



Capstone Project Report

TripSharing

Group	
Group Members	Hà Văn Thái – SE04801 Nguyễn Văn Phong – SE05051 Trần Văn Phong – SE05048 Lê Xuân Trường – SE04616 Lý Phúc Linh – SE04693
Supervisor	Đào Trọng Duy
Capstone Project Code	TripSharing

Hanoi, May 30th, 2019

Chapter 1: Introduction

1.1 Purpose

This chapter provide an overview of the project include background information, a literature review of existing system and raising a proposal for ideas of improvement.

1.2 Project Information

- Project name: **TripSharing**
- Project code: **TRIPSHARING**
- Project group name: **SWP491_G26**
- Project type: **Web Application**
- Timeline: **From 13th May 2019 to 30th August 2019**

1.3 The People

1.3.1 Supervisors

	Full name	Phone	E-mail	Title
Supervisor	Dao Trong Duy	0983204196	duydt@fe.edu.vn	Lecturer

Table 1-1: Supervisors' information

1.3.2 Team Members

	Full name	Phone	E-mail	Role in Group
1	Hà Văn Thái	0349940158	thaihvse04801@fpt.edu.vn	Leader
2	Nguyễn Văn Phong	0978296187	phongnvse05051@fpt.edu.vn	Member
3	Trần Văn Phong	0987489397	phongtvse05048@fpt.edu.vn	Member
4	Lê Xuân Trường	0964038801	truonglxse04616@fpt.edu.vn	Member
5	Lý Phúc Linh	0362442818	linhlpse04693@fpt.edu.vn	Member

Table 1-2: Team member's information

1.4 Background

Along with the development of technology, tourism demand is getting higher, especially young people. Nowadays, people mostly find information about where they want to go on the internet and social network like Facebook, TripAdvisor, Gody.vn, etc. But many websites only

provide general information about the destination and only focus on advertising and support booking hotel, restaurant, travel tour.... We can find such post on Facebook but it scattered on many pages and there are many posts created for advertising purpose may make people concern about the correctness of the information.

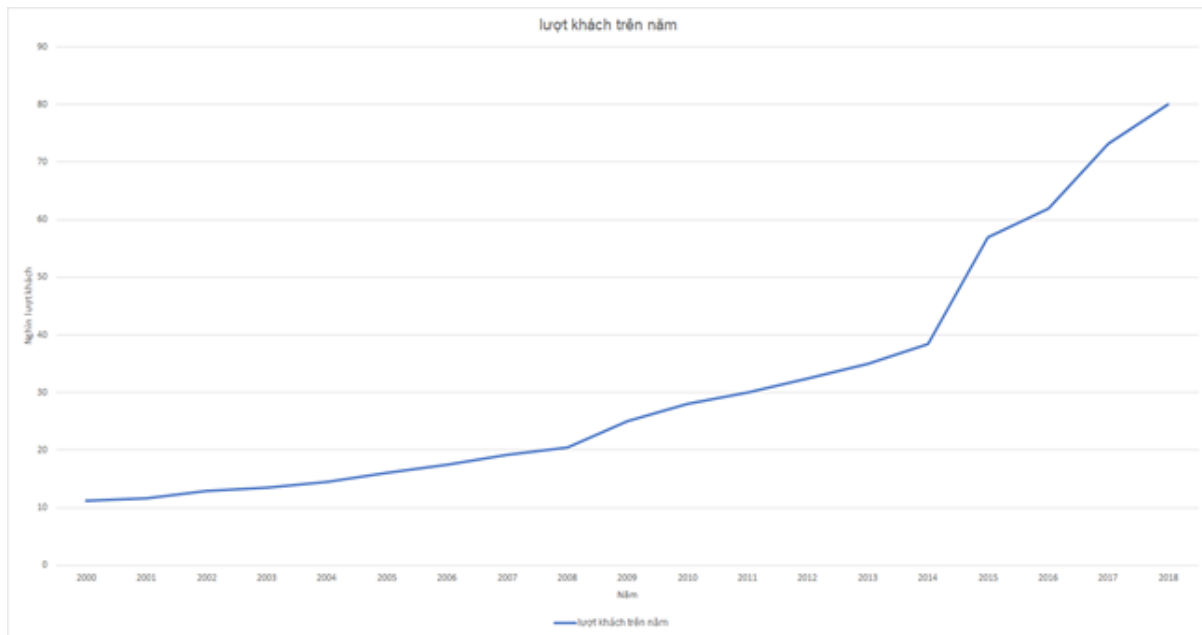


Figure 1-1: Number of local tourists reach 80 million in 2018¹

Among young people, tourism for exploring and experience is becoming a new trend, and people usually want to share their experience online:

“Khảo sát về xu hướng du lịch toàn cầu trong năm 2018 do Visa thực hiện với sự tham gia của hơn 15.000 người đến từ 27 quốc gia, trong đó có Việt Nam đã chỉ ra rằng khách du lịch hiện nay thường mong muốn đạt được cả hai mục tiêu “khám phá” và “tận hưởng” trong những chuyến đi của mình. Kết quả khảo sát đã đưa ra ba nhóm động lực chính cho những chuyến du lịch là: gắn kết gia đình, bạn bè (33%), thư giãn (11%) và trải nghiệm (10%). Ranh giới giữa những động lực thúc đẩy người dân đi du lịch đang dần bị xóa nhòa. Những người du lịch vì cảm giác “tận hưởng” thường đi để gắn kết với bạn bè, người thân hay đơn giản là tận hưởng thời gian nghỉ dưỡng của riêng mình. Riêng những du khách đi du lịch để “khám phá” có xu hướng trải nghiệm nhiều hơn với các nền văn hóa mới và thăm quan những điểm đến hấp dẫn.

¹ <http://vietnamtourism.gov.vn/index.php/items/13460>

63% người được hỏi trả lời rằng họ đi du lịch vì cả hai lý do này, tỉ lệ tương ứng tại Việt Nam là 72%. ”²



Figure 1-2: Sharing travel information on social media³

1.4.1 The exist sharing travel experience systems are focus on famous travel destination and booking services

Our study shows that travel guides, travel destinations reviews websites are focusing too much on advertising and booking for travel destination than the travel experience of users. Example on Tripadvisor.com and Toidi.net are 2 big websites, but they don't provide enough interaction between users, Toidi.net is more like a blog then the posts are subjective, on Tripadvisor.com people can post photo or review for a destination but there is no comment

² <http://flcholiday.com/tin-tuc/xu-huong-du-lich-2018-kham-pha-va-tan-huong-cuoc-song-117.htm>

³ <http://www.younetmedia.com/insights/infographic-xu-huong-du-lich-cua-gioi-tre-qua-phan-tich-tren-social-media.html>

section for other to interact with each other. The creation of this project is aiming to improve the lack of interaction between users and focus more on sharing experiences through the trip.

1.4.2 TripAdvisor's Advantages and Disadvantages

1.4.2.1 TripAdvisor's Advantages

- They already have a booking system.

