 | FAP | Display Suggest Place menu includes:<br>- Place menu item | |
| **Alternative Flows: N/A** | | | |
| **Exceptions: N/A** | | | |
| **Priority** | High | | |
| **Frequency of Use:** | High | | |
| **Business Rules:** | N/A | | |
| **Other Information:** | N/A | | |

#### 3.4.2.3.2. UC005-Suggest friend

| | | | |
|---|---|---|---|
| **Use Case ID** | UC005 | **Version** | 1.1 |
| **Use Case Name** | Suggest friend | | |
| **Created by:** | HieuTM | **Date Created:** | 09/06/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | N/A |
| **Description:** | FAP suggests friends to user base on mutual friends or likes | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User is viewing Homepage or Personal Page | | |
| **Trigger:** | User browses FAP website | | |
| **Post conditions:** | Suggests is displayed | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click a post thumbnail | |
| 2 | FAP | Display Suggest Friend menu includes:<br>- Friend menu item | |
| **Alternative Flows: N/A** | | | |
| **Exceptions: N/A** | | | |
| **Priority** | High | | |
| **Frequency of Use:** | High | | |
| **Business Rules:** | N/A | | |
| **Other Information:** | N/A | | |

#### 3.4.2.3.3. UC006-Look around

| | | | |
|---|---|---|---|
| **Use Case ID** | UC006 | **Version** | 1.1 |
| **Use Case Name** | Look around | | |
| **Created by:** | HieuTM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allows user to see post of others around | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system | | |
| **Trigger:** | User click Look Around in header | | |
| **Post conditions:** | 1. Look Around page is displayed | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Look Around | |
| 2 | FAP | Redirect user to Look Around page includes:<br>- Header<br>- Suggest Bar<br>- Map<br>- Post thumbnail and short description<br>- Footer | |
| 3 | User | Enter location to text box | |
| 4 | User | Click Look or press Enter | |

| | | |
|---|---|---|
| 5 | FAP | Display Look Around page with results |
| **Alternative Flows: N/A** | | |
| **Exceptions:** | | |
| **EC1** | At step 5 in the main flows, if there is no result matched the keywords | |
| **Step** | **Actor** | **Action** |
| 5.1 | FAP | Display Look Around page with message with ID MSG2 |
| **EC2** | At step 3 in the alternative flows, if FAP cannot locate user's current location | |
| **Step** | **Actor** | **Action** |
| 3.1 | FAP | Display Look Around page with message with ID MSG3 |
| **Priority** | | Normal |
| **Frequency of Use:** | | High |
| **Business Rules:** | | N/A |
| **Other Information:** | | N/A |

### 3.4.2.4. Personal Page

#### *3.4.2.4.1.* UC007-Display User's Personal Page

| | | | |
|---|---|---|---|
| **Use Case ID** | UC007 | **Version** | 1.1 |
| **Use Case Name** | Display Timeline | | |
| **Created by:** | HieuTM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | FAP records all of user's activities and display | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system | | |
| **Trigger:** | User click View Profile | | |
| **Post conditions:** | Personal Page is displayed | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Avatar image button in header | |
| 2 | FAP | Display a menu includes:<br>- View Profile menu item<br>- Logout menu item | |
| 3 | User | Click View Profile | |
| 4 | FAP | Redirect user to Profile page includes:<br>- Header<br>- Cover image label<br>- Profile panel<br>- Friend panel<br>- Post thumbnails<br>- Chat button | |
| **Alternative Flows: N/A** | | | |
| **Exceptions: N/A** | | | |
| **Priority** | High | | |
| **Frequency of Use:** | High | | |
| **Business Rules:** | N/A | | |
| **Other Information:** | N/A | | |

#### 3.4.2.4.2. UC008-Display Homepage

| | | | |
|---|---|---|---|
| **Use Case ID** | UC008 | **Version** | 1.1 |
| **Use Case Name** | Display Homepage | | |
| **Created by:** | HieuTM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | FAP updates activities of user's friends automatically | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system | | |
| **Trigger:** | User browses FAP website and login | | |
| **Post conditions:** | 1. Homepage page is displayed | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | FAP | Display Homepage page includes:<br>- Header<br>- Suggest Bar<br>- Post thumbnails | |
| **Alternative Flows: N/A** | | | |
| **Exceptions: N/A** | | | |
| **Priority** | High | | |
| **Frequency of Use:** | High | | |
| **Business Rules:** | N/A | | |
| **Other Information:** | N/A | | |

#### 3.4.2.4.3. UC009-Display Post Details

| | | | |
|---|---|---|---|
| **Use Case ID** | UC009 | **Version** | 1.1 |
| **Use Case Name** | Display Post Details | | |
| **Created by:** | ThuyLM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | FAP display details of a post | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User is viewing Homepage or Personal Page | | |
| **Trigger:** | User click post thumbnail | | |
| **Post conditions:** | A post is displayed | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click a post thumbnail | |
| 2 | FAP | Post Details page is displayed includes:<br>- Image/Photo of post<br>- Place related to post<br>- Owner of post<br>- Like button<br>- Dislike button<br>- Add to wishlist button | |

| | | |
|---|---|---|
| | | - Share button<br>- Number of like, dislike, wishlist, shared<br>- Comments<br>- New comment panel |
| **Alternative Flows: N/A** | | |
| **Exceptions: N/A** | | |
| **Priority** | | High |
| **Frequency of Use:** | | High |
| **Business Rules:** | | N/A |
| **Other Information:** | | N/A |

#### *3.4.2.4.4.* UC010-Display Wishlist

| | | | |
|---|---|---|---|
| **Use Case ID** | UC010 | **Version** | 1.1 |
| **Use Case Name** | Display Wishlist | | |
| **Created by:** | ThuyLM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | FAP display all photo of an user | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system | | |
| **Trigger:** | User click Wishlist | | |
| **Post conditions:** | 1. Wishlist page is displayed | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Wishlist in Homepage | |
| 2 | FAP | Display Wishlist page includes:<br>- Header<br>- Suggest bar<br>- Post thumbnails | |
| **Alternative Flows: N/A** | | | |
| **Exceptions: N/A** | | | |
| **Priority** | | High | |
| **Frequency of Use:** | | High | |
| **Business Rules:** | | N/A | |
| **Other Information:** | | N/A | |

#### 3.4.2.4.5. UC011-Display Room List

| | | | |
|---|---|---|---|
| **Use Case ID** | UC011 | **Version** | 1.1 |
| **Use Case Name** | Display Photo List | | |
| **Created by:** | ThuyLM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | FAP display all photo of an user | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system | | |
| **Trigger:** | User click Rooms | | |
| **Post conditions:** | 1. Room List page is displayed | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Rooms | |
| 2 | FAP | Display Room List page includes:<br>- Header<br>- Room menu bar<br>- Room thumbnails | |
| **Alternative Flows: N/A** | | | |
| **Exceptions: N/A** | | | |
| **Priority** | High | | |
| **Frequency of Use:** | High | | |
| **Business Rules:** | N/A | | |
| **Other Information:** | N/A | | |

#### 3.4.2.4.6. UC012-Display Room Details

| | | | |
|---|---|---|---|
| **Use Case ID** | UC012 | **Version** | 1.1 |
| **Use Case Name** | Display Photo List | | |
| **Created by:** | ThuyLM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | FAP display all photo of an user | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User is viewing Room List page or Search Result page | | |
| **Trigger:** | User click Photos on Personal Page | | |
| **Post conditions:** | 1. Room Details page is displayed | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click View Detail button in Room thumbnail | |
| 2 | FAP | Display Room Details page includes:<br>- Header<br>- Logout menu item | |
| 3 | User | Click View Profile | |
| 4 | FAP | Redirect user to Profile page includes:<br>- Header | |

| | | |
|---|---|---|
| | | - Room description panel<br>- Post thumbnails<br>- Member panel<br>- Create Post panel<br>- Chat panel |
| **Alternative Flows: N/A** | | |
| **Exceptions: N/A** | | |
| **Priority** | | High |
| **Frequency of Use:** | | High |
| **Business Rules:** | | N/A |
| **Other Information:** | | N/A |

#### *3.4.2.4.7.* UC013-Display Photo List

| | | | |
|---|---|---|---|
| **Use Case ID** | UC013 | **Version** | 1.1 |
| **Use Case Name** | Display Photo List | | |
| **Created by:** | ThuyLM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | FAP display all photo of an user | | |
| **Preconditions:** | 5. FAP website is available<br>6. User browsed FAP website<br>7. User logged in to system | | |
| **Trigger:** | User click Photos on Personal Page | | |
| **Post conditions:** | 2. A list of photos is displayed | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Avatar image button in header | |
| 2 | FAP | Display a menu includes:<br>- View Profile menu item<br>- Logout menu item | |
| 3 | User | Click View Profile | |
| 4 | FAP | Redirect user to Profile page includes:<br>- Header<br>- Cover image label<br>- Profile panel<br>- Friend panel<br>- Post thumbnails<br>- Chat button | |
| 5 | User | Click Photos | |
| 6 | FAP | Display list of photos | |
| **Alternative Flows: N/A** | | | |
| **Exceptions: N/A** | | | |
| **Priority** | | High | |
| **Frequency of Use:** | | High | |
| **Business Rules:** | | N/A | |
| **Other Information:** | | N/A | |

#### *3.4.2.4.8.* UC014-Display Video List

| | | | |
|---|---|---|---|
| **Use Case ID** | UC014 | **Version** | 1.1 |
| **Use Case Name** | Display Photo List | | |
| **Created by:** | ThuyLM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | FAP display all video of an user | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system | | |
| **Trigger:** | User click Videos on Personal Page | | |
| **Post conditions:** | 1. A list of videos is displayed | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Avatar image button in header | |
| 2 | FAP | Display a menu includes:<br>- View Profile menu item<br>- Logout menu item | |
| 3 | User | Click View Profile | |
| 4 | FAP | Redirect user to Profile page includes:<br>- Header<br>- Cover image label<br>- Profile panel<br>- Friend panel<br>- Post thumbnails<br>- Chat button | |
| 5 | User | Click Videos | |
| 6 | FAP | Display list of Videos | |
| **Alternative Flows: N/A** | | | |
| **Exceptions: N/A** | | | |
| **Priority** | High | | |
| **Frequency of Use:** | High | | |
| **Business Rules:** | N/A | | |
| **Other Information:** | N/A | | |

#### *3.4.2.4.9.* UC015-Display Place List

| | | | |
|---|---|---|---|
| **Use Case ID** | UC015 | **Version** | 1.1 |
| **Use Case Name** | Display Place List | | |
| **Created by:** | ThuyLM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | FAP display all place of an user | | |
| **Preconditions:** | 4. FAP website is available<br>5. User browsed FAP website<br>6. User logged in to system | | |
| **Trigger:** | User click Places on Personal Page | | |
| **Post conditions:** | A list of places is displayed | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Avatar image button in header | |
| 2 | FAP | Display a menu includes:<br>- View Profile menu item<br>- Logout menu item | |
| 3 | User | Click View Profile | |
| 4 | FAP | Redirect user to Profile page includes:<br>- Header<br>- Cover image label<br>- Profile panel<br>- Friend panel<br>- Post thumbnails<br>- Chat button | |
| 5 | User | Click Places | |
| 6 | FAP | Display list of places | |
| **Alternative Flows: N/A** | | | |
| **Exceptions: N/A** | | | |
| **Priority** | High | | |
| **Frequency of Use:** | High | | |
| **Business Rules:** | N/A | | |
| **Other Information:** | N/A | | |

#### *3.4.2.4.10.* UC016-Display Notification

| | | | |
|---|---|---|---|
| **Use Case ID** | UC016 | **Version** | 1.1 |
| **Use Case Name** | Display Notification | | |
| **Created by:** | HieuTM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | FAP updates activities automatically and display notifications | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system | | |
| **Trigger:** | User click Notifications in Header | | |
| **Post conditions:** | 1. Notification panel is displayed | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Notification | |
| 2 | FAP | Notification panel is displayed includes:<br>- Notification label<br>- Notification items<br>- View All button | |
| **Alternative Flows: N/A** | | | |
| **AT1** | At step 1, user click Friends | | |
| **Step** | **Actor** | **Action** | |
| 1.1 | User | Click Friend | |
| 1.2 | FAP | Friend panel is displayed include:<br>- Friend Request label<br>- Friend Item: User name, Confirm button, Delete button<br>View All button | |
| | | | |
| **AT2** | At step 1, user click Chat | | |
| **Step** | **Actor** | **Action** | |
| 1.1 | User | Click Chat | |
| 1.2 | FAP | Chat menu is displayed includes:<br>- User menu item | |
| 1.3 | User | Click a User menu item | |
| 1.4 | FAP | Display Chat box | |
| | | | |
| **Exceptions: N/A** | | | |
| **Priority** | High | | |
| **Frequency of Use:** | High | | |
| **Business Rules:** | N/A | | |
| **Other Information:** | N/A | | |

#### *3.4.2.4.11.* UC017-View Place Details

| | | | |
|---|---|---|---|
| **Use Case ID** | UC017 | **Version** | 1.1 |
| **Use Case Name** | View place | | |
| **Created by:** | HieuTM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | FAP display post related to a place and place details | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system | | |
| **Trigger:** | User click Chat | | |
| **Post conditions:** | 1. Homepage is displayed | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Place on corner of a post | |
| 2 | FAP | Place details page is displayed includes:<br>- Location of place on Google maps<br>- Basic information of places<br>- Related post | |
| **Alternative Flows: N/A** | | | |
| **Exceptions: N/A** | | | |
| **Priority** | High | | |
| **Frequency of Use:** | High | | |
| **Business Rules:** | N/A | | |
| **Other Information:** | N/A | | |

### 3.4.2.5. Post management

#### *3.4.2.5.1.* UC018-Add Post

| | | | |
|---|---|---|---|
| **Use Case ID** | UC018 | **Version** | 1.1 |
| **Use Case Name** | Add post | | |
| **Created by:** | HieuTM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | None |
| **Description:** | This function allows user to share information, knowledge, experience | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system | | |
| **Trigger:** | User click Create Post | | |
| **Post conditions:** | 1. Post is updated to user's Personal Page.<br>2. Post is updated to Homepage of user's friends.<br>3. Post is updated to Database. | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Create Post. | |
| 2 | FAP | Create Post panel is displayed includes:<br>- Update Status label<br>- Content text area<br>- Location button<br>- Photo button<br>- Video button<br>- Privacy dropdown button<br>- Post button | |
| 3 | User | Enter text into content text area | |
| 4 | User | Click Place | |
| 5 | FAP | Display Place panel | |
| 6 | User | Enter whole or part of a place name | |
| 7 | FAP | Display list of suggestion | |
| 8 | User | Click a name in list of suggestion | |
| 9 | User | Click Post or press Enter. | |
| 10 | FAP | Create a post | |
| 11 | FAP | Updates to user's timeline | |
| 12 | FAP | Updates to Homepage of user's friends | |
| 13 | FAP | Redirects user to Post Detail page which contain created post. | |
| **Alternative Flows** | | | |
| **AT1** | At step 5 in the main flows, if user click out of Create Post panel | | |
| **Step** | **Actor** | **Action** | |
| 5.1 | FAP | Close Create Post panel | |
| **AT2** | At step 1 in the main flows, if user choose Photos | | |
| **Step** | **Actor** | **Action** | |
| 1.1 | User | Click Create Post. | |
| 1.2 | FAP | Create Post panel is displayed includes:<br>- Update Status label<br>- Content text area | |

| | | |
|---|---|---|
| | | - Location button<br>- Photo button<br>- Video button<br>- Privacy dropdown button<br>- Post button |
| 1.3 | User | Enter text into content text area |
| 14 | User | Click Place |
| 15 | FAP | Display Place panel |
| 16 | User | Enter whole or part of a place name |
| 17 | FAP | Display list of suggestion |
| 18 | User | Click a name in list of suggestion |
| 1.5 | User | Click Photo |
| 1.6 | FAP | Displays Add Photo panel |
| 1.7 | User | Click Add Photo button |
| 1.8 | FAP | Displays file chooser |
| 1.9 | User | Choose images |
| 1.10 | FAP | Displays images' thumbnail |
| 1.11 | User | Click Create |
| 1.12 | FAP | Create a post |
| 1.13 | FAP | Updates to user's timeline |
| 1.14 | FAP | Updates to Homepage of user's friends |
| 1.15 | FAP | Redirects user to Post Detail page which contain created post. |
| **AT3** | At step 1 in the main flows, if user choose Video | |
| **Step** | **Actor** | **Action** |
| 1.1 | User | Click Create Post. |
| 1.2 | FAP | Redirects user to Add Post Page includes:<br>- Header<br>- Suggest Bar<br>- Name textbox<br>- Place textbox<br>- Browse video button<br>- Video link button<br>- Privacy combo box<br>- Description text area<br>- Footer |
| 19 | User | Click Place |
| 20 | FAP | Display Place panel |
| 21 | User | Enter whole or part of a place name |
| 22 | FAP | Display list of suggestion |
| 23 | User | Click a name in list of suggestion |
| 1.3 | User | Click Add Video. |
| 1.4 | User | Redirects user to Add Video Page which contain an Add video form. |
| 1.5 | User | Click Browse to choose video. |
| 1.6 | FAP | Display video and Caption field |
| 1.7 | User | Enters information in fields. |

| | | |
|---|---|---|
| 1.8 | User | User click Create or press Enter. |
| 1.9 | FAP | Create a post |
| 1.10 | FAP | Updates to user's timeline |
| 1.11 | FAP | Updates to Homepage of user's friends |
| 1.12 | FAP | Displays message with ID MSG4 |
| 1.13 | FAP | Redirects user to Post Page which contain created post. |
| 1.14 | User | Click Create Post. |
| 1.15 | FAP | Redirects user to Add Post Page includes:<br>- Header<br>- Suggest Bar<br>- Name textbox<br>- Place textbox<br>- Browse video button<br>- Video link button<br>- Privacy combo box<br>- Description text area<br>Footer |
| **Exceptions: N/A** | | |
| **EC1** | At step 5, Content text area is blank | |
| **Step** | **Actor** | **Action** |
| 5.1 | FAP | Display error message with ID MSG5 |
| 4.2 | FAP | Mark Content text area |
| **Priority** | | High |
| **Frequency of Use:** | | High |
| **Business Rules:** | | B25 |
| **Other Information:** | | N/A |

#### 3.4.2.5.2. UC019-Edit Post

| | | | |
|---|---|---|---|
| **Use Case ID** | UC019 | **Version** | 1.1 |
| **Use Case Name** | Edit post | | |
| **Created by:** | HieuTM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | None |
| **Description:** | This function allows user to edit their post | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User are viewing their own post | | |
| **Trigger:** | User click Edit post while viewing an own post | | |
| **Post conditions:** | 1. Post is updated to FAP website.<br>2. Post is updated to User Detail.<br>3. Post is updated to Database. | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Edit | |
| 2 | FAP | Display Edit Post text box with old data | |
| 3 | User | Edits data in text box. | |
| 4 | User | Click Update or press Enter. | |
| 5 | FAP | Edit this post | |
| 6 | FAP | Displays message with ID MSG7 | |
| 7 | FAP | Redirects user to Post Page which contain edited post. | |
| **Alternative Flows** | | | |
| **AT1** | At step 4, user click Cancel | | |
| **Step** | **Actor** | **Action** | |
| 4.1 | FAP | FAP redirects user to previous page. | |
| **AT2** | At step 4 in the main flows, if user click out of Edit text box | | |
| **Step** | **Actor** | **Action** | |
| 4.1 | FAP | Edit text box is closed | |
| **Exceptions:** | | | |
| **EC1** | At step 4, if Edit text box is blank | | |
| **Step** | **Actor** | **Action** | |
| 4.1 | FAP | Display error message with ID MSG5 | |
| 4.2 | FAP | Mark error fields | |
| **Priority** | Normal | | |
| **Frequency of Use:** | High | | |
| **Business Rules:** | N/A | | |
| **Other Information:** | N/A | | |

#### 3.4.2.5.3. UC020-Delete Post

| | | | |
|---|---|---|---|
| **Use Case ID** | UC020 | **Version** | 1.1 |
| **Use Case Name** | Delete post | | |
| **Created by:** | HieuTM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | None |
| **Description:** | This function allows user to delete what they posted | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User are viewing their own post | | |
| **Trigger:** | User click Delete while viewing a post | | |
| **Post conditions:** | 1. Post is deleted in user's Timeline.<br>2. Post status is updated to Database. | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Delete | |
| 2 | FAP | Display confirm popup "Delete this post?" | |
| 3 | User | Click OK | |
| 4 | FAP | Delete this post | |
| 5 | FAP | Redirects user to Homepage | |
| **Alternative Flows** | | | |
| **AT1** | At step 1, user click menu in bottom-right corner of a post thumbnail | | |
| **Step** | **Actor** | **Action** | |
| 3.1 | FAP | Display a menu includes:<br>- Edit menu item<br>- Delete menu item | |
| 3.2 | User | Click Delete | |
| 3.3 | FAP | Display confirm popup "Delete this post?" | |
| 3.4 | User | Click OK | |
| 3.5 | FAP | Delete this post | |
| 3.6 | FAP | Redirects user to Homepage | |
| **AT1** | At step 3, user click Cancel | | |
| **Step** | **Actor** | **Action** | |
| 3.1 | FAP | Closes confirm popup | |
| **Exceptions: N/A** | | | |
| **Priority** | Normal | | |
| **Frequency of Use:** | Low | | |
| **Business Rules:** | N/A | | |
| **Other Information:** | N/A | | |

### 3.4.2.6. Share

#### *3.4.2.6.1.* UC021- Share post

| | | | |
|---|---|---|---|
| **Use Case ID** | UC021 | **Version** | 1.1 |
| **Use Case Name** | Share post | | |
| **Created by:** | HieuTM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | None |
| **Description:** | This function allows user to share a post, makes it available on timeline | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User are viewing a post | | |
| **Trigger:** | User click Share while viewing a post | | |
| **Post conditions:** | 1. Shared post is updated to user's Facebook timeline<br>2. Update share number of shared post | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Share. | |
| 2 | FAP | Displays a textbox dialog. | |
| 3 | User | Enters comment. | |
| 4 | User | Click Share. | |
| 5 | FAP | Closes dialog and updates shared post to user's timeline. | |
| **Alternative Flows** | | | |
| **AT1** | At step 3, user click Cancel | | |
| **Step** | **Actor** | **Action** | |
| 3.1 | FAP | Closes confirm popup | |
| **AT2** | At step 4 in the main flows, if user click other hyperlinks or buttons | | |
| **Step** | **Actor** | **Action** | |
| 4.1 | FAP | Redirects user to chosen hyperlink or button | |
| **Exceptions: N/A** | | | |
| **Priority** | High | | |

| | |
|---|---|
| **Frequency of Use:** | High |
| **Business Rules:** | N/A |
| **Other Information:** | N/A |

### 3.4.2.7. Comment

#### *3.4.2.7.1.* UC022-Add Comment

| | | | |
|---|---|---|---|
| **Use Case ID** | UC022 | **Version** | 1.1 |
| **Use Case Name** | Add comment | | |
| **Created by:** | HieuTM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allows user to comment opinion in a post | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User are viewing a post | | |
| **Trigger:** | User enters comment and click Send while viewing a post | | |
| **Post conditions:** | Updates post's comments | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Entered comment into textbox | |
| 2 | User | Click Send or press Enter | |
| 3 | FAP | Updates post's comment | |
| 4 | FAP | Displays comment | |
| **Alternative Flows:** | | | |
| **AT1** | At step 2 in the main flows, if user click other hyperlinks or buttons | | |
| **Step** | **Actor** | **Action** | |

| | | |
|---|---|---|
| 2.1 | FAP | Redirects user to chosen hyperlink or button |
| **AT2** | At step 2 in the main flows, if user click other hyperlinks or buttons | |
| **Step** | **Actor** | **Action** |
| 2.1 | FAP | Redirects user to chosen hyperlink or button |
| **Exceptions: N/A** | | |
| **Priority** | High | |
| **Frequency of Use:** | High | |
| **Business Rules:** | B8 B24 | |
| **Other Information:** | N/A | |

#### *3.4.2.7.2.* UC023-Edit Comment

| | | | |
|---|---|---|---|
| **Use Case ID** | UC023 | **Version** | 1.1 |
| **Use Case Name** | Edit comment | | |
| **Created by:** | HieuTM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allows user to edit what they commented | | |
| **Preconditions:** | 5. FAP website is available<br>6. User browsed FAP website<br>7. User logged in to system<br>8. User are viewing a post has their own comments | | |
| **Trigger:** | User click Edit while viewing an own comment | | |
| **Post conditions:** | Updates post's comments | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Edit | |
| 2 | User | Displays a textbox | |
| 3 | User | Entered comment into textbox | |
| 4 | User | Click Edit or press Enter | |
| 5 | FAP | Updates comment | |
| 6 | FAP | Displays edited comment | |
| **Alternative Flows:** | | | |
| **AT1** | At step 4 in the main flows, if user click other hyperlinks or buttons | | |
| **Step** | **Actor** | **Action** | |
| 4.1 | FAP | Redirects user to chosen hyperlink or button | |
| **AT2** | At step 4 in the main flows, if user click other hyperlinks or buttons | | |
| **Step** | **Actor** | **Action** | |
| 4.1 | FAP | Redirects user to chosen hyperlink or button | |
| **Exceptions: N/A** | | | |
| **Priority** | Normal | | |
| **Frequency of Use:** | Normal | | |
| **Business Rules:** | B8 | | |
| **Other Information:** | N/A | | |

#### *3.4.2.7.3.* UC024-Delete Comment

| | | | |
|---|---|---|---|
| **Use Case ID** | UC024 | **Version** | 1.1 |

| | | | |
|---|---|---|---|
| **Use Case Name** | Delete comment | | |
| **Created by:** | HieuTM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allows user to edit what they commented | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User are viewing a post has their own comments | | |
| **Trigger:** | User click Delete while viewing an own comment | | |
| **Post conditions:** | 1. Post's comment is deleted | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Delete | |
| 2 | User | Displays confirm popup "Delete this comment?" | |
| 3 | User | Click OK | |
| 4 | User | Deletes comment | |
| 5 | FAP | Display post without deleted comment | |
| **Alternative Flows: N/A** | | | |
| **Exceptions: N/A** | | | |
| **Priority** | Normal | | |
| **Frequency of Use:** | Low | | |
| **Business Rules:** | N/A | | |
| **Other Information:** | N/A | | |

### 3.4.2.8. Like

#### *3.4.2.8.1.* UC025-Like/Unlike

| | | | |
|---|---|---|---|
| **Use Case ID** | UC025 | **Version** | 1.1 |
| **Use Case Name** | Like/Unlike | | |
| **Created by:** | HieuTM | **Date Created:** | 28/05/2015 |

| | | | |
|---|---|---|---|
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allows user to rate a post or a comment | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User are viewing a post or a comment | | |
| **Trigger:** | User click Like while viewing a post or a comment | | |
| **Post conditions:** | 1. Liked post is updated to user's timeline<br>2. Liked post is updated to Homepage of user's friends if available<br>3. Update like number of liked post or comment | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Like | |
| 2 | FAP | Updates liked post to user's timeline | |
| 3 | FAP | Updates liked post to Homepage of user's friends | |
| 4 | FAP | Update like number of liked post | |
| 5 | FAP | Displays post or comment as Liked | |
| **Alternative Flows:** | | | |
| **AT1** | User click Like a liked post | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Like | |
| 3 | FAP | Update like number of liked post | |
| 4 | FAP | Displays post or comment as normal | |
| **Exceptions: N/A** | | | |
| **Priority** | High | | |
| **Frequency of Use:** | High | | |
| **Business Rules:** | N/A | | |
| **Other Information:** | N/A | | |

#### *3.4.2.8.2.* UC026-Dislike/Un-dislike

| | | | |
|---|---|---|---|
| **Use Case ID** | UC026 | **Version** | 1.1 |
| **Use Case Name** | Dislike | | |
| **Created by:** | HieuTM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allows user to rate a post or a comment | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User are viewing a post or a comment | | |
| **Trigger:** | User click Dislike a post or comment | | |
| **Post conditions:** | 1. Dislike post is updated to user's timeline<br>2. Dislike post is updated to Homepage of user's friends if available<br>3. Update dislike number of dislike post or comment | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |

| | | |
|---|---|---|
| 1 | User | Click Dislike |
| 2 | FAP | Updates dislike post to user's timeline |
| 3 | FAP | Updates dislike post to Homepage of user's friends |
| 4 | FAP | Update dislike number of dislike post |
| 5 | FAP | Display post or comment as Disliked |
| **Alternative Flows: N/A** | | |
| **AT1** | User click Dislike a disliked post | |
| **Step** | **Actor** | **Action** |
| 1 | User | Click Dislike |
| 2 | FAP | Update dislike number of un-disliked of post |
| 3 | FAP | Unmark Dislike button |
| | | |
| **Exceptions: N/A** | | |
| **Priority** | High | |
| **Frequency of Use:** | High | |
| **Business Rules:** | N/A | |
| **Other Information:** | N/A | |

### 3.4.2.9. Report

#### *3.4.2.9.1.* UC027-Report a post

| | | | |
|---|---|---|---|
| **Use Case ID** | UC027 | **Version** | 1.1 |
| **Use Case Name** | Report a post | | |
| **Created by:** | HieuTM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allows user to report a post or comment violated rules | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User are viewing a post or a comment | | |

| | | |
|---|---|---|
| **Trigger:** | | User click Report while viewing a post |
| **Post conditions:** | | 1. Report is sent to admin |
| **Normal Flow** | | |
| **Step** | **Actor** | **Action** |
| 1 | User | Click Report. |
| 2 | FAP | Displays popup. |
| 3 | User | Choose common reason. |
| 4 | User | Click Report or press Enter. |
| 5 | FAP | Closes dialog. |
| 6 | FAP | Sent report to admin |
| 7 | FAP | Display message with ID MSG8 |
| **Alternative Flows** | | |
| **AT1** | At step 3, user choose Other: | |
| **Step** | **Actor** | **Action** |
| 3.1 | FAP | Displays a textbox dialog. |
| 3.2 | User | Enters reason into textbox. |
| 3.3 | User | Click Report or press Enter. |
| 3.4 | FAP | Closes dialog. |
| 3.5 | FAP | Sent report to admin |
| 3.6 | FAP | Display message with ID MSG8 |
| **AT2** | At step 4, user choose Cancel: | |
| **Step** | **Actor** | **Action** |
| 4.1 | FAP | Closes popup. |
| | | |
| **AT3** | At step 4 in the main flows, if user click other hyperlinks or buttons | |
| **Step** | **Actor** | **Action** |
| 4.1 | FAP | Redirects user to chosen hyperlink or button |
| **Exceptions: N/A** | | |
| **Priority** | | Normal |
| **Frequency of Use:** | | Normal |
| **Business Rules:** | | B3 B5 |
| **Other Information:** | | N/A |

#### *3.4.2.9.2.* UC028-Report a user

| | | | |
|---|---|---|---|
| **Use Case ID** | UC028 | **Version** | 1.1 |
| **Use Case Name** | Report an user | | |
| **Created by:** | HieuTM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allows user to report an user who violated rules | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User are viewing a post or a comment | | |
| **Trigger:** | User click Report in User menu | | |
| **Post conditions:** | 1. Report is sent to admin | | |

## Fly Away Plus

| Normal Flow | | |
|---|---|---|
| **Step** | **Actor** | **Action** |
| 1 | User | Click a User name. |
| 2 | FAP | Displays a menu includes these hyperlinks:<br>- Add Friend<br>- Unfriend<br>- Edit Relationship<br>- Follow<br>- Block<br>- Report |
| 3 | User | Click Report. |
| 4 | FAP | Displays popup. |
| 5 | User | Choose common reason. |
| 6 | User | Click Report or press Enter. |
| 7 | FAP | Closes dialog. |
| 8 | FAP | Sent report to admin |
| 9 | FAP | Display message with ID MSG16 |
| **Alternative Flows** | | |
| **AT1** | At step 3, user choose Other: | |
| **Step** | **Actor** | **Action** |
| 3.1 | FAP | Displays a textbox dialog. |
| 3.2 | User | Enters reason into textbox. |
| 3.3 | User | Click Report or press Enter. |
| 3.4 | FAP | Closes dialog. |
| 3.5 | FAP | Sent report to admin |
| 3.6 | FAP | Display message  with ID MSG8 |
| **AT3** | At step 4, user choose Cancel: | |
| **Step** | **Actor** | **Action** |
| 4.1 | FAP | Closes popup. |
| **Exceptions: N/A** | | |
| **Priority** | | Normal |
| **Frequency of Use:** | | Normal |
| **Business Rules:** | | B3 B5 |
| **Other Information:** | | N/A |

### 3.4.2.10. Chat

#### 3.4.2.10.1. UC029-Display Message

| | | | |
|---|---|---|---|
| **Use Case ID** | UC029 | **Version** | 1.1 |
| **Use Case Name** | Display Message | | |
| **Created by:** | HieuTM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | FAP updates activities of user's friends automatically | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system | | |
| **Trigger:** | User click Chat | | |
| **Post conditions:** | 2. Chat panel is displayed | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Chat | |
| 2 | FAP | Chat panel is displayed includes:<br>- User name | |
| **Alternative Flows: N/A** | | | |
| **Exceptions: N/A** | | | |
| **Priority** | High | | |
| **Frequency of Use:** | High | | |
| **Business Rules:** | N/A | | |
| **Other Information:** | N/A | | |

#### 3.4.2.10.2. UC030-Chat with Friends

| | | | |
|---|---|---|---|
| **Use Case ID** | UC030 | **Version** | 1.1 |
| **Use Case Name** | Report a post | | |
| **Created by:** | HieuTM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allows user to report a post or comment violated rules | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system | | |
| **Trigger:** | User type message to chat box and click Send | | |
| **Post conditions:** | 1. Chat contents is sent | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Friend List. | |
| 2 | FAP | Displays friend list. | |
| 3 | User | Click friend's name. | |
| 4 | FAP | Displays chat box. | |
| 5 | User | Enters message to chat box. | |
| 6 | User | Click Send or press Enter. | |
| 7 | FAP | Sends message to friend. | |
| 8 | FAP | Displays message on chat box. | |
| **Alternative Flows:** | | | |
| **AT1** | At step 6 in the main flows, if user click other hyperlinks or buttons | | |

| Step | Actor | Action |
|---|---|---|
| 6.1 | FAP | Redirects user to chosen hyperlink or button |
| | | |
| **Exceptions: N/A** | | |
| **Priority** | | High |
| **Frequency of Use:** | | High |
| **Business Rules:** | | B10 |
| **Other Information:** | | N/A |

### *3.4.2.10.3.* Friend management

### *3.4.2.10.4.* UC031-Add Friend

| **Use Case ID** | UC031 | **Version** | 1.1 |
|---|---|---|---|
| **Use Case Name** | Add friend | | |
| **Created by:** | HieuTM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allows user to add others to friend list to chat or see their activities and updates | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system | | |
| **Trigger:** | User click Add Friend in others' Personal Page | | |
| **Post conditions:** | 1. Friend request is sent | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click a User name. | |
| 2 | FAP | Redirect user to Profile page includes:<br>- Header | |

| | | |
|---|---|---|
| | | - Cover image label<br>- Profile panel<br>- Friend panel<br>- Post thumbnails<br>- Chat button |
| 3 | User | Click Add Friend. |
| 4 | FAP | Sends request to user |
| 5 | FAP | Display Add Friend button as Friend Request Sent instead |
| **Alternative Flows** | | |
| **AT1** | At step 6, if user click Add Friend button in Friend Suggest menu in a Post Detail page | |
| **Step** | **Actor** | **Action** |
| 3.1 | User | Click Add Friend |
| 3.2 | FAP | Display Add Friend button as Friend Request Sent instead |
| | | |
| **Exceptions: N/A** | | |
| **Priority** | High | |
| **Frequency of Use:** | High | |
| **Business Rules:** | N/A | |
| **Other Information:** | N/A | |

### *3.4.2.10.5.* UC032-Unfriend

| | | | |
|---|---|---|---|
| **Use Case ID** | UC032 | **Version** | 1.1 |
| **Use Case Name** | Unfriend | | |
| **Created by:** | HieuTM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allows user to remove others from friend list | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User are viewing a post or a comment | | |
| **Trigger:** | User click Unfriend in User menu | | |
| **Post conditions:** | 1. Friend is removed from list | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click a User name. | |
| 2 | FAP | Displays a menu includes these hyperlinks:<br>- Add Friend<br>- Unfriend<br>- Edit Relationship<br>- Follow<br>- Block<br>- Report | |
| 3 | User | Click Unfriend. | |
| 4 | FAP | Displays confirm popup “Unfriend this user?” | |
| 5 | User | Click OK. | |

| | | |
|---|---|---|
| 6 | FAP | Closes popup. |
| 7 | FAP | Remove friend from list |
| **Alternative Flows** | | |
| **AT1** | At step 5, user choose Cancel: | |
| **Step** | **Actor** | **Action** |
| 5.1 | FAP | Closes popup. |
| **Exceptions: N/A** | | |
| **Priority** | High | |
| **Frequency of Use:** | High | |
| **Business Rules:** | N/A | |
| **Other Information:** | N/A | |

#### *3.4.2.10.6.* UC033-Tag Friend

| | | | |
|---|---|---|---|
| **Use Case ID** | UC033 | **Version** | 1.1 |
| **Use Case Name** | Tag friend | | |
| **Created by:** | HieuTM | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allows user to tag friends, let friend receive notification about post or comment they were tagged. | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User are viewing Post Detail page | | |
| **Trigger:** | User click Tag while creating a post | | |
| **Post conditions:** | Notification is sent to tagged users | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Comment text box | |
| 2 | User | Type “@” into text box | |
| 3 | FAP | Display friend name suggestion | |
| 4 | User | Click a friend name | |
| 5 | FAP | Display friend name as hyperlink | |
| 6 | FAP | Sends notifications to tagged friend | |
| **Alternative Flows: N/A** | | | |
| **Exceptions: N/A** | | | |
| **Priority** | High | | |
| **Frequency of Use:** | High | | |
| **Business Rules:** | N/A | | |
| **Other Information:** | N/A | | |

### 3.4.2.11. Wish list

#### *3.4.2.11.1.* UC034-Add to Wishlist

| | | | |
|---|---|---|---|
| **Use Case ID** | UC034 | **Version** | 1.1 |
| **Use Case Name** | Add to Wishlist | | |
| **Created by:** | HieuTM | **Date Created:** | 23/07/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allows user to add a post to their wish list | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User are viewing a post | | |
| **Trigger:** | User click Wishlist image button to add the place to their wish list | | |
| **Post conditions:** | 1. Place is added to user's wish list.<br>2. User's wish list is updated to database. | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Wishlist image button in a post | |
| 2 | FAP | Mark Wishlist image button | |
| 3 | FAP | Place of that post is added to wish list | |
| **Alternative Flows: N/A** | | | |
| **Exceptions: N/A** | | | |
| **Priority** | Normal | | |
| **Frequency of Use:** | High | | |
| **Business Rules:** | N/A | | |
| **Other Information:** | N/A | | |

#### *3.4.2.11.2.* UC035-Delete from wishlist

| | | | |
|---|---|---|---|
| **Use Case ID** | UC035 | **Version** | 1.1 |
| **Use Case Name** | Delete from wish list | | |
| **Created by:** | HieuTM | **Date Created:** | 23/07/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allows user to delete what they posted | | |
| **Preconditions:** | 1. FAP website is available<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User are viewing a post which has been added to wish list | | |
| **Trigger:** | User click Wishlist image button in a post which has been added to wish list | | |
| **Post conditions:** | 1. Post is deleted from user's wish list.<br>2. User's wish list is updated to database. | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Wishlist image button in a post which has been added to wish list | |
| 2 | FAP | Unmark Wishlist image button | |
| 3 | FAP | Delete that post from wish list | |
| **Alternative Flows** | | | |
| **AT1** | At step 1, user click Wishlist in Suggest bar | | |
| **Step** | **Actor** | **Action** | |
| 1.1 | FAP | Redirects user to Wishlist page | |
| 1.2 | User | Click X | |
| 1.3 | FAP | Delete chosen from Wishlist | |
| **Exceptions: N/A** | | | |
| **Priority** | Normal | | |
| **Frequency of Use:** | Low | | |
| **Business Rules:** | N/A | | |
| **Other Information:** | N/A | | |

### 3.4.2.12. Room

uc
Room
Join Room
Leave Room
Create Room
Edit room's information
Add member
Remove Member
Event
Work portion
Estimation
Chat
User

#### *3.4.2.12.1.* UC036-Join room

| | | | |
|---|---|---|---|
| **Use Case ID** | UC036 | **Version** | 1.0 |
| **Use Case Name** | Join room | | |
| **Created by:** | ThuyLM | **Date Created:** | 11/06/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | None |
| **Description:** | This function allows user join an existing room | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. User browsed FAP website<br>3. User logged in to system<br>4. Room have been existing | | |
| **Trigger:** | User enters Room name and click Search | | |
| **Post conditions:** | User join a room | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click on Details button on Room thumbnail in Room list screen | |
| 2 | FAP | Redirect user to Room Details screen | |
| **Alternative Flows:** | | | |
| **AT1** | At step 1, if Room is private | | |
| **Step** | **Actor** | **Action** | |
| 1.1 | User | Enter Room name on Search panel | |
| 1.2 | User | Click Search or press Enter | |
| 1.3 | FAP | Display Room on Search Result screen | |
| 1.4 | User | Click on Details button on Room thumbnail in Search result page | |
| 1.5 | FAP | Redirect user to Room Details screen | |
| | | | |
| **AT2** | If user has been invited by a member of room | | |
| **Step** | **Actor** | **Action** | |
| 1.1 | FAP | Display notification to user | |
| 1.2 | User | Click on invitation | |
| 1.3 | FAP | Redirect user to Room Details screen | |
| **Exceptions: N/A** | | | |
| **Priority** | High | | |
| **Frequency of Use:** | High | | |
| **Business Rules:** | None | | |
| **Other Information:** | N/A | | |

#### 3.4.2.12.2. UC037-Leave room

| | | | |
|---|---|---|---|
| **Use Case ID** | UC037 | **Version** | 1.0 |
| **Use Case Name** | Leave room | | |
| **Created by:** | ThuyLM | **Date Created:** | 11/06/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allows users to leave a room that they have join | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User has join a room | | |
| **Trigger:** | User click Exit in Setting menu | | |
| **Post conditions:** | 1. User is no longer on that room<br>2. Room has been deleted from user's room list | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | User enter Room page | |
| 2 | User | Click on Setting button on Room Screen | |
| 3 | User | Click "Exit" | |
| 4 | FAP | 1. Redirect user to Homepage<br>2. Delete room name from user's room list<br>3. Show message with ID MSG12 on Room Screen<br>4. Replace username on schedule/plan by "Left member" | |
| **Alternative Flows: N/A** | | | |
| **Exceptions: N/A** | | | |
| **Priority** | High | | |
| **Frequency of Use:** | High | | |
| **Business Rules:** | N/A | | |
| **Other Information:** | N/A | | |

#### 3.4.2.12.3. UC038-Create room

| | | | |
|---|---|---|---|
| **Use Case ID** | UC038 | **Version** | 1.0 |
| **Use Case Name** | Create room | | |
| **Created by:** | ThuyLM | **Date Created:** | 11/06/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allows user to create new room | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. User browsed FAP website<br>3. User logged in to system | | |
| **Trigger:** | User click Create Room in Homepage | | |
| **Post conditions:** | A new room will be created | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Create a Room | |
| 2 | FAP | Display a panel with fields and button:<br>- Room name<br>- Room description | |

| | | |
|---|---|---|
| | | - Start date<br>- End date<br>- Public/Private state<br>- Start place<br>- Target place<br>- Create button |
| 3 | User | Fill information of room |
| 4 | User | Click "Create" |
| 5 | FAP | Create room |
| 6 | FAP | Redirect user to their new room |
| **Alternative Flows** | | |
| **AT1** | At step 5 in the main flows, user left Room name blank | |
| **Step** | **Actor** | **Action** |
| 5.1 | FAP | Display message with ID MSG13 |
| 5.2 | FAP | Return to step 4 |
| | | |
| **Exceptions: N/A** | | |
| **Priority** | High | |
| **Frequency of Use:** | High | |
| **Business Rules:** | | |
| **Other Information:** | Not required fields will be filled with default value of FAP | |

### *3.4.2.12.4.* UC039-Edit room's information

| | | | |
|---|---|---|---|
| **Use Case ID** | UC039 | **Version** | 1.0 |
| **Use Case Name** | Edit room's information | | |
| **Created by:** | ThuyLM | **Date Created:** | 11/06/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allow user edit room's information | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User created room | | |
| **Trigger:** | User click Edit in Room Details screen | | |
| **Post conditions:** | Room's information is edited | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click on button Edit on Room Details screen | |
| 2 | FAP | Display a window with fields:<br>- Room name<br>- Room description<br>- Start date<br>- End date<br>- Public/Private state<br>- Start place<br>- Target place<br>- Edit button | |

| | | |
|---|---|---|
| 3 | User | Edit room's information |
| 4 | User | Click edit button |
| 5 | FAP | Redirect user to Room details screen |
| | | |
| **Alternative Flows** | | |
| **AT1** | At step 5 in the main flows, user left Room name blank | |
| **Step** | **Actor** | **Action** |
| 5.1 | FAP | Display message with ID MSG13 |
| 5.2 | FAP | Return to step 4 |
| | | |
| **AT2** | At step 3 in the main flow, user clicks on Cancel button | |
| **Step** | **Actor** | **Action** |
| 3.1 | FAP | Return to previous screen |
| | | |
| **Exceptions: N/A** | | |
| **Priority** | High | |
| **Frequency of Use:** | High | |
| **Business Rules:** | | |
| **Other Information:** | N/A | |

#### *3.4.2.12.5.* UC040-Create new event

| | | | |
|---|---|---|---|
| **Use Case ID** | UC040 | **Version** | 1.0 |
| **Use Case Name** | Create milestones | | |
| **Created by:** | ThuyLM | **Date Created:** | 11/06/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allow user create milestone on their trips | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User is currently a member of room | | |
| **Trigger:** | User click Personal Page in Room Details screen | | |
| **Post conditions:** | New event be created | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click on Personal Page on Room details screen | |
| 2 | FAP | Display Personal Page | |
| 3 | User | Select a hour on the calendar | |
| 4 | FAP | Display a Add new event form include:<br>- Title<br>- Date that user selected<br>- Hour that user selected<br>- Plan length (in hours)<br>- Save button<br>- Cancel button | |
| 5 | User | Fill information | |
| 6 | User | Click Save | |

| | | |
|---|---|---|
| 7 | FAP | Display new event on calendar |
| **Alternative Flows** | | |
| **AT1** | At step 3 in the main flow, user clicks on Cancel button | |
| **Step** | **Actor** | **Action** |
| 3.1 | FAP | Return to previous screen |
| | | |
| **Exceptions: N/A** | | |
| **Priority** | High | |
| **Frequency of Use:** | High | |
| **Business Rules:** | | |
| **Other Information:** | N/A | |

#### *3.4.2.12.6.* UC041-Edit event

| | | | |
|---|---|---|---|
| **Use Case ID** | UC041 | **Version** | 1.0 |
| **Use Case Name** | Edit event | | |
| **Created by:** | ThuyLM | **Date Created:** | 11/06/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allow user edit an event of a trip on their room | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User is currently a member of room | | |
| **Trigger:** | User click an existing event on Personal Page | | |
| **Post conditions:** | Event is updated and display on Room details screen | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click on Personal Page on Room details screen | |
| 2 | FAP | Display Personal Page | |
| 3 | User | Click on end time | |
| 4 | User | Drag to the new end time | |
| 5 | FAP | Display confirm popup | |
| 6 | User | Click Yes | |
| 7 | FAP | Save information and display on Plan panel | |
| **Alternative Flows** | | | |
| **AT1** | At step 6 in the main flow, user clicks on No button | | |
| **Step** | **Actor** | **Action** | |
| 3.1 | FAP | Event is not edited | |
| | | | |
| **AT2** | At step 3 in the main flow, user clicks on event and drag it to other timespan | | |
| **Step** | **Actor** | **Action** | |
| 3.1 | FAP | Start time of event is move to the selected timespan | |
| | | | |
| **Exceptions: N/A** | | | |
| **Priority** | High | | |
| **Frequency of Use:** | High | | |

| | |
|---|---|
| **Business Rules:** | |
| **Other Information:** | N/A |

#### *3.4.2.12.7.* UC042-Delete event

| | | | |
|---|---|---|---|
| **Use Case ID** | UC042 | **Version** | 1.0 |
| **Use Case Name** | Delete event | | |
| **Created by:** | ThuyLM | **Date Created:** | 11/06/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allow user delete an event of a trip on their room | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User is currently a member of room | | |
| **Trigger:** | User click an existing event on Personal Page | | |
| **Post conditions:** | Event is updated and display on Room details screen | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 8 | User | Click on Personal Page on Room details screen | |
| 9 | FAP | Display Personal Page | |
| 10 | User | Right-click on end time | |
| 11 | User | Select Delete | |
| 12 | FAP | Delete event from calendar | |
| **Alternative Flows: N/A** | | | |
| **Exceptions: N/A** | | | |
| **Priority** | High | | |
| **Frequency of Use:** | High | | |
| **Business Rules:** | | | |
| **Other Information:** | N/A | | |

#### *3.4.2.12.8.* UC043-Add member

| | | | |
|---|---|---|---|
| **Use Case ID** | UC043 | **Version** | 1.0 |
| **Use Case Name** | Add member | | |
| **Created by:** | ThuyLM | **Date Created:** | 11/06/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allows user add member to room | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User is currently a member of room | | |
| **Trigger:** | N/A | | |
| **Post conditions:** | New member is added to room | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Tag name of friends on Add new member textbox | |
| 2 | User | Click Add button | |
| 3 | FAP | 1. Add new member to room and send notification to each people<br>2. Redirect user to Room details screen | |
| **Alternative Flows** | | | |
| **AT1** | At step 3 in the main flow, user clicks on Cancel button | | |
| **Step** | **Actor** | **Action** | |
| 3.1 | FAP | Return to previous screen | |
| **Exceptions:** | | | |
| **Priority** | High | | |
| **Frequency of Use:** | High | | |
| **Business Rules:** | | | |
| **Other Information:** | N/A | | |

#### *3.4.2.12.9.* UC044-Add new task

| | | | |
|---|---|---|---|
| **Use Case ID** | UC044 | **Version** | 1.0 |
| **Use Case Name** | Add new task | | |
| **Created by:** | ThuyLM | **Date Created:** | 11/06/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allows user add a new task for a trip | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User is currently a member of room | | |
| **Trigger:** | User click General tab on Room Details screen | | |
| **Post conditions:** | New task is updated | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click on General tab on Room details screen | |
| 2 | FAP | Display Tasks | |
| 3 | User | Click on Add a room | |
| 4 | FAP | Display a Add new task form include: | |

| | | |
|---|---|---|
| | | - Work portion<br>- Note<br>- Assign for<br>- Start time<br>- Plan length<br>- Save button<br>- Cancel button |
| 5 | User | Fill information |
| 6 | User | Click Save |
| 7 | FAP | Display new event on calendar |
| **Alternative Flows** | | |
| **AT1** | At step 3 in the main flow, user clicks on Cancel button | |
| **Step** | **Actor** | **Action** |
| 3.1 | FAP | Closes popup. |
| | | |
| **Exceptions: N/A** | | |
| **Priority** | High | |
| **Frequency of Use:** | High | |
| **Business Rules:** | | |
| **Other Information:** | N/A | |

### *3.4.2.12.10.* UC045-Edit task

| | | | |
|---|---|---|---|
| **Use Case ID** | UC045 | **Version** | 1.0 |
| **Use Case Name** | Edit task | | |
| **Created by:** | ThuyLM | **Date Created:** | 11/06/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allows user edit an existing task on General tabs | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User is currently a member of room | | |
| **Trigger:** | User click General tab on Room Details screen | | |
| **Post conditions:** | New task is updated | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click on General tab on Room details screen | |
| 2 | FAP | Display Tasks | |
| 3 | User | Click on Menu bottom on right corner of a task | |
| 4 | User | Select Edit | |
| 5 | FAP | Display Edit task form include:<br>- Work portion<br>- Note<br>- Assign for<br>- Start time<br>- Plan length<br>- Save button | |

| | | |
|---|---|---|
| | | - Cancel button |
| 6 | User | Fill information |
| 7 | User | Click Save |
| 8 | FAP | Display edited task |
| **Alternative Flows** | | |
| **AT1** | At step 3 in the main flow, user clicks on Cancel button | |
| **Step** | **Actor** | **Action** |
| 3.1 | FAP | Closes popup. |
| **Exceptions: N/A** | | |
| **Priority** | High | |
| **Frequency of Use:** | High | |
| **Business Rules:** | | |
| **Other Information:** | N/A | |

### *3.4.2.12.11.* UC046-Delete task

| | | | |
|---|---|---|---|
| **Use Case ID** | UC046 | **Version** | 1.0 |
| **Use Case Name** | Delete task | | |
| **Created by:** | ThuyLM | **Date Created:** | 11/06/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allow user delete an existing task of room | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User is currently a member of room | | |
| **Trigger:** | User click General tab on Room Details screen | | |
| **Post conditions:** | Task is deleted | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click on | |
| 2 | FAP | Display Tasks | |
| 3 | User | Click on Menu bottom on right corner of a task | |
| 4 | User | Select Delete | |
| 5 | FAP | Display confirm pop-up | |
| 6 | User | Click Yes | |
| 7 | FAP | Delete task | |
| **Alternative Flows** | | | |
| **AT2** | At step 7 in the main flow, user clicks on Cancel button | | |
| **Step** | **Actor** | **Action** | |
| 3.1 | FAP | Closes popup. | |
| **Exceptions: N/A** | | | |
| **Priority** | High | | |
| **Frequency of Use:** | High | | |
| **Business Rules:** | | | |
| **Other Information:** | N/A | | |

### *3.4.2.12.12.* UC047-Add estimation item

| | | | |
|---|---|---|---|
| **Use Case ID** | UC047 | **Version** | 1.0 |
| **Use Case Name** | Add estimation item | | |
| **Created by:** | ThuyLM | **Date Created:** | 11/06/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allow user add new estimation for their trip | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User is currently a member of room | | |
| **Trigger:** | User click Estimation tab on Room Details screen | | |
| **Post conditions:** | New estimation is added to Room schedule | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click on Estimation tab on Room details screen | |
| 2 | FAP | Display table of estimation of trip | |
| 3 | User | Click on Add a new estimation | |
| 4 | FAP | Display a Add a new estimation form include:<br>- Payment<br>- Price<br>- Creator<br>- Payer<br>- Date created<br>- Save button<br>- Cancel button | |
| 5 | User | Fill information | |
| 6 | User | Click Save | |
| 7 | FAP | Display new estimation on table | |
| **Alternative Flows** | | | |
| **AT1** | At step 7 in the main flow, user clicks on Cancel button | | |
| **Step** | **Actor** | **Action** | |
| 3.1 | FAP | Closes popup. | |
| **Exceptions: N/A** | | | |
| **Priority** | High | | |
| **Frequency of Use:** | High | | |
| **Business Rules:** | | | |
| **Other Information:** | N/A | | |

### *3.4.2.12.13.* UC048-Export estimation

| | | | |
|---|---|---|---|
| **Use Case ID** | UC048 | **Version** | 1.0 |
| **Use Case Name** | Export estimation | | |
| **Created by:** | ThuyLM | **Date Created:** | 11/06/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allow | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. User browsed FAP website | | |

| | | |
|---|---|---|
| | | 3. User logged in to system<br>4. User is currently a member of room |
| **Trigger:** | | User click Estimation tab on Room Details screen |
| **Post conditions:** | | Table of estimation is exported to document file. |
| **Normal Flow** | | |
| **Step** | **Actor** | **Action** |
| 1 | User | Click on Estimation tab on Room details screen |
| 2 | FAP | Display table of estimation of trip |
| 3 | User | Click on Export button |
| 4 | User | Select format file that they want to save |
| 5 | User | Click OK |
| 6 | FAP | Export the table of estimation to selected format file |
| **Alternative Flows** | | |
| **AT1** | At step 4 in the main flow, user clicks on Cancel button | |
| **Step** | **Actor** | **Action** |
| 4.1 | FAP | Closes popup. |
| **Exceptions: N/A** | | |
| **Priority** | | High |
| **Frequency of Use:** | | High |
| **Business Rules:** | | |
| **Other Information:** | | N/A |

*3.4.2.12.14.* UC049-Search estimation item

| | | | |
|---|---|---|---|
| **Use Case ID** | UC049 | **Version** | 1.0 |
| **Use Case Name** | Search estimation item | | |
| **Created by:** | ThuyLM | **Date Created:** | 11/06/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allow search a estimation item on table | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. User browsed FAP website<br>3. User logged in to system<br>4. User is currently a member of room | | |
| **Trigger:** | User click Estimation tab on Room Details screen | | |
| **Post conditions:** | Search result of estimation is displayed | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click on Estimation tab on Room details screen | |
| 2 | FAP | Display table of estimation of trip | |
| 3 | User | Enter keywords on search textbox | |
| 4 | User | Press Enter | |
| 5 | FAP | Display search result | |
| **Alternative Flows: N/A** | | | |
| **Exceptions: N/A** | | | |
| **Priority** | High | | |
| **Frequency of Use:** | High | | |

| | |
|---|---|
| **Business Rules:** | |
| **Other Information:** | N/A |

### *3.4.2.12.15.* UC050-Approve request

| | | | |
|---|---|---|---|
| **Use Case ID** | UC050 | **Version** | 1.0 |
| **Use Case Name** | Approve request | | |
| **Created by:** | ThuyLM | **Date Created:** | 11/06/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allows administrator of a room approve member request | | |
| **Preconditions:** | FAP must be connected to the Internet<br>User browsed FAP website<br>User logged in to system<br>User is administrator of room (creator of room) | | |
| **Trigger:** | Administrator of room approve the join request of other user | | |
| **Post conditions:** | New request is approved | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| | User | Click on Approve Request button on Room Details screen | |
| 2 | FAP | Display list of request | |
| 3 | User | Click on select box beside member request | |
| 4 | User | Select Approve | |
| 5 | FAP | Selected member is added to room | |
| **Alternative Flows** | | | |
| **AT1** | At step 3 in the main flow, user clicks on Cancel button | | |
| **Step** | **Actor** | **Action** | |
| 3.1 | FAP | Closes popup. | |
| **AT2** | At step 4 in the main flow, user clicks on Decline button | | |
| **Step** | **Actor** | **Action** | |
| 3.1 | FAP | Decline member requests | |
| **Exceptions: N/A** | | | |
| **Priority** | Low | | |
| **Frequency of Use:** | Medium | | |
| **Business Rules:** | | | |
| **Other Information:** | N/A | | |

### *3.4.2.12.16.* UC051-Remove member

| | | | |
|---|---|---|---|
| **Use Case ID** | UC051 | **Version** | 1.0 |
| **Use Case Name** | Remove member | | |
| **Created by:** | ThuyLM | **Date Created:** | 11/06/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allows user removes a member is already join the room | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. User browsed FAP website | | |

| | | |
|---|---|---|
| | | 3. User logged in to system<br>4. User is administrator of room (creator of room) |
| **Trigger:** | | User click Remove in Member menu |
| **Post conditions:** | | Member is removed from room |
| **Normal Flow** | | |
| **Step** | **Actor** | **Action** |
| 1 | User | Right click on Member profile picture on Member List |
| 2 | User | Choose Remove |
| 3 | FAP | 1. Delete this member from Member List<br>2. Send notification to member who had been remove from room |
| **Alternative Flows: N/A** | | |
| **Exceptions: N/A** | | |
| **Priority** | | High |
| **Frequency of Use:** | | High |
| **Business Rules:** | | |
| **Other Information:** | | N/A |

### *3.4.2.12.17.* UC052-Chat

| | | | |
|---|---|---|---|
| **Use Case ID** | UC052 | **Version** | 1.0 |
| **Use Case Name** | Chat | | |
| **Created by:** | ThuyLM | **Date Created:** | 11/06/2015 |
| **Primary Actor** | Registered user | **Secondary Actor** | |
| **Description:** | This function allows user chat with all member on room | | |
| **Preconditions:** | 5. FAP must be connected to the Internet<br>6. User browsed FAP website<br>7. User logged in to system<br>8. User is currently a member of room | | |
| **Trigger:** | User type chat message to chat box and click Send | | |
| **Post conditions:** | User can chat with all member on room | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 4 | User | Type a message on chat box | |
| 5 | User | Click Send button or press Enter | |
| 6 | FAP | Display message on chat windows; all member on room can see this message | |
| **Alternative Flows: N/A** | | | |
| **Exceptions: N/A** | | | |
| **Priority** | | High | |
| **Frequency of Use:** | | High | |
| **Business Rules:** | | | |
| **Other Information:** | | N/A | |

### *3.4.2.13. Account Management Module*

#### *3.4.2.13.1.* UC053-Login

| **Use Case ID** | UC053 | **Version** | 1.1 |
|---|---|---|---|

| | | | |
|---|---|---|---|
| **Use Case Name** | Login by social network's account<br>Login by registered account | | |
| **Created by:** | LucPT | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered User | **Secondary Actor** | |
| **Description:** | When Member want to login by Facebook/Google/Register account to use more functions in website | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. User browsed FAP website<br>3. Account Facebook/Google/Register must be exist and correctly<br>4. User are viewing Login page | | |
| **Trigger:** | User enter flyawayplus.com | | |
| **Post conditions:** | 1. Log user into system<br>2. Redirect user to previous page and display as Member | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Login in Homepage | |
| 2 | FAP | Display Login popup includes:<br>- User name text box<br>- Password text box<br>- Login button<br>- Cancel button<br>- Facebook button<br>- Google+ button<br>- Forgot password hyperlink | |
| 3 | User | Enters User name and Password | |
| 4 | User | Click Login | |
| 5 | FAP | Logs user into system | |
| 6 | FAP | Close popup | |
| 7 | FAP | Display previous page as Member | |
| **Alternative Flows** | | | |
| **AT1** | At step 3 in the main flows, if user click Facebook or Google+ button | | |
| **Step** | **Actor** | **Action** | |
| 3.1 | FAP | Redirects user to confirm site | |
| 3.2 | FAP | Logs user into system with Facebook or Google+ account | |
| **AT2** | At step 4, user choose Cancel: | | |
| **Step** | **Actor** | **Action** | |
| 4.1 | FAP | Closes popup. | |
| **AT3** | At step 8 in the main flows, if user click other hyperlinks or buttons | | |
| **Step** | **Actor** | **Action** | |
| 8.1 | FAP | Redirects user to chosen hyperlink or button | |
| **Exceptions:** | | | |
| **EC1** | At step 4 in main flow, if user entered wrong User name or Password | | |
| **Step** | **Actor** | **Action** | |
| 3.1 | FAP | Display Login popup message with ID MSG14 | |
| 3.2 | FAP | Mark error fields | |
| | | | |

| | |
|---|---|
| **Priority** | High |
| **Frequency of Use:** | High |
| **Business Rules:** | N/A |
| **Other Information:** | N/A |

#### *3.4.2.13.2.* UC054-Logout

| | | | |
|---|---|---|---|
| **Use Case ID** | UC054 | **Version** | 1.1 |
| **Use Case Name** | Logout | | |
| **Created by:** | LucPT | **Date Created:** | 28/05/2015 |
| **Primary Actor** | User | **Secondary Actor** | |
| **Description:** | When Member want to logout their account | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. User browsed FAP website<br>3. User logged in to system | | |
| **Trigger:** | User click Logout in header | | |
| **Post conditions:** | 1. Log user out from system.<br>2. Redirect user to login page | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Logout | |
| 2 | FAP | Display page as Guest | |
| **Alternative Flows: N/A** | | | |
| **Exceptions: N/A** | | | |
| **Priority** | High | | |
| **Frequency of Use:** | High | | |
| **Business Rules:** | N/A | | |
| **Other Information:** | N/A | | |

#### *3.4.2.13.3.* UC055-Register

| | | | |
|---|---|---|---|
| **Use Case ID** | UC055 | **Version** | 1.1 |
| **Use Case Name** | Register | | |
| **Created by:** | LucPT | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Guest | **Secondary Actor** | |
| **Description:** | Visitor can create new account to use more function as a register user | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. User browsed FAP website | | |
| **Trigger:** | Click on register link on the website | | |
| **Post conditions:** | 1. Add account information to database<br>2. Send confirm email<br>3. Logs user into system<br>4. Redirect user to Homepage and display as Member | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Register in header | |

| | | |
|---|---|---|
| 2 | FAP | Display Register page includes:<br>- Header<br>- First name textbox<br>- Last name textbox<br>- Phone number textbox<br>- Date of Birth date picker<br>- Gender checkbox<br>- Address textbox<br>- Emaill address<br>- Password textbox<br>- Confirm password textbox<br>- Register now button |
| 3 | User | Enters data in fields |
| 4 | User | Click Register |
| 5 | FAP | Send confirm email |
| 6 | FAP | Logs user into system |
| 7 | FAP | Display Homepage as Member |
| **Alternative Flows** | | |
| **AT1** | At step 4, user click Cancel | |
| **Step** | **Actor** | **Action** |
| 4.1 | FAP | Redirects user to previous page |
| **AT2** | At step 4 in the main flows, if user click other hyperlinks or buttons | |
| **Step** | **Actor** | **Action** |
| 4.1 | FAP | Redirects user to chosen hyperlink or button |
| **Exceptions:** | | |
| **EC1** | At step 4, required fields are not entered | |
| **Step** | **Actor** | **Action** |
| 4.1 | FAP | Display Register page with message: with ID MSG5 |
| 4.2 | FAP | Mark error fields |
| **EC2** | At step 4, fields are entered with wrong type of data | |
| **Step** | **Actor** | **Action** |
| 4.1 | FAP | Display Register page with message: with ID MSG6 |
| 4.2 | FAP | Mark error fields |
| | | |
| **Priority** | High | |
| **Frequency of Use:** | High | |
| **Business Rules:** | B18 B19 B20 B21 B22 B23 | |
| **Other Information:** | N/A | |

#### *3.4.2.13.4.* UC056-Edit profile

| | | | |
|---|---|---|---|
| **Use Case ID** | UC056 | **Version** | 1.1 |
| **Use Case Name** | Edit profile | | |
| **Created by:** | LucPT | **Date Created:** | 28/05/2015 |
| **Primary Actor** | User/Admin | **Secondary Actor** | |
| **Description:** | When user want to change their profile | | |
| **Preconditions:** | 1. FAP must be connected to the Internet | | |

| | | |
|---|---|---|
| | | 2. User browsed FAP website<br>3. User logged in to system |
| **Trigger:** | | User click Edit profile while in Profile page |
| **Post conditions:** | | 1. Edit information in database |
| **Normal Flow** | | |
| **Step** | **Actor** | **Action** |
| 1 | User | Click Profile in header |
| 2 | FAP | Display Profile page includes:<br>- Header<br>- User profile panel<br>- Footer |
| 3 | User | Click Edit profile |
| 4 | FAP | Display Profile page with data entered and editable fields |
| 5 | User | Modifies fields |
| 6 | User | Click OK |
| 7 | FAP | Display Profile page with entered information |
| **Alternative Flows** | | |
| **AT2** | At step 3 in the main flow, user clicks on Cancel button | |
| **Step** | **Actor** | **Action** |
| 3.1 | FAP | Return to previous screen |
| **AT2** | At step 4 in the main flows, if user click other hyperlinks or buttons | |
| **Step** | **Actor** | **Action** |
| 4.1 | FAP | Redirects user to chosen hyperlink or button |
| **Exceptions:** | | |
| **EC1** | At step 4, fields are entered with wrong type of data | |
| **Step** | **Actor** | **Action** |
| 4.1 | FAP | Display Register page with message with ID MSG6 |
| 4.2 | FAP | Mark error fields |
| **Priority** | | High |
| **Frequency of Use:** | | High |
| **Business Rules:** | | B18 B19 B20 B21 B22 B23 |
| **Other Information:** | | N/A |

#### *3.4.2.13.5.* UC057-Forgot password

| | | | |
|---|---|---|---|
| **Use Case ID** | UC057 | **Version** | 1.1 |
| **Use Case Name** | Forgot password | | |
| **Created by:** | LucPT | **Date Created:** | 28/05/2015 |
| **Primary Actor** | User/admin | **Secondary Actor** | |
| **Description:** | When Member, Admin forgot their password to login the system, this function will receiving their password to email | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. User browsed FAP website<br>3. User logged in to system | | |
| **Trigger:** | Click Forgot password in Login popup | | |
| **Post conditions:** | 1. Send confirm email | | |
| **Normal Flow** | | | |

## Fly Away Plus

| Step | Actor | Action |
|---|---|---|
| 1 | User | Click Forgot password in Login popup |
| 2 | FAP | Display Email text box |
| 3 | User | Enter registered email |
| 4 | User | Click OK |
| 5 | FAP | Sends confirm email |
| 6 | FAP | Close popup |
| **Alternative Flows** | | |
| **AT2** | At step 3 in the main flow, user clicks on Cancel button | |
| **Step** | **Actor** | **Action** |
| 3.1 | FAP | Return to previous screen |
| **AT2** | At step 4 in the main flows, if user click other hyperlinks or buttons | |
| **Step** | **Actor** | **Action** |
| 4.1 | FAP | Redirects user to chosen hyperlink or button |
| **Exceptions:** | | |
| **EC1** | At step 4, entered email is invalid | |
| **Step** | **Actor** | **Action** |
| 4.1 | FAP | Displays Login popup with message:  with ID MSG15 |
| 4.2 | FAP | Marks email text box |
| **Priority** | | High |
| **Frequency of Use:** | | High |
| **Business Rules:** | | N/A |
| **Other Information:** | | N/A |

### 3.4.2.14. Admin Module

#### *3.4.2.14.1.* UC058-Admin Login

| | | | |
|---|---|---|---|
| **Use Case ID** | UC058 | **Version** | 1.1 |
| **Use Case Name** | Admin Login | | |
| **Created by:** | LucPT | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Registered User | **Secondary Actor** | |
| **Description:** | When Administrator want to login to website | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. Admin browsed FAP website<br>3. Admin's account must be exist and correctly<br>4. Admin are viewing Login page | | |
| **Trigger:** | User enter flyawayplus.com\admin | | |

| | | |
|---|---|---|
| **Post conditions:** | | 1. Log admin into system<br>2. Redirect admin to Admin page. |
| **Normal Flow** | | |
| **Step** | **Actor** | **Action** |
| 1 | User | Admin enter flyawayplus.com/Admin |
| 2 | FAP | Display Login popup includes:<br>- User name text box<br>- Password text box<br>- Login button<br>- Cancel button |
| 3 | User | Enters User name and Password |
| 4 | User | Click Login |
| 5 | FAP | Logs admin into system |
| 6 | FAP | Close popup |
| 7 | FAP | Display admin page |
| **Alternative Flows** | | |
| **AT1** | At step 4, admin choose Cancel: | |
| **Step** | **Actor** | **Action** |
| 4.1 | FAP | Closes popup. |
| **AT2** | At step 8 in the main flows, if user click other hyperlinks or buttons | |
| **Step** | **Actor** | **Action** |
| 8.1 | FAP | Redirects admin to chosen hyperlink or button |
| **Exceptions:** | | |
| **EC1** | At step 4 in main flow, if user entered wrong User name or Password | |
| **Step** | **Actor** | **Action** |
| 3.1 | FAP | Display Login popup message with ID MSG14 |
| 3.2 | FAP | Mark error fields |
| **Priority** | | High |
| **Frequency of Use:** | | High |
| **Business Rules:** | | N/A |
| **Other Information:** | | N/A |

#### *3.4.2.14.2.* UC059-Admin Logout

| | | | |
|---|---|---|---|
| **Use Case ID** | UC059 | **Version** | 1.1 |
| **Use Case Name** | Logout | | |
| **Created by:** | LucPT | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Administrator | **Secondary Actor** | |
| **Description:** | When Admin want to logout their account | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. User browsed FAP website<br>3. User logged in to system | | |
| **Trigger:** | User click Logout in header | | |
| **Post conditions:** | 1. Log admin out from system.<br>2. Redirect admin to login page. | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |

| | | |
|---|---|---|
| 1 | User | Click Logout |
| 2 | FAP | Display page as Guest |
| **Alternative Flows: N/A** | | |
| **Exceptions: N/A** | | |
| **Priority** | High | |
| **Frequency of Use:** | High | |
| **Business Rules:** | N/A | |
| **Other Information:** | N/A | |

#### *3.4.2.14.3.* UC060-Lock user's account

| | | | |
|---|---|---|---|
| **Use Case ID** | UC060 | **Version** | 1.1 |
| **Use Case Name** | Lock user's account | | |
| **Created by:** | LucPT | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Admin | **Secondary Actor** | None |
| **Description:** | Administrator can lock user account in a period of time depending on severity | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. User browsed FAP website<br>3. User logged into system as Admin | | |
| **Trigger:** | User click Lock in User menu | | |
| **Post conditions:** | 1. Chosen account is locked<br>2. Lock notification is sent<br>3. User's status is updated to database | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Reported User button | |
| 2 | FAP | Displays a menu includes:<br>- User reported ID<br>- User reported name<br>- Number report<br>- Lock User button<br>- Cancel button | |
| 3 | User | Click Lock User | |
| 4 | FAP | Displays message popup. | |
| 5 | FAP | Locks chosen account | |
| 6 | FAP | Display message: "This user has been locked" | |
| **Alternative Flows** | | | |
| **AT1** | At step 6 in the main flows, if user click Cancel | | |
| **Step** | **Actor** | **Action** | |
| 6.1 | FAP | Close popup | |
| | | | |
| **Exceptions: N/A** | | | |
| **Priority** | High | | |
| **Frequency of Use:** | High | | |
| **Business Rules:** | N/A | | |
| **Other Information:** | N/A | | |

#### 3.4.2.14.4. UC061-Unlock user's account

| | | | |
|---|---|---|---|
| **Use Case ID** | UC061 | **Version** | 1.1 |
| **Use Case Name** | Unlock user's account | | |
| **Created by:** | LucPT | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Admin | **Secondary Actor** | |
| **Description:** | Administrator can unlock user account | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. User browsed FAP website<br>3. User logged into system as Admin<br>4. Only locked user can be unlock | | |
| **Trigger:** | User click Unlock in User menu | | |
| **Post conditions:** | 1. Chosen account is unlocked<br>2. Unlock notification is sent<br>3. User's status is updated to database | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Locked list | |
| 2 | FAP | Displays a menu includes:<br>- User reported ID<br>- User reported name<br>- Number report<br>- Unlock User button | |
| 3 | User | Click Unlock | |
| 4 | FAP | Display confirm popup: "Unlock this user?" | |
| 5 | User | Click OK | |
| 6 | FAP | Unlocks chosen account | |
| 7 | FAP | Display message: "This user has been unlocked" | |
| **Alternative Flows:** | | | |
| **AT1** | At step 6 in the main flows, if user click Cancel | | |
| **Step** | **Actor** | **Action** | |
| 6.1 | FAP | Close popup | |
| **Exceptions: N/A** | | | |
| **Priority** | High | | |
| **Frequency of Use:** | High | | |
| **Business Rules:** | N/A | | |
| **Other Information:** | N/A | | |

#### 3.4.2.14.5. UC062-Review post

| | | | |
|---|---|---|---|
| **Use Case ID** | UC062 | **Version** | 1.1 |
| **Use Case Name** | Review post | | |
| **Created by:** | LucPT | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Admin | **Secondary Actor** | |
| **Description:** | Review reported post | | |
| **Preconditions:** | 1. FAP must be connected to the Internet | | |

| | | |
|---|---|---|
| | | 2. Admin browsed FAP website<br>3. Admin logged in to system |
| **Trigger:** | | User click Reported Post list |
| **Post conditions:** | | 1. Display list of reported post |
| **Normal Flow** | | |
| **Step** | **Actor** | **Action** |
| 1 | User | Click Reported User button |
| 2 | FAP | Display Reported User list page includes:<br>- Post ID<br>- Content reported<br>- Number report<br>- View Post button<br>- Lock Post button<br>- Cancel button |
| 3 | Admin | Click View Post button |
| 4 | FAP | Display content of report include:<br>- Owner of reported post<br>- Contents of reported |
| **Alternative Flows: N/A** | | |
| **Exceptions: N/A** | | |
| **Priority** | | High |
| **Frequency of Use:** | | High |
| **Business Rules:** | | N/A |
| **Other Information:** | | N/A |

#### *3.4.2.14.6.* UC063-Lock and hide user's post

| | | | |
|---|---|---|---|
| **Use Case ID** | UC063 | **Version** | 1.1 |
| **Use Case Name** | Lock and hide user's post | | |
| **Created by:** | LucPT | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Admin | **Secondary Actor** | |
| **Description:** | Administrator can lock and hide post when this post violate rule of website | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. User browsed FAP website<br>3. User logged into system as Admin<br>4. User is viewing a post | | |
| **Trigger:** | User click Lock post in menu | | |
| **Post conditions:** | 1. Post is locked and hidden<br>2. Update database<br>3. Notification is sent | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | User | Click Lock | |
| 2 | FAP | Sends notification to post's owner | |
| 3 | FAP | Update to database | |
| **Alternative Flows** | | | |

| AT1 | At step 4 in the main flows, user click Cancel | |
|---|---|---|
| **Step** | **Actor** | **Action** |
| 4.1 | FAP | Closes popup |
| **Exceptions: N/A** | | |
| **Priority** | | High |
| **Frequency of Use:** | | High |
| **Business Rules:** | | N/A |
| **Other Information:** | | N/A |

### *3.4.2.14.7.* UC064-View all user

| **Use Case ID** | UC064 | **Version** | 1.1 |
|---|---|---|---|
| **Use Case Name** | View all user | | |
| **Created by:** | LucPT | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Admin | **Secondary Actor** | |
| **Description:** | View all user in system | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. Admin browsed FAP website<br>3. Admin logged in to system | | |
| **Trigger:** | Click on “View all user” link | | |
| **Post conditions:** | All user are displayed | | |
| **Normal Flow** | | | |
| **Step** | **Actor** | **Action** | |
| 1 | FAP | Display Admin page screen | |
| 2 | Admin | Admin click View all user link corresponding | |
| 3 | FAP | Display all user | |
| **Alternative Flows: N/A** | | | |
| **Exceptions: N/A** | | | |
| **Priority** | | High | |
| **Frequency of Use:** | | High | |
| **Business Rules:** | | N/A | |
| **Other Information:** | | N/A | |

### *3.4.2.14.8.* UC065-Statistics

| **Use Case ID** | UC065 | **Version** | 1.1 |
|---|---|---|---|
| **Use Case Name** | Statistics | | |
| **Created by:** | LucPT | **Date Created:** | 28/05/2015 |
| **Primary Actor** | Admin | **Secondary Actor** | |
| **Description:** | This function allow admin statistics basic information of page and displayed as diagram | | |
| **Preconditions:** | 1. FAP must be connected to the Internet<br>2. Admin browsed FAP website<br>3. Admin logged in to system | | |
| **Trigger:** | Click on “Statistics” button | | |
| **Post conditions:** | Statistics page is displayed | | |

## Fly Away Plus

| Normal Flow | | |
|---|---|---|
| **Step** | **Actor** | **Action** |
| 1 | Admin | Enter website link on web browser |
| 2 | FAP | Display Homepage screen |
| 3 | Admin | Administrator enter necessary and mandatory information and click Login |
| 4 | FAP | Display homepage screen |
| 5 | Admin | Admin click Statistics button corresponding |
| 6 | FAP | Display number of member, number of reported post and number of reported user |
| **Alternative Flows: N/A** | | |
| **Exceptions: N/A** | | |
| **Priority** | | High |
| **Frequency of Use:** | | High |
| **Business Rules:** | | N/A |
| **Other Information:** | | N/A |

### 3.4.3. Message

| Message ID | Description |
|---|---|
| MSG1 | Your Q&A is sent |
| MSG2 | No location found |
| MSG3 | Cannot Auto-Located |
| MSG4 | Post is created |
| MSG5 | Required fields are not entered |
| MSG6 | Wrong type of data |
| MSG7 | Post is edited |
| MSG8 | This post has been reported |
| MSG9 | Friend request has been sent |
| MSG10 | This user has been added to your block list |
| MSG11 | Nothing found |
| MSG12 | [Username] has left room |
| MSG13 | Your room name cannot be blank |
| MSG14 | Wrong user name or password. Please try again! |
| MSG15 | Your entered email is invalid |
| MSG16 | This user has been reported |

## 3.5. Non-functional specification

### 3.5.1. Reliability

1. Mean time between failures: The mean time between each failure is expected to be about 480 hours of using.
2. The maximum bugs per function are 2 bugs/a function when user uses software within 2 months. The average number of bugs in the software during system testing is about to be around 1 bugs/KLOC.
3. The database must be backed up daily and can be recovered if necessary

### 3.5.2. Performance Requirements

#### 3.5.2.1. Availability

- The application must be available 95% of time. Users can access to it everywhere from their
- Web browser with internet connection.

#### 3.5.2.2. Response time

- In term of response time, waiting time of processing will be 2 to 5 seconds; time to process any functions will not exceed 7 seconds.

#### 3.5.2.3. User Interface

❖ **Color**
- The background color will be gray in default. The color of text will be black or white.

#### 3.5.2.4. Maintainability

❖ **Coding standards and naming conventions**
- Output of the project must include coding standards and naming conventions documentations. Implementation code must be easy to maintain.
- All code must be clearly commented, including class, method documentations.
- If some components are reused, the documentations of those components must also be included.

❖ **Design**
- The design of the system must be loosely coupled that chances on some module will not affect others.

❖ **Logging**
- All the errors should be logged, supporting for bug fixing and maintenance.
- All strange or sensitive situations should also be logged.

❖ **Mean time to repair**
- Immediately when Administrator finds out problem or website is attacked/hacked by someone.
- Average time 1 day.

#### 3.5.2.5. Usability

Usability Requirements support the following from the perspective of its primary users:

- **Efficiency of use**
  - User can complete each function in less than 12 actions
- **Intuitiveness**
  - User can understand approximately 90% help/error messages

#### 3.5.2.6. Security Requirements

In order to avoid unwanted access by strangers, the security implemented in various ways:

- **User authorize**
  - Each function must be distributed system access and manipulate the individual parts.
  - To edit information, user must declare their username and password before the operation.
  - Functions will be show after users login dependencies user's role and permission of each user.
- **Manage Data Layer**
  - Only Administrator can modify database system.
- **Stored Data**
  - All data about information will be saved in Neo4j database, and be easy for data classification or backup...

#### 3.5.2.7. Hardware/Software Requirements

- **Hardware requirement:** PC/Laptop
- **Software requirements:** Web browser (Chrome 30.0 or above, Firefox 20.0 or above) with internet connection

# CHAPTER 4: SOFTWARE DESIGN

## 4.1. Purpose

This chapter is to give the developer team a guidance of what the system's architecture and how they should be implemented. This chapter is consist of:

- Architecture overview
- Component diagram
- Detailed design
- Detailed description of components
- Database design

## 4.2. Architecture Overview

### 4.2.1. CHOICE OF ARCHITECTURE DESIGN

#### 4.2.1.1. MVC Model

The purpose of FAP is developing as a travelling social network, to make people with same interest can find each other. The system of FAP is structured based on MVC combined with layered architecture.

##### 4.2.1.1.1. MVC Model overview

MVC is a software architecture pattern that separates the representation of information from user's interaction with it. MVC Model separates system into components to make developers can develop, maintain and upgrade some specific parts without making change to whole system. MVC stands for Model-View-Controller where: Model is used to modelize data into objects, View is used to display user interface and Controller is used to implement business logic.

The Model-View-Controller (MVC) design pattern assigns objects in an application one of three roles: model, view, or controller. The pattern defines not only the roles objects play in the application, it defines the way objects communicate with each other. Each of the three types of objects is separated from the others by abstract boundaries and communicates with objects of the other types across those boundaries. The collection of objects of a certain MVC type in an application sometimes referred to as a layer—for example, model layer.

Figure 10: MVC Model

In addition to dividing the application into three kinds of components, the MVC design defines the interactions between them:

- **A controller:** can send commands to its associated view to change the view's presentation of the model (e.g., by scrolling through a document). It can also send commands to the model to update the model's state (e.g., editing a document).

- **A model:** notifies its associated views and controllers when there has been a change in its state. This notification allows the views to produce updated output, and the controllers to change the available set of commands. A passive implementation of MVC omits these notifications, because the application does not require them or the software platform does not support them.
- **A view:** requests from the model the information that it needs to generate an output representation to the user.
- MVC in FAP system:
- The Model is the part of the application that handles the logic for the application data. Often model objects retrieve data (and store data) from a database.
- The View is the parts of the application that handles the display of the data. Most often the views are created from the model data.
- The Controller is the part of the application that handles user interaction. Typically controllers read data from a view, control user input, and send input data to the model.

#### 4.2.1.1.2. Advantages and disadvantages of MVC model

❖ **Advantages:**
- MVC separates system into components, which can be developed, maintained and upgraded individually without pausing system.
- Develop tools is useful and easy to use.
- Large of documentary sources.

❖ **Disadvantages:**
- Take much time to transfer data between components
- Time consuming to transits data between components.
- Not suitable for agent-oriented applications such as interactive mobile and robotics applications.

#### 4.2.1.1.3. The reason of choosing MVC Model

- MVC makes parts of system can be developed individually and simultaneously to reduce developing time.
- Better support for test-driven development.
- Tools is useful and documentary source is large makes MVC is easy to develop.
- FAP is a social network, needs to upgrade as user feedback, so we needs to upgrade part of system without affect to whole system.

### 4.2.1.2. .NET Framework

.NET Framework is a software framework developed by Microsoft that runs primarily on Microsoft Windows. It includes a large class library known as Framework Class Library (FCL) and provides language interoperability (each language can use code written in other languages) across several programming languages.

#### 4.2.1.2.1. The reason of choosing .NET Framework

- Consistent with FAP system
- Many team member can use

#### 4.2.1.3. Graph Database

A graph database is a database that uses graph structures for semantic queries with nodes, edges and properties to represent and store data. A graph database is any storage system that provides index-free adjacency. This means that every element contains a direct pointer to its adjacent elements and no index lookups are necessary. General graph databases that can store any graph are distinct from specialized graph databases such as triple stores and network databases.

Users have friends, friends have posts, posts have comments and likes, each comment has one commenter and each like has one liker. If we store this data in relational database, with the data fully normalize, it would be a seven-table join to get everything out. Seven table joins – with the complexity of O(log(n)*m)^2 for each join in the best case (all tables are indexed) – would be very slow when the size of the datasets is considerably large. So far, there has been several work-around for querying newsfeed on relational database – the most popular ones are: caching and de-normalizing the tables. However, they all have trade-offs such as lower consistency, anti-updating patterns…etc.

**In FAP system we are using Neo4j, an open-source graph database for storing data.** In Neo4j, everything is stored in form of either an edge, a node or an attribute. Each node and edge can have any number of attributes. Both the nodes and edges can be labelled. Labeling is useful, because you can narrow down your searching area using the labels.

##### 4.2.1.3.1. Advantages and disadvantages of Graph Database

- **Advantages:**
  - Faster for associative data sets and map more directly to the structure of object-oriented applications
  - Scale more naturally to large data sets as they do not typically require expensive join operations
  - Optimized for connection, more suitable to manage ad-hoc and changing data
  - Optimized for traversing connected data
  - Optimized for seeing the forest, trees, branches and trunks
  - Suitable for managing a social network
- **Disadvantages:**
  - Sharding (lot of people working on this)
  - Team members have to study new techniques

##### 4.2.1.3.2. The reason of choosing Graph Database

- Suitable for managing a social network
- Consistent with FAP system

### 4.2.2. ARCHITECTURAL REPRESENTATION

Figure 11: System overview

We follow MVC architecture to implement the FAP Project. MVC offers architectural benefits over standard JavaScript — it helps us write better-organized and therefore more maintainable code.

**Model** is where the application's data objects are stored. A model object is in charge of encapsulating application state and one object could be related to other objects establishing a one-to-one or one-to-many relationship. The model object does not talk directly to a View, instead is made available to a controller, which accesses it when needed. When a model changes, typically it will notify its observers that a change has occurred. As with any data object it contains instance variables and getter/setter methods.

**View** is what is presented to the users and how users interact with the system. The view is expected to render the model in a meaningful way to the user. In FAP, the view is made with .cshtml file including css, JavaScript or jQuery, it sends user gestures to controller and allows controller to select view.

**Controller** is the decision maker and the glue between the model and view; it handles user actions and gestures, and responds to user events. For example, in CMS, when a user clicks the "Create" button to create a new contract, the controller for that action is invoked.

The controller will then make changes to the contract model. The view will then render the modified contract model to the display so that user can view the new contract he added in the contract list.

### 4.2.3. ARCHITECTURAL GOALS AND CONSTRAINTS

- **Availability**
  - The application must be available 95% of time. Users can access to it everywhere from there .Web browser with internet connection.
- **Maintainability**
  - Coding standards and naming conventions
    - Output of the project must include coding standards and naming conventions documentations. Implementation code must be easy to maintain.
    - All code must be clearly commented, including class, method documentations.
    - If some components are reused, the documentations of those components must also be included.
  - Design
    - The design of the system must be loosely coupled that chances on some module will not affect others.
  - Logging
    - All the errors should be logged, supporting for bug fixing and maintenance.
    - All strange or sensitive situations should also be logged.
- **Usability**
  - Usability Requirements support the following from the perspective of its primary users:
    - Efficiency of use: user can complete each function in less than 12 actions
    - Intuitiveness: all help/error messages are simple to understand; user can know exactly how to do each feature after one time using it.
- **Capacity and scalability**
  - Throughput, storage and growth requirements.

### 4.2.4. IMPLEMENTATION VIEW

#### 4.2.4.1. Overview

Implementation View includes Package diagram and Class diagram. Package diagram describes the organization of packages and elements. Class Diagram provides an overview of

the target system by describing the objects and classes inside the system and the relationships between them. It provides a wide variety of usages; from modeling the domain-specific data structure to detailed design of the target system

- Controller contain the interface between
  - Associated models
  - Associated views
  - The input devices (e.g., keyboard, pointing device, time).
  - Send commands to the model to update the model's state.
- Model is:
  - the domain-specific software simulation
  - Or implementation of the application's central structure.
- View deal with everything graphical
  - Requests data from their model
  - Display  the data

### 4.2.4.2. Architecturally Significant Design Packages

Figure 12: Package Diagram

❖ Model

| No | Controller class | Role |
|---|---|---|
| 1 | Comment | Description entity of Comment in database |
| 2 | Conversation | Description entity of Conversation in database |
| 3 | Notification | Description entity of Notification in database |
| 4 | Post | Description entity of Post in database |
| 5 | Message | Description entity of Message in database |
| 6 | Photo | Description entity of Photo in database |
| 7 | Place | Description entity of Place in database |
| 8 | Plan | Description entity of Plan in database |
| 9 | Room | Description entity of Room in database |
| 10 | User | Description entity of User in database |
| 11 | Video | Description entity of Video in database |

❖ Controller

| No | Controller class | Role |
|---|---|---|
| 1 | AdminController | Receive request contact's information from client.<br>Handle request from client and call method in Admin Model to get data from Database.<br>Respond data back to Admin View. |
| 2 | HomeController | Receive request contact's information from client.<br>Handle request from client and call method in Manage View Model to get data from Database.<br>Respond data back to Home View. |
| 3 | LoginController | Receive request contact's information from client.<br>Handle request from client and call method in User Model to get data from Database.<br>Respond data back to Home View. |
| 4 | RoomController | Receive request contact's information from client.<br>Handle request from client and call method in Room Model to get data from Database.<br>Respond data back to Room View. |
| 5 | PostController | Receive request contact's information from client.<br>Handle request from client and call method in Post Model to get data from Database.<br>Respond data back to Post View. |
| 6 | LookAroundController | Receive request contact's information from client.<br>Handle request from client and call method in Post Model to get data from Database.<br>Respond data back to Home View. |

| | | |
|---|---|---|
| 7 | SearchController | Receive request contact's information from client.<br>Handle request from client and call method in User Model to get data from Database.<br>Respond data back to Search View. |
| 8 | UserController | Receive request contact's information from client.<br>Handle request from client and call method in User Model to get data from Database.<br>Respond data back to User View. |

❖ View
- Include many .cshtml file

### 4.2.5. PROCESS VIEW

Figure 13: Login Activity Diagram

Figure 14: Search Activity Diagram

Figure 15: Post Activity Diagram

Figure 16: Room Activity Diagram

### 4.2.6. DEPLOYMENT VIEW

Figure 17: Deployment Diagram

## 4.3. Detail Design

### 4.3.1. Package Design

Figure 18: Package Design

### 4.3.2. Package Description

#### 4.3.2.1. Model

##### 4.3.2.1.1. Comment

| No | Property | Type | Default | Note | Description |
|---|---|---|---|---|---|
| 1 | CommentId | int | | public | Comment's ID |
| 2 | Content | String | | public | Comment's content |
| 3 | DateCreated | String | | public | Comment's created date. Auto-created while uploading |

##### 4.3.2.1.2. Conversation

| No | Property | Type | Default | Note | Description |
|---|---|---|---|---|---|
| 1 | ConversationId | String | | public | Conversation's ID |
| 2 | DateCreated | String | | public | Conversation's created date. Auto-created while creating conversation |

##### 4.3.2.1.3. Message

| No | Property | Type | Default | Note | Description |
|---|---|---|---|---|---|
| 1 | MessageId | int | | public | Message's Id |
| 2 | Content | String | | public | Message's content |
| 3 | DateCreated | String | | public | Message's created date. Auto-created while creating conversation |

##### 4.3.2.1.4. Notification

| No | Property | Type | Default | Note | Description |
|---|---|---|---|---|---|
| 1 | Cctivity | String | | public | Activity type of notification |
| 2 | DateCreated | String | | public | Notification's created date. Auto-created while creating conversation |
| 3 | User | user | | public | |
| 4 | Post | post | | public | |
| 5 | LastActivityId | int | | public | |

##### 4.3.2.1.5. Photo

| No | Property | Type | Default | Note | Description |
|---|---|---|---|---|---|
| 1 | PhotoId | int | | | Photo's Id |
| 2 | Url | String | | | Photo's URL |
| 3 | DateCreated | String | | | Photo's created date. Auto-created while uploading |

##### 4.3.2.1.6. Place

| No | Property | Type | Default | Note | Description |
|---|---|---|---|---|---|
| 1 | PlaceId | int | | | Place's Id |
| 2 | Name | String | | | Place's name |
| 3 | Latitude | Decimal | | | Place's latitude |

| | | | | | |
|---|---|---|---|---|---|
| 4 | Longitude | Decimal | | | Place's longitude |

#### 4.3.2.1.7. Plan

| No | Property | Type | Default | Note | Description |
|---|---|---|---|---|---|
| 1 | PlanId | int | | | Plan's Id |
| 2 | WorkItem | String | | | |
| 3 | LengthInMinute | int | | | |
| 4 | DatePlanStart | String | | | |

#### 4.3.2.1.8. Post

| No | Property | Type | Default | Note | Description |
|---|---|---|---|---|---|
| 1 | PostId | int | | | Post's Id |
| 2 | Content | String | | | Post's content |
| 3 | DateCreated | String | | | Post's created date. Auto-created while creating post |
| 4 | Privacy | String | | | Post's privacy |

#### 4.3.2.1.9. Room

| No | Property | Type | Default | Note | Description |
|---|---|---|---|---|---|
| 1 | RoomId | int | | public | Room's Id |
| 2 | RoomName | String | | public | Room name |
| 3 | Description | String | | public | Room's description |
| 4 | DateCreated | String | | public | Room's created date. Auto-created while creating room |
| 5 | StartDate | String | | public | Start date of room's plan |
| 6 | LengthInDays | int | | public | Length of room's plan |
| 7 | MaxNoSlot | int | | public | Number of room's member |
| 8 | StartLocation | String | | public | Start location of room's plan |
| 9 | StartLatitude | String | | public | Latitude of start location |
| 10 | StartLongitude | String | | public | Longitude of start location |
| 11 | DestinationLocation | String | | public | Destination location of room's plan |
| 12 | DestinationLatitude | String | | public | Latitude of destination location |
| 13 | DestinationLongitude | String | | public | Longitude of destination location |
| 14 | Privacy | String | | public | Room's privacy |
| 15 | PhotoCoverUrl | String | | public | Room's cover photo URL |

#### 4.3.2.1.10. User

| No | Property | Type | Default | Note | Description |
|---|---|---|---|---|---|
| 1 | UserId | int | | public | User's Id |
| 2 | TypeId | int | | public | User's type, includes: Normal, Facebook, Google+ registered |

| | | | | | |
|---|---|---|---|---|---|
| 3 | Address | String | | public | User's address |
| 4 | Avatar | String | | public | User's avatar image |
| 5 | DateJoined | String | | public | User's joined date. Auto-created while registering |
| 6 | DateOfBirth | String | | public | User's date of birth |
| 7 | Email | String | | public | User's email |
| 8 | FirstName | String | | public | User's first name |
| 9 | LastName | String | | public | User's last name |
| 10 | Password | String | | public | User's password |
| 11 | PhoneNumber | String | | public | User's phone number |
| 12 | Status | String | | public | User's status, includes: Lock and Active |

#### 4.3.2.1.11. Video

| No | Property | Type | Default | Note | Description |
|---|---|---|---|---|---|
| 1 | VideoId | int | | public | Video's Id |
| 2 | Path | String | | public | Video's URL |
| 3 | DateCreated | String | | public | Video's created date. Auto-created while creating video |

### 4.3.2.2. View

- Include many .cshtml files to display user interface.

### 4.3.2.3. Controller

#### 4.3.2.3.1. AdminController

| No. | Method | Parameter | Return | Description |
|---|---|---|---|---|
| 1 | Authenticate | | ActionResult | |
| 2 | Index | | ActionResult | Display Admin page |
| 3 | LockUser | int, int | JsonResult | Lock a reported user |
| 4 | UnlockUser | int | JsonResult | Unlock a locked user |
| 5 | LockPost | int, int | JsonResult | Lock a reported post |
| 6 | CancelReportPost | int | JsonResult | Delete a post from report list |
| 7 | CancelReportUser | int | JsonResult | Delete an user from report list |
| 8 | ViewPost | int | ActionResult | |

#### 4.3.2.3.2. HelpCenterController

| No. | Method | Parameter | Return | Description |
|---|---|---|---|---|
| 1 | Index | | ActionResult | Display Help Center page |

#### 4.3.2.3.3. LoginController

| No. | Method | Parameter | Return | Description |
|---|---|---|---|---|
| 1 | AuthenFacebook | | | User login with Facebok |
| 2 | AuthenGoogle | | | User login with Google+ |

| | | | | |
|---|---|---|---|---|
| 3 | ForgotPassword | | | Set user's password to a random string and send to user |
| 4 | Login | | | User login with registered account |
| 5 | Logout | | | User logout from FAP |
| 6 | SendMail | | | Send mail to user |

#### 4.3.2.3.4. LookAroundController

| No. | Method | Parameter | Return | Description |
|---|---|---|---|---|
| 1 | Index | | ActionResult | Display Look Around page |

#### 4.3.2.3.5. PostController

| No. | Method | Parameter | Return | Description |
|---|---|---|---|---|
| 1 | Index | | ActionResult | Display Post Detail page |
| 2 | CreatePost | form | ActionResult | Create a post |
| 3 | EditPost | int, String | void | Edit an own existed post |
| 4 | DeletePost | int | void | Delete an own existed post |

#### 4.3.2.3.6. RoomController

| No. | Method | Parameter | Return | Description |
|---|---|---|---|---|
| 1 | Index | int | ActionResult | Display Room Detail page |
| 2 | RoomDetail | String | ActionResult | Display room detail |
| 3 | UpdateEventPlan | String, String, String | void | Update plan of a room |
| 4 | SaveEvent | String, String, String, String | Boolean | |
| 5 | GetPlanEvents | DateTime, DateTime | JsonResult | |
| 6 | Add | | ActionResult | Create a new room |

#### 4.3.2.3.7. SearchController

| No. | Method | Parameter | Return | Description |
|---|---|---|---|---|
| 1 | Index | | ActionResult | Display Search page |
| 2 | Search | String | ActionResult | Search a keyword |
| 3 | SearchDetail | | ActionResult | Display Search Result page |

#### 4.3.2.3.8. UserController

| No. | Method | Parameter | Return | Description |
|---|---|---|---|---|
| 1 | AddFriend | int, int | JsonResult | Add other users to friend list to get news, notification and messages |
| 2 | AddToWishlist | String | JsonResult | Add a post to wish list |
| 3 | Comment | int, String | ActionResult | Create a comment |
| 4 | CreateMessage | int, String | JsonResult | Send message to others |
| 5 | CreateMessageInRoom | int, String | JsonResult | Create message in room |
| 6 | DeleteComment | int | JsonResult | Delete an owned comment |
| 7 | Dislike | int | JsonResult | Mark a post as dislike |
| 8 | EditComment | int, String | JsonResult | Edit content of an owned comment |
| 9 | EditProfile | user | JsonResult | Edit personal information |
| 10 | Like | int | JsonResult | Mark a post as liked |
| 11 | RemoveFromWishlist | int | JsonResult | Remove a post from wish list |
| 12 | ReportPost | int, int, int | JsonResult | Report a rule violation post |
| 13 | ReportUser | int, int | JsonResult | Report a rule violation user |
| 14 | Unfriend | int, int | JsonResult | Remove an user from friend list |

### 4.3.3. Component Design

#### 4.3.3.1. Search

##### 4.3.3.1.1. Class Diagram

Figure 19: Search class diagram

##### 4.3.3.1.2. Search Place

###### 4.3.3.1.2.1. Sequence Diagram

Figure 20: Search place sequence diagram

#### 4.3.3.1.2.2. Screen Design

Figure 21: Search place screen design

Figure 22: Search place result screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Search result for | Kết quả tìm kiếm | Text | | Y | | Display text |
| 2 | Place tab | Tab địa điểm | Tab | Click | Y | | Display result as place |
| 3 | People tab | Tab người dùng | Tab | Click | Y | | Display result as people |
| 4 | Room tab | Tab phòng | Tab | Click | Y | | Display result as room |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 5 | List place | Danh sách địa điểm | List | | Y | | Display list of place as result |

#### 4.3.3.1.3. Search User

##### 4.3.3.1.3.1. Sequence Diagram

Figure 23: Search user sequence diagram

##### 4.3.3.1.3.2. Screen Design

Figure 24: Search user screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Search result for | Kết quả tìm kiếm | Text | | Y | | Display text |
| 2 | Place tab | Tab địa điểm | Tab | Click | Y | | Display result as place |
| 3 | People tab | Tab người dùng | Tab | Click | Y | | Display result as people |
| 4 | Room tab | Tab phòng | Tab | Click | Y | | Display result as room |
| 5 | List user | Danh sách người dùng | List | | Y | | Display list of user as result |

#### 4.3.3.1.4. Search Room

##### 4.3.3.1.4.1. Sequence Diagram

Figure 25: Search room sequence diagram

#### 4.3.3.1.4.2. Screen Design

Figure 26: Search room screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | SearchResult | Kết quả tìm kiếm | Text | | Y | | Display text |
| 2 | PlaceTab | Tab địa điểm | Tab | Click | Y | | Display result as place |
| 3 | People tab | Tab người dùng | Tab | Click | Y | | Display result as people |
| 4 | RoomTab | Tab phòng | Tab | Click | Y | | Display result as room |
| 5 | ListRoom | Danh sách phòng | List | | Y | | Display list of room as result |

#### 4.3.3.2. Help Center

##### 4.3.3.2.1. Class Diagram

Figure 27: Help Center class diagram

#### 4.3.3.2.2. Help Center

##### 4.3.3.2.2.1. Sequence Diagram

Figure 28: Help Center sequence diagram

##### 4.3.3.2.2.2. Screen Design

Figure 29: Help Center screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | HelpCenter | Trung tâm hỗ trợ | Label | Label | | | Label display “Help Center” |
| 2 | SearchText | Từ khóa tìm kiếm | Text | Text | | | Text for searching question |
| 3 | SearchBtn | Nút tìm kiếm | Button | Click | | | User click on search button for searching result |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4 | ListQuestion | Danh sách câu hỏi và câu trả lời | List | List | Y | | List of question and answer |

### 4.3.3.3. Suggest

#### 4.3.3.3.1. Class Diagram

Figure 30: Suggest class diagram

#### 4.3.3.3.2. Suggest Friend

##### 4.3.3.3.2.1. Sequence Diagram

Figure 31: Suggest Friend sequence diagram

#### 4.3.3.3.2.2. Screen Diagram

Figure 32: Suggest Friend screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | ListSuggested Friends | Danh sách bạn gợi ý | List | | Y | | Display list of suggested friends |

### 4.3.3.3.3. Suggest Place

#### 4.3.3.3.3.1. Sequence Diagram

Figure 33: Suggest Place sequence diagram

#### 4.3.3.3.3.2. Screen Design

Figure 34: Suggest place screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | ListSuggestedPlaces | Danh sách các địa điểm gợi ý | List | | Y | | Display list of sugguested places |

### 4.3.3.4. Personal Page

#### 4.3.3.4.1. Class Diagram

Figure 35: Personal Page class diagram

### 4.3.3.4.2. Display User's Personal Page

#### 4.3.3.4.2.1. Sequence Diagram

Figure 36: Display User's Personal Page sequence diagram

#### 4.3.3.4.2.2. Screen Design

Figure 37: User Personal Page screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Cover | Ảnh nền | Image | | Y | | Cover image of user |
| 2 | Avatar | Ảnh đại diện | Image | | Y | | Avatar image of user |
| 3 | Name | Tên | Label | | Y | | Display name of user |
| 4 | Post | Bài đăng | Button | Click | Y | | Click to display list of post |
| 5 | Place | Địa điểm | Button | Click | Y | | Click to display list of place |
| 6 | Photo | Hình ảnh | Button | Click | Y | | Click to display list of photo |
| 7 | Video | Đoạn phim | Button | Click | Y | | Click to display list of video |
| 8 | Friend | Bạn bè | Label | | Y | | |
| 9 | Friend Thumbnail | Hình nhỏ bạn bè | Button | Click | Y | | Click to display friend's personal page |
| 10 | View All | Xem tất cả | Button | Click | Y | | Click to display friend list |
| 11 | Post Thumbnail | Hình nhỏ bài đăng | Post | Click | Y | | Click to display post's detail page |

Table 1: User's Personal Page screen description

#### 4.3.3.4.3. Display New Feed

##### 4.3.3.4.3.1. Sequence Diagram

Figure 38: Display New Feed sequence diagram

## Fly Away Plus

### 4.3.3.4.3.2. Screen Design

Figure 39: New Feed screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Location | Vị trí | Label | | Y | | Display information of current location of user |
| 2 | Wishlist | Danh sách mong muốn | Hyperlink | Click | Y | | Click to display Wishlist page |
| 3 | Discover Room | Tìm hiểu phòng | Hyperlink | Click | Y | | Click to display Room List page |
| 4 | My Room | Phòng của tôi | Hyperlink | Click | Y | | Click to display Room List page |
| 5 | Look Around | Tìm xung quanh | Hyperlink | Click | Y | | Click to display Look Around page |
| 6 | Hot Trend | Xu hướng mới | Hyperlink | Click | Y | | Click to display Hot Trend page |
| 7 | Post Thumbnail | Hình nhỏ bài đăng | Post | Click | Y | | Click to display Post Detail page |
| 8 | Message | Tin nhắn | Button | Click | Y | | Click to display Chat panel |

Table 2: Display New Feed screen description

#### 4.3.3.4.4. Display Post Detail

##### 4.3.3.4.4.1. Sequence Diagram

Figure 40: Display Post Detail sequence diagram

#### 4.3.3.4.4.2. Screen Design

Figure 41: Post Detail screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Avatar | Ảnh đại diện | Image | Click | Y | | Click to display user's personal page |
| 2 | User Name | Tên người dung | Hyperlink | Click | Y | | Click to display user's personal page |
| 3 | Information | Thông tin | Label | | Y | | Display post's information |
| 4 | Image | Hình ảnh | Image | | Y | | Display image of post |
| 5 | Content | Nội dung | Label | | Y | | Display content of post |
| 6 | Like | Thích | Hyperlink | Click | Y | | Click to mark this post as like |
| 7 | Dislike | Không thích | Hyperlink | Click | Y | | Click to mark this post as dislike |
| 8 | Share | Chia sẻ | Hyperlink | Click | Y | | Click to share this post |
| 9 | Report | Báo cáo | Hyperlink | Click | Y | | Click to report this post |
| 10 | Rating | Đánh giá | Label | | Y | | Display like, dislike, share number of post |
| 11 | Comment | Bình luận | Comment | | Y | | Display comments of post |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 12 | Visit Place List | Danh sách địa điểm tham quan | Panel | | Y | | Display list of visit place |
| 13 | Visit Place Item | Địa điểm tham quan | Item | Click | Y | | Click to display Search Detail page |
| 14 | Find Friends | Danh sách gợi ý kết bạn | Panel | | Y | | Display friend suggestion |
| 15 | Friend Item | Gợi ý kết bạn | Item | Click | Y | | Click to send request or display user's personal page |

Table 3: Post Detail screen description

#### 4.3.3.4.5. Display Wish List

##### 4.3.3.4.5.1. Sequence Diagram

Figure 42: Display Wish List sequence diagram

#### 4.3.3.4.5.2. Screen Design

Figure 43: Wish List screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Post Thumbnail | Hình nhỏ bài đăng | Post | Click | Y | | Click to display Post Detail page |

Table 4: Wish List screen description

### 4.3.3.4.6. Display Room List

#### 4.3.3.4.6.1. Sequence Diagram

Figure 44: Display Room List sequence diagram

#### 4.3.3.4.6.2. Screen Design

Figure 45: Room List screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Room Thumbnail | Hình nhỏ phòng | Room | Click | Y | | Click to display Room Detail page |

#### 4.3.3.4.7. Display Room Detail

##### 4.3.3.4.7.1. Sequence Diagram

Figure 46: Display Room Detail sequence diagram

#### 4.3.3.4.7.2. Screen Design

Figure 47: Room Detail screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 12 | Room Information | Thông tin phòng | Panel | | Y | | Display information of room |
| 13 | Interaction | Tương tác | Panel | Click Type | Y | | Interaction of room |
| 14 | Estimation | Dự toán | Panel | Click Type | Y | | Plan, estimation of room |
| 15 | Member | Thành viên | Image | Click | Y | | Click to display User's Personal page |
| 16 | View All | Xem tất cả | Button | Click | Y | | Click to display member list |
| 17 | Create Post | Tạo bài đăng | Panel | Click Type | Y | | Input data and click Post to create a post |
| 18 | Chat Box | Khung tán gẫu | Chat box | | Y | | Display messages |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 19 | Message | Tin nhắn | Panel | | Y | | Display message history |
| 20 | Chat | Tán gẫu | Text box | Type | Y | | Send message |

Table 5: Room Detail screen description

#### 4.3.3.4.8. Display Photo List

##### 4.3.3.4.8.1. Sequence Diagram

Figure 48: Display Photo List sequence diagram

##### 4.3.3.4.8.2. Screen Design

Figure 49: Display Photo List screen design

| No | Field name | Field name Vietnamese | Type | Require | Mand-atory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Avatar | Ảnh đại diện | Image | Image | Y | | Avatar of user |
| 2 | Username | Tên người dùng | Text | Text | Y | | Username |
| 3 | Post | Bài đăng | Tab | Tab | Y | | List Post of User |
| 4 | Places | Địa điểm | Tab | Tab | Y | | List Place of User |
| 5 | Photos | Ảnh | Tab | Tab | Y | | List Photo of User |
| 6 | Profile | Tiểu sử | Button | Click | Y | | Show profile of User |
| 7 | FriendList | Danh sách bạn | List | List | Y | | List friend of User |
| 8 | ViewAll | Xem tất cả | Button | Click | Y | | View all User |
| 9 | ListPhoto | Danh sách ảnh | List | List | Y | | List Photo of User |

#### 4.3.3.4.9. Display Video List

##### 4.3.3.4.9.1. Sequence Diagram

Figure 50: Display Video List sequence diagram

#### 4.3.3.4.9.2. Screen Design

Figure 51: Display Video List screen design

| No | Field name | Field name Vietnamese | Type | Require | Mand-atory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Avatar | Ảnh đại diện | Image | Image | Y | | Avatar of user |
| 2 | Username | Tên người dùng | Text | Text | Y | | Username |
| 3 | Post | Bài đăng | Tab | Tab | Y | | List Post of User |
| 4 | Places | Địa điểm | Tab | Tab | Y | | List Place of User |
| 5 | Photos | Ảnh | Tab | Tab | Y | | List Photo of User |
| 6 | Profile | Tiểu sử | Button | Click | Y | | Show profile of User |
| 7 | FriendList | Danh sách bạn | List | List | Y | | List friend of User |
| 8 | ViewAll | Xem tất cả | Button | Click | Y | | View all User |
| 9 | ListVideo | Danh sách video | List | List | Y | | List Video of User |

#### 4.3.3.4.10. Display Place List

##### 4.3.3.4.10.1. Sequence Diagram

Figure 52: Display Place List sequence diagram

##### 4.3.3.4.10.2. Screen Design

Figure 53: Display Place List screen design

| No | Field name | Field name Vietnamese | Type | Require | Mand-atory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Map | Bản đồ | Map | Click | Y | | Display visited places in a map |

Table 6: Display Place List screen description

#### 4.3.3.4.11. View Place

##### 4.3.3.4.11.1. Sequence Diagram

Figure 54: View Place sequence diagram

##### 4.3.3.4.11.2. Screen Design

Figure 55: View Place screen design

| No | Field name | Field name Vietnamese | Type | Require | Mand-atory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Map | Bản đồ | Map | Click | Y | | Display visited places in a map |
| 2 | Place Name | Tên địa điểm | Label | | Y | | Display name of place |
| 3 | Post Thumbnail | Hình nhỏ bài đăng | Post | Click | Y | | Click to display Post Detail page |

Table 7: View Place screen description

### 4.3.3.5. Post Management

#### 4.3.3.5.1. Class Diagram

Figure 56: Post Management class diagram

#### 4.3.3.5.2. Create Post

##### 4.3.3.5.2.1. Sequence Diagram

Figure 57: Create Post sequence diagram

##### 4.3.3.5.2.2. Screen Design

Figure 58: Create Post screen design

| No | Field name | Field name Vietnamese | Type | Require | Mand-atory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | UpdateStatusLabel | Cập nhật trạng thái | Label | Label | Y | | Label display "Update Status" |
| 2 | PostContent | Nội dung bài đăng | Text | Text | Y | | Post's content |
| 3 | InputTextPlace | Nhập địa điểm | Input text | Input text | Y | | Input text place |
| 4 | Map | Bản đồ | Google map | Google map | Y | | Google map show place |
| 5 | Location | Địa điểm | Button | CLick | Y | | Show location |
| 6 | Photo | Ảnh | Button | Click | Y | | Show Photo tab to post photo |
| 7 | Video | Video | Button | Click | Y | | Show Video tab to post video |
| 8 | Post | Bài đăng | Button | Click | Y | | Button for post |

#### 4.3.3.5.3. Edit Post

##### 4.3.3.5.3.1. Sequence Diagram

Figure 59: Edit Post sequence diagram

#### 4.3.3.5.3.2. Screen Design

Figure 60: Edit Post screen design

| No | Field name | Field name Vietnamese | Type | Require | Mand-atory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | editPost Label | Chỉnh sửa bài đăng | Label | Label | Y | | Label display “Edit post” |
| 2 | PostContent | Nội dung bài đăng | Text | Text | Y | | Post’s content |
| 3 | Cancel | Hủy bỏ | Button | Button | Y | | Cancel edit post |
| 4 | Save | Lưu | Button | Button | Y | | Save post’s content |

#### 4.3.3.5.4. Delete Post

##### 4.3.3.5.4.1. Sequence Diagram

Figure 61: Delete Post sequence diagram

##### 4.3.3.5.4.2. Screen Design

Figure 62: Delete Post screen design

| No | Field name | Field name Vietnamese | Type | Require | Mand-atory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Confirm Label | Bạn có chắc có | Label | Label | Y | | Label display "Are you sure?" |
| 2 | Cancel | Hủy bỏ | Button | Button | Y | | Cancel delete post |
| 3 | Confirm | Có | Button | Button | Y | | Delete post |

#### 4.3.3.6. Share Management

##### 4.3.3.6.1. Share Post

###### 4.3.3.6.1.1. Sequence Diagram

Figure 63: Share sequence diagram

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### 4.3.3.6.1.2. Screen Design

Figure 64: Share Post screen design

| No | Field name | Field name Vietnamese | Type | Require | Mand-atory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Facebook | Facebook | Icon | Icon | Y | | Facebook |
| 2 | Avatar | Ảnh đại diện | Image | Image | Y | | Avatar of User |
| 3 | PostContent | Nội dung bài đăng | Text | Text | Y | | Post's content |
| 4 | Privacy | Quyền riêng tư | Button | Click | Y | | Privacy of Post |
| 5 | Share | Chia sẻ | Button | Click | Y | | Share button to Facebook |
| 6 | Cancel | Hủy | Button | Click | Y | | Cancel Share post |

### 4.3.3.7. Comment Management

#### 4.3.3.7.1. Class Diagram

Figure 65: Comment Management class diagram

#### 4.3.3.7.2. Add Comment

##### 4.3.3.7.2.1. Sequence Diagram

Figure 66: Add Comment sequence diagram

##### 4.3.3.7.2.2. Screen Design

Figure 67: Add Comment screen diagram

| No | Field name | Field name Vietnamese | Type | Require | Mand-atory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Post content | Nội dung bài đăng | Text | Text | Y | | Post's content |
| 2 | Like | Thích | Button | Click | Y | | Like Post |
| 3 | Dislike | Không thích | Button | Click | Y | | Dislike Post |
| 4 | Share | Chia sẻ | Button | Click | Y | | Share button to Facebook |
| 5 | Report | Báo cáo | Button | Click | Y | | Report post to system |
| 6 | CommentText | Bình luận | Text | Text | Y | | Comment |

#### 4.3.3.7.3. Edit Comment

##### 4.3.3.7.3.1. Sequence Diagram

Figure 68: Edit Comment sequence diagram

#### 4.3.3.7.3.2. Screen Design

Figure 69: Edit Comment screen design

| No | Field name | Field name Vietnamese | Type | Require | Mand-atory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Post content | Nội dung bài đăng | Text | Text | Y | | Post's content |
| 2 | Like | Thích | Button | Click | Y | | Like Post |
| 3 | Dislike | Không thích | Button | Click | Y | | Dislike Post |
| 4 | Share | Chia sẻ | Button | Click | Y | | Share button to Facebook |
| 5 | Report | Báo cáo | Button | Click | Y | | Report post to system |
| 6 | EditComment | Chỉnh sửa bình luận | Button | Click | Y | | Edit Comment |
| 7 | DeleteComment | Xóa bình luận | Button | Click | Y | | Delete Comment |
| 8 | CommentText | Bình luận | Text | Text | Y | | Comment |

#### 4.3.3.7.4. Delete Comment

##### 4.3.3.7.4.1. Sequence Diagram

Figure 70: Delete Comment sequence diagram

##### 4.3.3.7.4.2. Screen Design

Figure 71: Delete screen design

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| No | Field name | Field name Vietnamese | Type | Require | Mand-atory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Post content | Nội dung bài đăng | Text | Text | Y | | Post's content |
| 2 | Like | Thích | Button | Click | Y | | Like Post |
| 3 | Dislike | Không thích | Button | Click | Y | | Dislike Post |
| 4 | Share | Chia sẻ | Button | Click | Y | | Share button to Facebook |
| 5 | Report | Báo cáo | Button | Click | Y | | Report post to system |
| 6 | EditComment | Chỉnh sửa bình luận | Button | Click | Y | | Edit Comment |
| 7 | DeleteComment | Xóa bình luận | Button | Click | Y | | Delete Comment |
| 8 | CommentText | Bình luận | Text | Text | Y | | Comment |

### 4.3.3.8. Like Management

#### 4.3.3.8.1. Class Diagram

Figure 72: Like class diagram

#### 4.3.3.8.2. Like

##### 4.3.3.8.2.1. Sequence Diagram

Figure 73: Like sequence diagram

#### 4.3.3.8.2.2. Screen Design

Figure 74: Like screen design

| No | Field name | Field name Vietnamese | Type | Require | Mand-atory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Post content | Nội dung bài đăng | Text | Text | Y | | Post's content |
| 2 | Like | Thích | Button | Click | Y | | Like Post |
| 3 | Dislike | Không thích | Button | Click | Y | | Dislike Post |
| 4 | Share | Chia sẻ | Button | Click | Y | | Share button to Facebook |
| 5 | Report | Báo cáo | Button | Click | Y | | Report post to system |
| 6 | EditComment | Chỉnh sửa bình luận | Button | Click | Y | | Edit Comment |
| 7 | DeleteComment | Xóa bình luận | Button | Click | Y | | Delete Comment |
| 8 | CommentText | Bình luận | Text | Text | Y | | Comment |

#### 4.3.3.8.3. Dislike

##### 4.3.3.8.3.1. Sequence Diagram

Figure 75: Dislike sequence diagram

#### 4.3.3.8.3.2. Screen Design

Figure 76: Dislike screen design

| No | Field name | Field name Vietnamese | Type | Require | Mand-atory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Post content | Nội dung bài đăng | Text | Text | Y | | Post's content |
| 2 | Like | Thích | Button | Click | Y | | Like Post |
| 3 | Dislike | Không thích | Button | Click | Y | | Dislike Post |
| 4 | Share | Chia sẻ | Button | Click | Y | | Share button to Facebook |
| 5 | Report | Báo cáo | Button | Click | Y | | Report post to system |
| 6 | EditComment | Chỉnh sửa bình luận | Button | Click | Y | | Edit Comment |
| 7 | DeleteComment | Xóa bình luận | Button | Click | Y | | Delete Comment |
| 8 | CommentText | Bình luận | Text | Text | Y | | Comment |

Figure 77: Dislike sequence diagram

### 4.3.3.9. Report

#### 4.3.3.9.1. Class Diagram

Figure 78: Report class diagram

#### 4.3.3.9.2. Report a post

##### 4.3.3.9.2.1. Sequence Diagram

Figure 79: Report a Post sequence diagram

#### 4.3.3.9.2.2. Screen Design

Figure 80: Report Post screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Report Post | Báo cáo bài viết | Button | Click | Y | | Click to report post |

Table 8: Report Post screen description

### 4.3.3.9.3. Report an user

#### 4.3.3.9.3.1. Sequence Diagram

Figure 81: Report a user sequence diagram

#### 4.3.3.9.3.2. Screen Design

Figure 82: Report User screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Report User | Báo cáo người dung | Button | Click | Y | | Click to report user |

Table 9: Report User screen description

### 4.3.3.10. Chat

#### 4.3.3.10.1. Class Diagram

Figure 83: Chat class diagram

### 4.3.3.10.2. Chat

#### 4.3.3.10.2.1. Sequence Diagram

Figure 84: Chat sequence diagram

#### 4.3.3.10.2.2. Screen Design

Figure 85: Chat screen 1

Figure 54: Chat screen 2

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 2 | Chat | Nút chat | Button | Click | Y | | Chat button |
| 3 | Message List Box | Khung chat | List Chat Item | | Y | | Display friend list |
| 4 | Friend Chat Item | Bạn | Chat Item | Click | | | Friend item to chat |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 5 | Friend Avatar | Ảnh đại diện của bạn | Image | Click | Y | | User's avatar |
| 6 | Friend Name | Tên bạn | Hyperlink | Click | Y | | Friend's name |
| 7 | Message Content | Nội dung tin nhắn | Label | | Y | | Latest message |
| 8 | Time | Thời gian nhận tin nhắn | Label | | Y | | Message received time |
| 9 | Friend Chat | | Button | Click | Y | | |
| 10 | Chat Box | | Chat Box | | Y | | Display message |
| 11 | Friend Name | | Hyperlink | Click | Y | | Display friend's name |
| 12 | Message Display Box | | Conversation Box | | Y | | Display messages |
| 13 | Message | | Textbox | Type | Y | | User enters message into |

### 4.3.3.11. Friend Management

#### 4.3.3.11.1. Class Diagram

Figure 86: Friend Management class diagram

#### 4.3.3.11.2. Add Friend

##### 4.3.3.11.2.1. Sequence Diagram

Figure 87: Add Friend sequence diagram

##### 4.3.3.11.2.2. Screen Design

Figure 88: Request friend screen

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Request Friend | Yêu cầu kết bạn | Button | | Y | | Send a making friend request |

Table 10: Request friend screen description

#### 4.3.3.11.3. Unfriend

##### 4.3.3.11.3.1. Sequence Diagram

Figure 89: Unfriend sequence diagram

##### 4.3.3.11.3.2. Screen Design

Figure 90: Unfriend screen

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Unfriend | Hủy kết bạn | Button | | Y | | Remove an user from friend list |

Table 11: Unfriend screen description

### 4.3.3.12. Wish List

#### 4.3.3.12.1. Class Diagram

Figure 91: Wish List class diagram

#### 4.3.3.12.2. Add to Wish List

##### 4.3.3.12.2.1. Sequence Diagram

Figure 92: Add to Wish List sequence diagram

#### 4.3.3.12.2.2. Screen Design

Figure 93: Add to Wish list screen

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Add To Wish List | Thêm vào danh sách mong muốn | Button | Click | Y | | Add a place into wish list |

Table 12: Add to wish list screen description

### 4.3.3.12.3. Remove From Wish List

#### 4.3.3.12.3.1. Sequence Diagram

Figure 94: Remove From Wish List sequence diagram

#### 4.3.3.12.3.2. Screen Design

Figure 95: Remove from Wish list screen

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Remove From Wish List | Xóa khỏi danh sách mong muốn | Button | Click | Y | | Remove a place from wish list |

Table 13: Remove from Wish list screen description

### 4.3.3.13. Room

#### 4.3.3.13.1. Class Diagram

Figure 96: Room class diagram

#### 4.3.3.13.2. Create Room

##### 4.3.3.13.2.1. Sequence Diagram

Figure 97: Create Room sequence diagram

##### 4.3.3.13.2.2. Screen Design

Figure 98: Create Room screen

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Room name | Tên phòng | Text box | Type | Y | | User type room's name |
| 2 | No. of slots | Số lượng thành viên | Number | Type | Y | | User type maxium number of members that can join room |
| 3 | Start place | Điểm khởi hành | Text box | Type | Y | | User chosse start place |
| 4 | Target place | Điểm đến | Text box | Type | Y | | User chosse target place |
| 5 | Start date | Ngày khởi hành | Calendar | Type | Y | | User choose start date |
| 6 | End date | Ngày kết thúc | Calendar | Type | Y | | User choose end date |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 7 | Public switch | Chọn chế độ public/private room | Switch | Click | Y | | User chosse public or private room |
| 8 | Room description | Giới thiệu về phòng | Text area | Type | Y | | User write room description |
| 9 | Create | Tạo phòng | Button | Click | Y | | User click to create room |

Table 14: Create Room screen description

#### 4.3.3.13.3. Add General Plan

##### 4.3.3.13.3.1. Sequence Diagram

Figure 99: Add General Plan sequence diagram

#### 4.3.3.13.3.2. Screen Design

Figure 100: Add general plan screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Add Plan | Thêm kế hoạch | Text box | Click | Y | | Plan of the room |
| 2 | Add New Plan | Thêm kế hoạch mới | Panel | | Y | | Add plan form |
| 3 | Work Portion | Phần công việc | Text box | Type | Y | | Work portion of plan |
| 4 | Detail | Mô tả công việc | Text box | Type | Y | | Description of work portion |
| 5 | Assignee | Người thực hiện | Text box | Type | Y | | Assignee of plan |
| 6 | Start Time | Ngày bắt đầu | Text box | Type | Y | | Start time of plan |
| 7 | Cancel | Hủy bỏ | Button | Click | Y | | Cancel creating plan |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 8 | Save | Tạo kế hoạch | Button | Click | Y | | Create a plan |

#### 4.3.3.13.4. Add Timeline Plan

##### 4.3.3.13.4.1. Sequence Diagram

Figure 101: Add Timeline Plan sequence diagram

##### 4.3.3.13.4.2. Screen Design

Figure 102: Add Timeline Plan

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Plan Time | Ngày dự kiến | Label | | Y | | Plan time of room |
| 2 | Previous Week | Tuần trước | Button | Click | Y | | Jump to previous week |
| 3 | Next Week | Tuần sau | Button | Click | Y | | Jump to next week |
| 4 | Week | Tuần | Button | Click | Y | | Display plan calendar by week |
| 5 | Day | Ngày | Button | Click | Y | | Display plan calendar by day |
| 6 | Plan Calendar | Lịch kế hoạch | Calendar | | Y | | Calendar of plan |
| 7 | Plan Calendar Item | Đơn vị lịch kế hoạch | Calendar Item | Click | Y | | Plan detail by day |
| 8 | Timeline Plan | Kế hoạch theo ngày | Panel | | Y | | Create timeline plan form |
| **9** | Title | Tiêu đề | Text box | Type | Y | | Titile of timeline plan |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **10** | Timeline Plan Date | Ngày theo kế hoạch | Text box | | | | Date of plan |
| **11** | Time Plan Time | Giờ theo kế hoạch | Text box | | | | Time of plan |
| **12** | Plan Length | Độ dài kế hoạch | Text box | Type | Y | | Length of plan |
| **13** | Cancel | Hủy bỏ | Button | Click | Y | | Cancel creating plan |
| **14** | Save | Tạo kế hoạch | Button | Click | Y | | Create a plan |

Table 15: Add Timeline Plan screen description

#### 4.3.3.14. Account Management

##### 4.3.3.14.1. Class Diagram

Figure 103: Account Management class diagram

#### 4.3.3.14.2. Login

##### 4.3.3.14.2.1. Sequence Diagram

Figure 104: Login sequence diagram

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### 4.3.3.14.2.2. Screen Design

Figure 105: Login screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Login with Facebook | Đăng nhập qua Facebook | Button | Click | Y | | Login with Facebook |
| 2 | Login with Google | Đăng nhập qua Google | Button | Click | Y | | Login with Google+ |
| 3 | Email | Thư điện tử | Text box | Type | Y | | Email of registered user |
| 4 | Password | Mật khẩu | Text box | Type | Y | | Password of registered user |
| 5 | Day | Ngày | Button | Click | Y | | Display plan |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | calendar by day |
| 6 | Remember Me | Lưu thông tin đăng nhập | Check box | Click | Y | | Save login information |
| 7 | Login | Đăng nhập | Button | Click | Y | | Login |
| 8 | Forgot Password | Quên mật khẩu | Hyperlink | Click | Y | | Resend password to user |

Table 16: Login screen description

#### 4.3.3.14.3. Logout

##### 4.3.3.14.3.1. Sequence Diagram

Figure 106: Logout sequence diagram

##### 4.3.3.14.3.2. Screen Design

Figure 107: Logout screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Logout | Đăng xuất | Hyperlink | Click | Y | | Logout |

Table 17: Logout screen description

#### 4.3.3.14.4. Register

##### 4.3.3.14.4.1. Sequence Diagram

Figure 108: Register sequence diagram

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### 4.3.3.14.4.2. Screen Design

Figure 109: Register screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Register | Đăng ký | Hyperlink | Click | Y | | Display register form |
| 2 | Avatar | Ảnh đại diện | Button | Click | Y | | Display file chooser to upload avatar |
| 3 | First Name | Tên | Text box | Type | Y | | First name of user |
| 4 | Last Name | Họ | Text box | Type | Y | | Last name of user |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 5 | Phone Number | Số điện thoại | Text box | Type | Y | | Phone number of user |
| 6 | DOB | Ngày tháng năm sinh | Date picker | Click | Y | | Date of birth of user |
| 7 | Gender | Giới tính | Radio button group | Click | Y | | Gender of user |
| 8 | Address | Địa chỉ | Text box | Type | Y | | Address of user |
| 9 | Passwor d | Mật khẩu | Text box | Type | Y | | Password of user |
| 10 | Confirm Passwor d | Nhập lại mật khẩu | Text box | Type | Y | | User retype password |
| 11 | Register | Đăng ký | Button | Type | Y | | User register a new account |

Table 18: Register screen description

#### 4.3.3.14.5. Edit Profile

##### 4.3.3.14.5.1. Sequence Diagram

Figure 110: Edit Profile sequence diagram

#### 4.3.3.14.5.2. Screen Design

Figure 111: Edit Profile screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Profile | Thông tin cá nhân | Label | | Y | | Display panel name |
| **2** | First Name | Tên | Label | | Y | | First name of user |
| **3** | First Name Edit | Sửa tên | Button | Click | Y | | Edit first name of user |
| **4** | Last Name | Họ | Label | | Y | | Last name of user |
| **5** | Last Name Edit | Sửa họ | Button | Click | Y | | Edit last name of user |
| **6** | Phone Number | Số điện thoại | Label | | Y | | Phone number of user |
| **7** | Phone Number Edit | Sửa số điện thoại | Button | Click | Y | | Edit phone number of user |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **8** | DOB | Ngày tháng năm sinh | Label | | Y | | Date of birth of user |
| **9** | DOB Edit | Sửa ngày tháng năm sinh | Button | Click | Y | | Edit date of birth of user |
| **10** | Gender | Giới tính | Radio button group | Click | Y | | Gender of user |
| **11** | Address | Địa chỉ | Label | | Y | | Address of user |
| **12** | Address Edit | Sửa địa chỉ | Button | Click | Y | | Edit address of user |
| **13** | Email | Thư điện tử | Label | | Y | | Email of user |
| **14** | Password | Mật khẩu | Label | | Y | | Password of user |
| **15** | Password Edit | Đổi mật khẩu | Button | Click | Y | | Edit password of user |
| **16** | Save | Lưu thông tin | Button | Click | Y | | Save new information of user |

Table 19: Edit Profile screen description

#### 4.3.3.14.6. Forgot Password

##### 4.3.3.14.6.1. Sequence Diagram

Figure 112: Forgot Password sequence diagram

#### 4.3.3.14.6.2. Screen Design

Figure 113: Forgot Password screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Email | Thư điện tử | Text | Text | Y | 100 | User input email with length less than 100 characters |
| 2 | Find | Tìm password | Button | Click | Y | | Click to receive password via email |

Table 20: Forgot Password screen description

### 4.3.3.15. Management Member's Account

#### 4.3.3.15.1. Class Diagram

Figure 114: Admin class diagram

### 4.3.3.15.2. Admin Login

#### 4.3.3.15.2.1. Sequence Diagram

Figure 115: Admin Login sequence diagram

#### 4.3.3.15.2.2. Screen Design

Figure 116: Admin Login screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Admin Username | Tên đăng nhập của quản lý | Text box | Type | Y | | Username of admin |
| 2 | Admin Password | Mật khẩu của quản lý | Text box | Type | Y | | Password of admin |
| 3 | Login | Đăng nhập | Button | Click | Y | | Click to login |

Table 21: Admin Login screen description

#### 4.3.3.15.3. Admin Logout

##### 4.3.3.15.3.1. Sequence Diagram

Figure 117: Admin Logout sequence diagram

##### 4.3.3.15.3.2. Screen Design

Figure 118: Admin Logout screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Logout | Đăng xuất | Button | Click | Y | | Click to logout |

#### 4.3.3.15.4. Lock User

##### 4.3.3.15.4.1. Sequence Diagram

Figure 119: Lock User sequence diagram

##### 4.3.3.15.4.2. Screen Design

Figure 120: Lock User screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Lock User | Khóa người dung | Toggle button | Click | Y | | Click to lock user |

#### 4.3.3.15.5. Unlock User

##### 4.3.3.15.5.1. Sequence Diagram

Figure 121: Unlock User sequence diagram

#### 4.3.3.15.5.2. Screen Design

Figure 122: Unlock User screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Unlock User | Mở khóa người dung | Toggle button | Click | Y | | Click to unlock user |

#### 4.3.3.15.6. View All User

#### 4.3.3.15.7. Review Post

#### 4.3.3.15.7.1. Sequence Diagram

Figure 123: Review Post sequence diagram

#### 4.3.3.15.7.2. Screen Design

Figure 124: Review Post screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | View Post | Xem bài viết | Button | Click | Y | | Click to redirect to post |

#### 4.3.3.15.8. Lock Post

##### 4.3.3.15.8.1. Sequence Diagram

Figure 125: Lock Post sequence diagram

##### 4.3.3.15.8.2. Screen Design

Figure 126: Lock Post screen design

| No | Field name | Field name Vietnamese | Type | Require | Mandatory | Max-Length | Description |
|---|---|---|---|---|---|---|---|
| 1 | Lock Post | Khóa bài viết | Button | Click | Y | | Click to lock post |

Table 22: Lock Post screen design description

## 4.4. Database

### 4.4.1. Entity Relationship Diagram

Entity Relationship Diagram part 1

Entity Relationship Diagram part 2

### 4.4.2. Entity Description

| No. | Entity | Description |
|---|---|---|
| 1 | User | User is all people who registered and using FAP |
| 2 | Post | A post which user published, contain content, videos, photos and places mention |
| 3 | Video | A video which user attached in a post while creating |
| 4 | Photo | Photo(s) which user attached in a post while creating |
| 5 | Place | A place which user must mention in a post while creating |
| 6 | Room | A group which user created, includes content, plan, members, photo, video and place mention |
| 7 | Message | Chat is message user sends or receives from others |
| 8 | Comment | A comment which user created, is placed in and associated to a post |

#### 4.4.2.1. Relationship

| No. | Relation | Properties | From | To | Description |
|---|---|---|---|---|---|
| 1 | AT | None | Post | Place | A place that a post mentioned to |
| 2 | BELONG_TO | None | Conversation | User | A conversation which was created by an user |
| 3 | COMMENTED | DateCreated activityId | User | Post | A post which user commented in “DateCreated”: created time |
| 4 | CREATE | None | User | Post | A post which was created by an user |
| 5 | CREATE | None | User | Comment | A comment which was created by an user |
| 6 | CREATE | None | User | Message | A message which was created by an user |
| 7 | FRIEND | DateCreated activityId | User | User | Two users are friend, exist in each other’s friend list “DateCreated”: accepted friend request time |
| 8 | HAS | None | Post | Video | A post includes a videos |
| 9 | HAS | None | Post | Photo | A post includes photos |
| 10 | HAS | None | Room | Conversation | A room includes conversation |
| 11 | JOIN | None | User | Room | User join a room<br>Type 0: Admin<br>Type 1: Member<br>Type 2: Request join |
| 12 | LASTEST_COMMENT | None | Post | Comment | The latest comment of a post |
| 13 | LASTEST_MESSAGE | None | Conversation | Message | The latest message of a conversation |

| | | | | | |
|---|---|---|---|---|---|
| 14 | LASTEST_POST | None | User | Post | The latest post user has created |
| 15 | LASTEST_POST | None | Room | Post | The latest post which was created in room |
| 16 | PREV_COMMENT | None | Comment | Comment | Previous comment of a comment |
| 17 | PREV_MESSAGE | None | Message | Message | Previous message of a message |
| 18 | PREV_POST | None | Post | Post | Previous post of a post |
| 19 | VISITED | None | User | Place | A place which user was visited |
| 20 | WISH | None | User | Place | A place which was added int user wish list |

### 4.4.3. Object Description

#### 4.4.3.1. User Object

| No | Field Name | Type | Allow Null | Description |
|---|---|---|---|---|
| 1 | userId | int | No | User's Id |
| 2 | typeId | int | No | User's created type includes: normal, Facebook and Google+ registered |
| 3 | email | String | No | User's email |
| 4 | firstName | String | | User's first name |
| 5 | lastName | String | | User's last name |
| 6 | password | String | No | User's password |
| 7 | confirmPassword | String | No | User retypes password. Must be same as password. |
| 8 | address | String | | User's address |
| 9 | gender | String | | User's gender |
| 10 | phoneNumber | String | | User's phone number |
| 11 | dateOfBirth | String | | User's date of birth |
| 12 | status | String | | User's status |
| 13 | dateJoined | String | No | User's joined date |
| 14 | avatar | String | | User's avatar |

#### 4.4.3.2. Comment Object

| No | Field Name | Type | Allow Null | Description |
|---|---|---|---|---|
| 1 | commentId | int | No | Comment's Id |
| 2 | content | String | No | Comment's content |

| | | | | |
|---|---|---|---|---|
| 3 | dataCreated | String | No | Comment's created date |

#### 4.4.3.3. Conversation Object

| No | Field Name | Type | Allow Null | Description |
|---|---|---|---|---|
| 1 | conversationId | String | No | Conversation's Id |
| 2 | dataCreated | String | No | Conversation's created date |

#### 4.4.3.4. Message Object

| No | Field Name | Type | Allow Null | Description |
|---|---|---|---|---|
| 1 | messageId | int | No | Message's Id |
| 2 | content | String | No | Message's content |
| 3 | DateCreated | String | No | Message's created date |

#### 4.4.3.5. Notification Object

| No | Field Name | Type | Allow Null | Description |
|---|---|---|---|---|
| 1 | lastActivityId | int | No | Notification's Id |
| 2 | activity | String | No | Notification's activity |
| 3 | DateCreated | String | No | Notification's created date |
| 4 | user | user | No | Activity's owner |
| 5 | post | post | No | Activity's location |

#### 4.4.3.6. Post Object

| No | Field Name | Type | Allow Null | Description |
|---|---|---|---|---|
| 1 | postId | int | No | Post's Id |
| 2 | content | String | No | Post's content |
| 3 | DateCreated | String | No | Post's created date |
| 4 | privacy | String | No | Post's privacy |

#### 4.4.3.7. Place Object

| No | Field Name | Type | Allow Null | Description |
|---|---|---|---|---|
| 1 | placeId | int | No | Place's Id |

| | | | | |
|---|---|---|---|---|
| 2 | longitude | decimal | No | Place's longitude |
| 3 | latitude | decimal | No | Place's latitude |
| 4 | name | String | No | Place's name |

#### 4.4.3.8. Plan Object

| No | Field Name | Type | Default | Description |
|---|---|---|---|---|
| 1 | PlanID | int | No | Plan's Id |
| 2 | WorkItem | String | No | Plan's work item |
| 3 | WorkItemDetail | String | No | Detail of plan's work item |
| 4 | LengthInMinute | | No | Plan's length |
| 5 | DatePlanStart | | No | Plan's start date |
| 6 | DatePlanCreated | | No | Plan's created date |
| 7 | PlanType | | No | Plan's type |

#### 4.4.3.9. Photo Object

| No | Field Name | Type | Default | Description |
|---|---|---|---|---|
| 8 | photoId | int | No | Photo's Id |
| 9 | url | String | No | Photo's url |
| 10 | DateCreated | String | No | Photo's created date |

#### 4.4.3.10. Video Object

| No | Field Name | Type | Allow Null | Description |
|---|---|---|---|---|
| 1 | videoId | int | No | Video's Id |
| 2 | path | String | No | Video's URL |
| 3 | DateCreated | String | No | Video's created date |

#### 4.4.3.11. Room Object

| No | Field Name | Type | Allow Null | Description |
|---|---|---|---|---|
| 1 | roomId | int | No | Room's Id |
| 2 | roomName | String | No | Room's name |
| 3 | DateCreated | String | No | Room's created date |

# CHAPTER 5: SOFTWARE TESTING

## 5.1. Introduction

### 5.1.1. Purpose

The primary purpose of this report is to detect software failures so that defects maybe discovered and correct to ensure that our project is thoroughly tested and resulting in a successful implementation of a new social website we are developing. It contains the following sections:

- Scope of Testing
- Testing Tool and Environment
- Resources and responsibilities
- Test strategy
  - Test approach
  - Test stages
- Test schedule
- Feature to be tested
- Feature not to be tested
- Defect log
- Test report

### 5.1.2. Scope of testing

FAP will be tested by 5 phases:

**Phase 1: Unit testing**

- Unit testing will be done by developers
- Developers use White Box Testing technique to do
- When executing unit testing, if any bugs are found, developers have to log bug on "Defect Log Management" file and fix it until it is correct.

Rule for filling test result:

| | |
|---|---|
| Test result pass | Pass |
| Test result fail | Fail |
| Do not test | Untested |
| Cannot test | N/A (Not available) |

**Phase 2: Component testing**

- After finishing unit testing, component testing will be performed by testers.
- Material are component test cases, low- level design
- Testers user Black Box Testing technique to do
- When executing component testing, if any bugs are found, testers have to log on "Defect Log Management" file and assign to developer fix it and redo this process until it is correct.

Rule for filling test result:

| | |
|---|---|
| Test result pass | Pass |
| Test result fail | Fail |
| Do not test | Untested |
| Cannot test | N/A (Not available) |

**Phase 3: Integration testing**

- After finishing component testing, integration testing will be performed by testers.
- Material are integration test cases, high- level design and test tools.
- Do test by flow of functions and items which have relation.
- When executing integration testing, if any bugs are found, testers have to log on "Defect Log Management" file and assign to developer fix it and redo this process until it is correct.

Rule for filling test result:

| | |
|---|---|
| Test result pass | Pass |
| Test result fail | Fail |
| Do not test | Untested |
| Cannot test | N/A (Not available) |

**Phase 4: System testing**

- After finishing integration testing and developers collect all functions and items, testers will be performed system testing, it means doing test whole system.
- Material area system test case, SRS
- If any bugs are found, developers have to fix and testers will verify them. System test is ended only when test cases are passed and no bug is found.

Rule for filling test result:

| | |
|---|---|
| Test result pass | Pass |
| Test result fail | Fail |
| Do not test | Untested |
| Cannot test | N/A (Not available) |

**Phase 5: Acceptance testing**

- Base on customer/user requirement specification, system is tested again, for ensure there is not lacking or mistake any requirement.
- If there is any problem, developers have to fix/update and tester will verify them.
- Acceptance testing is ended only when whole system met requirement specification.

## 5.2. Test plan

### 5.2.1. Test environment

#### 5.2.1.1. Hardware

| Name | Purpose | Detail |
|---|---|---|
| Laptop Asus | Device for create and execute test | Window 7 Ultimate Core i5 Ram 2GB |
| Laptop Dell | Device for create and execute test | Window 7 Ultimate Core i5 Ram 4GB |

**Table 23:** Hardware

#### 5.2.1.2.Software

| Name | Purpose | Detail |
|---|---|---|
| Test Plan | Managing test | Microsoft Word 2013, 2010 |
| Test case | Executing test | Microsoft Excel 2013, 2010 |
| Test report, Test checklist | Tracking test | Microsoft Excel 2013, 2010 |
| Chrome | Executing test | Chrome 40.0 |

**Table 24:** Software

#### 5.2.1.3.Infrastructure

| Name | Purpose | Detail | Vendor/In-house | Version |
|---|---|---|---|---|
| FAP_Defect Log Management_v1.0_EN | Tracking bug during testing time | Microsoft Excel 2013, 2010 | FPT-University | v1.0 |
| Test Effort | Effort execute test | Microsoft Excel 2013, 2010 | FPT-University | v1.0 |

**Table 25:** Infrastructure

### 5.2.2. Human resource

| Worker/Doer | Role | Specific Responsibilities/Comments |
|---|---|---|
| ThuyLM | Test Leader | Manage Test Resource and assign test tasks.<br>Create and review Test Plan.<br>Create and review Test Case.<br>Execute test.<br>Create and review Test Report |
| HieuTM<br>LucPT | Tester | Create and review Test Case.<br>Execute test.<br>Create Test view points<br>Create and review Test Report |

**Table 26:** Human resource

### 5.2.3. Test Strategy

#### 5.2.3.1. Test Model

FAP Project follows V-Model process:

Figure 127

Testing progress is divided to 5 phases include: Unit test, Component test, Integration test, System test and Acceptance test

- Unit test:
  - Unit testing is used to verify a single minimal unit of source code. The purpose of unit testing is to isolate the smallest testable parts of FAP and verify that they function properly in isolation.
  - Unit testing is the first level of testing and is perform prior to component testing
  - Unit testing will be done by developer.
- Component test:
  - Component testing is used to validate a combined many minimal units of source code.
  - Component testing is performed after unit testing and before integration testing
  - Component testing will be done by tester
- Integration test:
  - Integration testing is a level of the software testing process where individual units or component are combined and tested as a group.
  - The purpose is to expose faults in the interaction between integrated units.
  - Integration testing is performed after component testing
  - Integration testing will be done by tester
  - There are two methods of doing integration testing: Bottom-up Integration testing and Top Down Integration testing:

| No | Integration Testing Method |
|---|---|
| 1 | Bottom-up integration<br>This testing begins with unit testing, followed by tests of progressively higher-level combinations of units called modules. |
| 2 | Top- Down integration<br>This testing, the highest-level modules are tested first and progressively lower-level modules are tested after that |

**Table 27:** Integration test

- System test:
  - System Testing is a level of the software testing process where a complete, integrated system is tested
  - The purpose is to evaluate the system's compliance with the specified requirements
  - System testing is performed after integration testing
  - System testing will be done by tester
- Acceptance test:
  - Acceptance testing is performed after system testing
  - Acceptance testing will be performed by the test leader and team leader.
  - The acceptance test will be done for a period of 1 weeks after completion of the system test process

### 5.2.3.2. Test type

#### 5.2.3.2.1. Function Testing

- Functional testing is a type of software testing whereby the system is tested against the functional requirements/specifications.
- Functions are tested by feeding them input and examining the output. Functional testing ensure that the requirements are properly satisfied by the website. This type of testing is not concerned with how processing occurs, but rather, with the results of processing.
- During functional testing, Black Box Testing technique is used in which the internal logic of the system being tested is not known to the tester.

| | |
|---|---|
| **Test Objective:** | The type of this test is to ensure proper target-of-test functionality, including user interaction, all function defined in specification document implemented correctly. |
| **Technique:** | Executing each use case, use-case flow, or function, using valid and invalid data, to verify the following:<br>- The expected results occur when valid data is used.<br>- The appropriate error or warning messages are displayed when invalid data is used.<br>- Each business rule is properly applied. |
| **Completion Criteria:** | - All planned tests have been executed.<br>- All identified defects have been addressed and closed. |
| **Special Considerations:** | Testing may be stopped when<br>Time runs out<br>A certain number of defects found<br>Test coverage > 97%<br>Stop when testing becomes unproductive |

**Table 28:** Function Testing

#### 5.2.3.2.2. User Interface Testing

GUI testing is the process of ensuring proper functionality of the GUI for a given web and making sure it conforms to its written specifications.
GUI testing evaluates design elements such as layout, colors, fonts, font sizes, labels, text boxes, text formatting, captions, buttons, lists, icons, links, content and more.

| | |
|---|---|
| **Test Objective:** | Verify the following:<br>- Navigation through the target-of-test properly reflects business functions and requirements, including window-to-window, field-to-field, and use of access methods (tab keys, mouse movements, accelerator keys)<br>- Window objects and characteristics, such as menus, size, position, state, and focus conform to standards. |
| **Technique:** | Create or modify tests for each window to verify proper navigation and object states for each application window and objects. |
| **Completion Criteria:** | Each window successfully verified to remain consistent with benchmark version or within acceptable standard |
| **Special Considerations:** | Not all properties for custom and third party objects can be accessed. |

**Table 29:** GUI Testing

#### 5.2.3.2.3. Data and Database Integrity Testing

The databases and the database processes should be tested as a subsystem within the Project. These subsystems should be tested without the target-of-test's User Interface as the interface to the data. Additional research into the Database Management System (DBMS) needs to be performed to identify the tools and techniques that may exist to support the testing identified below.

| | |
|---|---|
| **Test Objective:** | Ensure database access methods and processes function properly and without data corruption. |
| **Technique:** | - Invoke each database access method and process, seeding each with valid and invalid data or requests for data.<br>- Inspect the database to ensure the data has been populated as intended, all database events occurred properly, or review the returned data to ensure that the correct data was retrieved for the correct reasons. |
| **Completion Criteria:** | All database access methods and processes function as designed and without any data corruption. |
| **Special Considerations:** | - Testing may require a DBMS development environment or drivers to enter or modify data directly in the databases.<br>- Processes should be invoked manually.<br>- Small or minimally sized databases (limited number of records) should be used to increase the visibility of any non-acceptable events. |

**Table 30:** Data and Data Integrity Testing

### 5.2.3.3. Test stages

Clearly state the stage in which the test will be executed. Identified below are the stages in which common test are executed

| Type of Tests | Stage of Test | | | |
|---|---|---|---|---|
| | **Unit** | **Component** | **Integration** | **System** |
| Function Testing | X | X | X | X |
| User Interface Testing | | X | X | |

#### 5.2.3.4. Test schedule

| Milestone Task | Effort (pd) | Start Date | End Date |
|---|---|---|---|
| Create Test Plan | 6 | 29/05/2015 | 02/06/2015 |
| Review & Update Test Plan | 2 | 03/06/2015 | 03/06/2015 |
| Create Component Test case | 12 | 04/06/2015 | 11/06/2015 |
| Review & Update Component Test Case | 2 | 12/06/2015 | 13/06/2015 |
| Create Integration Test case | 2 | 03/07/2015 | 09/07/2015 |
| Review & Update Integration Test Case | 2 | 14/07/2015 | 16/07/2015 |
| Create System Test case | 6 | 17/07/2015 | 21/07/2015 |
| Review & Update System Test Case | 2 | 22/07/2015 | 23/07/2015 |
| Execute Component test phase 1 | 1 | 31/07/2015 | 03/08/2015 |
| Execute Component test phase 2 | 1 | 12/08/2015 | 13/08/2015 |
| Execute Integration test phase 1 | 2 | 04/08/2015 | 05/08/2015 |
| Execute Integration test phase 2 | 2 | 14/08/2015 | 17/082015 |
| Execute System test phase 1 | 4 | 06/08/2015 | 07/08/2015 |
| Execute System test phase 2 | 4 | 18/08/2015 | 19/08/2015 |

#### 5.2.3.5. Deliverables

| No | Deliverables | Responsibilities | Delivered Date |
|---|---|---|---|
| 1 | Test Plan | Tester | 03/06/2015 |
| 2 | Component Test case | Tester | 15/06/2015 |
| 3 | Integration Test case | Tester | 16/07/2015 |
| 4 | System Test case | Tester | 23/07/2015 |
| 5 | Defect Log Management | All members | 24/08/2015 |
| 6 | Test report | PM | 24/08/2015 |

### 5.2.4. Features to be tested

| Components | | Description |
|---|---|---|
| Group | Function | |
| User | Search user | Tìm kiếm tên người dùng |
| | Search place | Tìm kiếm tên địa điểm |
| | Search room | Tìm kiếm tên phòng |
| | Basic guide | Hướng dẫn sử dụng cơ bản hệ thống FAP |
| | Search question | Người dùng có thể tìm kiếm hướng dẫn sử dụng qua các câu hỏi thông thường |
| | Suggest place | Gợi ý những địa điểm nằm trong xu hướng mới nhất trên FAP |

| | | |
|---|---|---|
| | Suggest friend | Gợi ý kết bạn với những người dùng có nhiều bạn chung/thông tin chung |
| | Look around | Gợi ý những bài viết được chú ý nhất quanh địa điểm hiện tại của người dùng |
| | Display user's personal page | Hiển thị các bài viết và ảnh của người dùng |
| | Display post list | Hiển thị các bài viết của bạn bè và các gợi ý cho các địa điểm/hoạt động v.v… |
| | View place | Hiển thị các bài viết liên quan đến một địa điểm |
| | Display post details | Hiển thị chi tiết một bài post (bao gồm cả video, ảnh) |
| | Display photo list | Hiển thị danh sách tất cả các ảnh của người dùng |
| | Display video list | Hiển thị danh sách tất cả các video của người dùng |
| | Display place list | Hiển thị danh sách tất cả các place của người dùng |
| | Display notifications | Hiển thị thông báo mới |
| | Add post | Thêm bài viết mới |
| | Edit post | Chỉnh sửa bài viết đã tồn tại |
| | Delete post | Xóa bài viết đã tồn tại và tất cả những nội dung liên quan |
| | Share post | Chia sẻ một bài viết của một người dùng khác |
| | Add comment | Thêm một bình luận vào bài đăng hoặc ảnh |
| | Edit comment | Chỉnh sửa một bình luận |
| | Delete comment | Xóa một bình luận |
| | Like/ Unlike | Thích/bỏ thích một bài đăng |
| | Dislike/ Un-dislike | Không thích/bỏ không thích một bài đăng |
| | Add to wishlist | Thêm 1 địa điểm vào danh sách mong muốn đến |
| | Remove from wishlist | Xóa 1 địa điểm khỏi danh sách mong muốn đến |
| | Report a post | Báo cáo một bài đăng có nội dung vi phạm tới quản trị viên |

| | | |
|---|---|---|
| | Report an user | Báo cáo một người dùng có hành vi vi phạm tới quản trị viên |
| | Chat with others | Tán gẫu với người dùng khác |
| | Display message | Hiển thị message của người khác đến người dùng |
| | Add friend | Kết bạn với thành viên khác |
| | Unfriend | Hủy kết bạn với một thành viên |
| | Tag friend | Tag bạn bè vào bài đăng/ảnh |
| | Join room | Tham gia vào một phòng |
| | Leave room | Thoát khỏi một phòng đã tham gia |
| | Create room | Tạo một phòng |
| | Edit room's information | Chỉnh sửa thông tin một phòng đã tạo |
| | Add event | Thêm một sự kiện vào lịch |
| | Edit event | Sửa nội dung sự kiện |
| | Delete event | Xóa một sự kiện |
| | Add task | Thêm một công việc |
| | Edit task | Sửa nội dung công việc |
| | Delete task | Xóa một công việc |
| | View estimation budget | Xem bản ước lượng tài chính |
| | Add estimation item | Thêm ước lượng tài chính |
| | Export estimation | Xuất bản ước lượng tài chính ra file .pdf, .excel |
| | Search estimation item | Tìm kiếm bản ước lượng tài chính |
| | Approve request | Chỉnh sửa kế hoạch/lịch trình cho một chuyến đi trong phòng |
| | Add member | Thêm thành viên mới vào phòng |
| | Remove member | Mời một thành viên ra khỏi phòng |
| | Chat | Tán gẫu với thành viên phòng |
| | Login by social network's account | Đăng nhập bằng tài khoản Facebook/Google |
| | Login by registered account | Đăng nhập bằng tài khoản được đăng ký trên FAP |

| | | |
|---|---|---|
| | Logout | Đăng xuất |
| | Register | Đăng ký thành viên để sử dụng tất cả các chức năng của FAP |
| | Edit Profile | Chỉnh sửa thông tin cá nhân |
| | Forgot Password | Yêu cầu hệ thống giúp đỡ khi quên mật khẩu |
| Admin | Admin login | Quản trị viên đăng nhập |
| | Admin logout | Quản trị viên đăng xuất |
| | Lock user's account | Khóa tài khoản của người dùng vi phạm |
| | Unlock user's account | Mở khóa tài khoản người dùng |
| | View all user | Hiển thị danh sách tất cả người dùng |
| | Statistics | Thống kê các thông tin về trang web |
| | Send warning | Gửi cảnh báo đến người dùng |
| | Review user | Kiểm tra người dùng bị báo cáo vi phạm |
| | Review post | Kiểm tra một bài post bị báo cáo vi phạm |
| | Hide post | Xóa một bài post có nội dung vi phạm |

## 5.3. Test case

Refer to:

- Unit Test
- FAP_User_ComponentTestCase_v1.0.xlsx
- FAP_Admin_ComponentTestCase_v1.0.xlsx
- FAP_Integration Test Case_v1.1_EN.xlsx
- FAP_System Test Case_v1.1_EN.xlsx

## 5.4. Test report

### 5.4.1. System test case report

| Client | Test Case | Pass | Fail | Not Available | Number of Test Case |
|---|---|---|---|---|---|
| Guest | Register | 19 | 0 | 0 | 19 |
| | Total | | 0 | 0 | 19 |
| Registered User | Search | 7 | 0 | 0 | 7 |
| | Send question | 2 | 0 | 0 | 2 |
| | Basic guide | 1 | 0 | 0 | 1 |
| | Search question | 6 | 0 | 0 | 6 |
| | Suggest place | 1 | 0 | 0 | 1 |
| | Suggest friend | 1 | 0 | 0 | 1 |
| | Look around | 1 | 0 | 0 | 1 |
| | Display personal page | 4 | 0 | 0 | 4 |
| | Display post list | 17 | 0 | 0 | 17 |
| | View place | 1 | 0 | 0 | 1 |
| | Display post details | 1 | 0 | 0 | 1 |
| | Display photo list | 1 | 0 | 0 | 1 |
| | Display video list | 1 | 0 | 0 | 1 |
| | Display place list | 1 | 0 | 0 | 1 |
| | Display notifications | 1 | 0 | 0 | 1 |
| | Add post | 26 | 0 | 0 | 26 |
| | Edit post | 12 | 0 | 0 | 12 |
| | Delete post | 4 | 0 | 0 | 4 |
| | Add to wishlist | 5 | 0 | 0 | 5 |
| | Remove from wishlist | 1 | 0 | 0 | 1 |
| | Share post | 9 | 0 | 0 | 9 |
| | Add comment | 16 | 0 | 0 | 16 |
| | Edit comment | 9 | 0 | 0 | 9 |
| | Delete comment | 4 | 0 | 0 | 4 |
| | Like/ Unlike | 11 | 0 | 0 | 11 |
| | Dislike/ Un-dislike | 7 | 0 | 0 | 7 |
| | Report a post | 9 | 0 | 0 | 9 |
| | Report an user | 9 | 0 | 0 | 9 |
| | Chat with others | 8 | 0 | 0 | 8 |
| | Display message | 2 | 0 | 0 | 2 |
| | Add friend | 8 | 0 | 0 | 8 |
| | Unfriend | 2 | 0 | 0 | 2 |
| | Tag friend | 2 | 0 | 0 | 2 |
| | Join room | 3 | 0 | 0 | 3 |
| | Leave room | 1 | 0 | 0 | 1 |
| | Create room | 9 | 0 | 0 | 9 |
| | Edit room's information | 3 | 0 | 0 | 3 |
| | Add event | 4 | 0 | 0 | 4 |
| | Edit event | 5 | 0 | 0 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| | Delete event | 2 | 0 | 0 | 2 |
| | Add task | 4 | 0 | 0 | 4 |
| | Edit task | 5 | 0 | 0 | 5 |
| | Delete task | 2 | 0 | 0 | 2 |
| | Approve request | 3 | 0 | 0 | 3 |
| | Add member | 2 | 0 | 0 | 2 |
| | Remove member | 1 | 0 | 0 | 1 |
| | Chat | 8 | 0 | 0 | 8 |
| | Login | 13 | 0 | 0 | 13 |
| | Logout | 3 | 0 | 0 | 3 |
| | Register | 19 | 0 | 0 | 19 |
| | Edit Profile | 22 | 0 | 0 | 22 |
| | Forgot Password | 9 | 0 | 0 | 9 |
| | Total | 289 | 0 | 0 | 289 |
| Admin | Admin login | 13 | 0 | 0 | 13 |
| | Admin logout | 1 | 0 | 0 | 1 |
| | Lock user's account | 2 | 0 | 0 | 2 |
| | Unlock user's account | 2 | 0 | 0 | 2 |
| | View all user | 1 | 0 | 0 | 1 |
| | Statistics | 1 | 0 | 0 | 1 |
| | Send warning | 2 | 0 | 0 | 2 |
| | Review user | 2 | 0 | 0 | 2 |
| | Review post | 2 | 0 | 0 | 2 |
| | Lock and hide post | 3 | 0 | 0 | 3 |
| | Total | 29 | 0 | 0 | 29 |
| Total of Test Case | | 337 | 0 | 0 | 337 |

### 5.4.2. Test report

| **Phase** | **Stage 1** | | **Stage 2** | | **Stage 3** | | **Final** |
|---|---|---|---|---|---|---|---|
| | Pass | Fail | Pass | Fail | Pass | Fail | |
| **Unit Test** | 144 | 0 | 144 | 0 | 144 | 0 | **144** |
| **Component Test** | 145 | 0 | 145 | 0 | 145 | 0 | **145** |
| **Integration Test** | 200 | 7 | 200 | 0 | 200 | 0 | **200** |
| **System Test** | 284 | 53 | 318 | 19 | 337 | 0 | **337** |
| **Total** | 673 | 70 | 807 | 19 | 826 | 0 | **826** |

# CHAPTER 6: USER MANUAL

## 6.1. Deployment Guidelines

### 6.1.1. Environment

Following are the software required to start the FAP system:

- Browsers: Firefox 40, Chrome 40 or higher.
- Database: Neo4j 2.2.3 or higher
- .NET Framework 4.5

### 6.1.2. Deployment

#### 6.1.2.1. Set up Environments

- Web: If users want to use FAP system on personal computer, users need to install Chrome 30/Firefox 20 or higher version and Neo4j to create and store database.

#### 6.1.2.2. Set up Neo4j for Windows

Download the latest stable version of Neo4j for Windows at: http://neo4j.org

## Fly Away Plus

**Step 1:** Run setup file:

**Step 2:** Click Next to Jump to accept agreement step

**Step 3:** Then select the folder to install Neo4j:

**Step 4:** Select the Start Menu Folder for Neo4j

**Step 5:** Wait for the installation step finishes:

**Step 6:** Start Windows of Neo4j Server – Community Version:

**Step 7:** Before start Neo4j Server, you have to change Setting by click 2on Settings button, then click the **Edit…** button for the Database Configuration

**Step 8:** To enable auto indexing Neo4j technique, in the neo4j.properties file we want to enable **Auto-indexing** which is disabled by default.
Simply remove the number sign (#) at the beginning of the following lines:

1. node_auto_indexing=true
2. node_keys_indexable=name,age

Once completed the file should look similar to the following – Close the file to Save and Close the Neo4j Settings

**Step 9:** Click on **Start** and browse to http://localhost:7474

**Step 10:** Ready to explore Neo4j and create graphs.

### 6.1.2.3. Installation IIS Manager

Step 1: On the Start menu, choose Control Panel, and then choose Programs and Features

**Step2:** Under **Programs and Features**, choose **Turn Windows features on or off.**

**Step 3:** In the **Windows features** list, expand **Internet Information Services**, and then expands **World Wide Web Services**.

**Step 4:** Expand **Application Development Features**, and select the following features:

- .NET Extensibility
- ASP.NET
- ISAPI Extensions
- ISAPI Filters

**Step 5:** Expand **Security**, and then select the following features:

- Request Filtering
- Basic Authenticate
- Centralized SSL Certificate Support
- Windows Authentication

**Step 6:** Expand **Common HTTP Features**, and then select the **All** feature.

**Step 7:** under **Internet Information Services**, expand **Web Management Tools**, and then select **All**.

**Step 8:** Choose the **OK** button and then restart computer to complete the installation.

### 6.1.2.4. Installation Web Application

**Step 1:** Preparing package **FlyAwayPlus.rar**. Make sure package is available (incorrupt).

**Step 2:** Copy file **FlyAwayPlus.rar** to folder **C:\inetpub\wwwroot** .

**Step 3:** Extract file FlyAwayPlus.rar, select “Extract here”.

**Step 4:** Open Browser (Chrome or Firefox) and go to link: http://localhost/Home/Index/

http://localhost/Admin/Index/

## 6.2. User guidelines

### 6.2.1. Register account

This is the first page which user will see. From this page the user can go to every page they want.

- Step 1: Open browser and enter to the address bar: http://localhost/Home/Index/
- Step 2: The first page which user will see Welcome page, system displays the Register form
- Step 3: Enter information and click Register Now button

Figure 128: Register account screen

### 6.2.2. Login

To use search sentences function on website, the users do the steps below:

- Step 1: In Welcome page, system display Login form
- Step 2: User enter username and password
- Step 3: Click on Login button
- Step 4: User can choose Login with Facebook or Login with Google

Figure 129: Login

### 6.2.3. View Homepage

This is the first page which user will see after login to FAP system. This page display all user's post, friend's post and all activity on FAP.

From this page user can use all functions that they want

Figure 130: Homepage

### 6.2.4. Personal Activities

User can control their own page by clicking on their avatar and select name to redirect to Personal Page.

In this page, all personal activities in personal page is displayed

Figure 131: Personal Page

### 6.2.5. Edit profile

User can change profile:

- Step 1: Clicking on Profile button and clicking on the pencil button on each section.
- Step 2: Fill in form and save Personal Profile

Figure 132: Edit Profile

### 6.2.6. Friends

- User can view friend list by clicking on Friends section on Personal Page
- User can view all images of them by clicking on Photo section on Personal Page
- User can view all video of them by clicking on Photo section on Personal Page

### 6.2.7. Post

User can quickly create a post:

Step 1: Clicking on Post button on navigator bar, create post panel will be displayed

Figure 133: Create a post

Step 2: Choose a location

Figure 134: Choose a location

Step 3: Choose Photo(s) by click on + button and click Post

Figure 135: Choose photo(s)

Step 3: Or user can choose video by click on + button and click Post

Figure 136: Choose video

- User can edit or delete a post

Figure 137: Edit a post

- User can view a single post by clicking on them

Figure 138: Post details

- User can watch a video on page

Figure 139: Watch video

## Fly Away Plus

- User can comment on single post

Figure 140: Comment

## Fly Away Plus

- And user can share a post to Facebook

Figure 141: Share to Facebook

- User can Like, Unlike, Dislike, Un-dislike a post

Figure 142: Like

### 6.2.8. Wishlist

- User can add a place to their wishlist to remember it and remove from wishlist by clicking on the button on a post

Figure 143: Wishlist

### 6.2.9. Notifications

- User will be inform by notifications on navigator bar when
  1. New like, dislike, comments for post
  2. New friend request

Figure 144: Notification

### 6.2.10. Chat with friends

Figure 145: Chat screen 1

Figure 54: Chat screen 2

### 6.2.11. Look around for places

### 2.3.5.1. Room

- User can search for room on Discover room page:

- Join a room by clicking on a Room thumbnail on Discover Room

- Plan a trips

## Fly Away Plus

- Create an event for trips

- User can create their own room:

- Estimate budget of trip

| No. | Payment | Price | Creator | Payer | Date created |
|---|---|---|---|---|---|
| 1 | Mua vé tàu cho cả nhóm | 1200000 | Duc Filan | Thuy Le | 2015-08-24 |
| 1 | Tiền đặt phòng khách sạn | 1200000 | Duc Filan | Thuy Le | 2015-08-24 |
| 1 | Mua lều | 1200000 | Duc Filan | Thuy Le | 2015-08-24 |
| 1 | Mua đồ ăn | 1200000 | Duc Filan | Thuy Le | 2015-08-24 |
| 1 | Thuê xe máy | 1200000 | Duc Filan | Thuy Le | 2015-08-24 |

- Chat with group of friends

### 6.2.12. Administrator

- Admin login to Admin page to manage system.

- Admin clicks Users tab to view all users in system

- Admin clicks Report Post button to view all post which was reported. Admin can view post to confirm that post violate rule of FAP. If that post violate rule of FAP. Admin can click Lock Post. If it isn't, admin click cancel.

- Admin clicks Report user button to view all people who has been reported. If user violates rule of FAP admin will using Lock User button.

- Admin clicks Statistic button to view all information about number of users, number of report post and number of report user in here.
- Admin click logout and exit out of FAP system