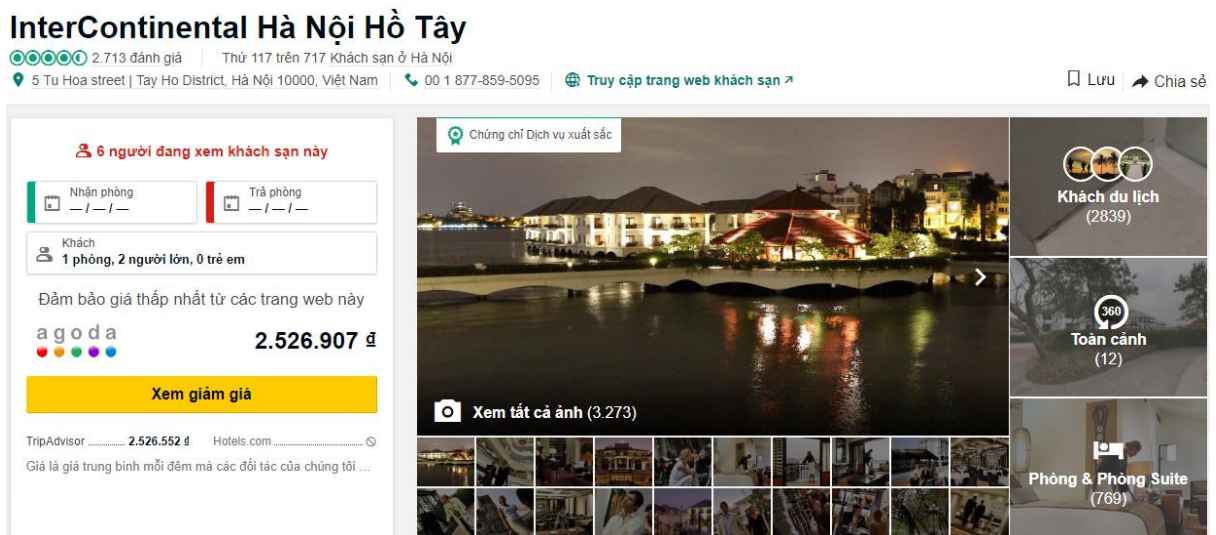


Figure 1-3: Booking function on TripAdvisor

- User can create a virtual trip

Tạo một chuyến đi

Tên chuyến đi

Một vòng Hạ Long

16 / 50 ký tự

Chọn những người có thể thấy Chuyến đi của bạn

☐ **Riêng tư**
Chỉ hiển thị với bạn và mọi bạn bè được bạn chia sẻ Chuyến đi

☒ **Công khai**
Hiển thị với mọi khách du lịch trên TripAdvisor, bao gồm mọi bạn bè được bạn chia sẻ Chuyến đi

Tạo

Figure 1-4: Creating a virtual trip function on TripAdvisor

1.4.2.2 TripAdvisor's Disadvantages

- User can't comment on other's posts or photos so they are lack of interaction between users.
- Don't support users for writing a long sharing experience post, like blog.

1.5 Proposal of System

1.5.1 Our Proposal System

After reviewing all properties of the existing systems as well as the travel trend of young people in Viet Nam, we have come to decision to develop a travel sharing system which allows

travelers to share their travel experiences by images, articles or blogs. It will make easier for other travelers to prepare their plans. The purpose of the system is creating a travel community to exchange information. The system is going to encourage travelers to share their experiences by recording their contributions as points and rank all contributors. If contributors have a high rank, they will receive many incentives from the system.

The system does not focus on booking services. A common trip includes three stages. The first stage is planning, the second is experiencing, and the last is sharing. Our system is going to focus on the sharing stage.

1.5.1.1 System Functions

- ❖ Allow users to register/sign in with email address.
- ❖ Allow users to create/edit their own profile.
- ❖ Allow users to search travel destination.
- ❖ Allow users to choose interesting topic.
- ❖ Allow users to create/edit/delete their post.
- ❖ Allow users to like/unlike a post.
- ❖ Allow users to share a post to social media.
- ❖ Allow users to bookmark a post.
- ❖ Allow users to comment to a post.
- ❖ Allow users to report a post/comment.
- ❖ Allow users to create/edit/delete their virtual trips.
- ❖ Allow users to follow/unfollow other users.
- ❖ Allow users to block/unblock other users.
- ❖ Allow users to create/edit/delete their finding companion posts.
- ❖ Allow users to join a finding companion group.
- ❖ Allow users to send/receive messages to other users.
- ❖ Allow Administrators to manage users' account, users' posts, users' comments.

1.5.1.2 The TripSharing User Process

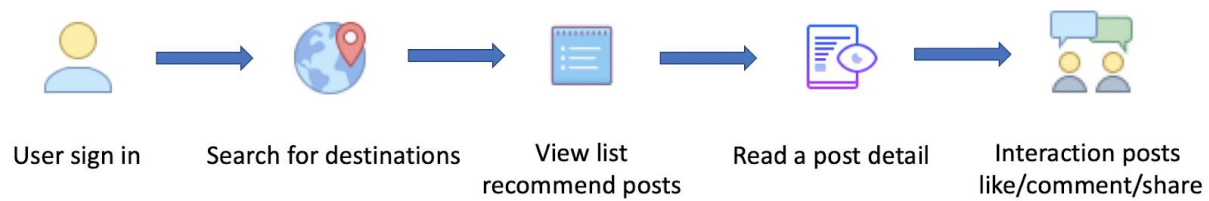


Figure 2-1: User reads and interacts with a post

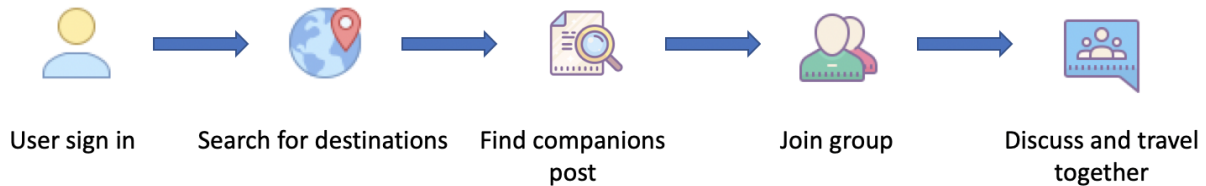


Figure 1-2: Users use Finding Companions function

1.5.1.3 Out of Scope Functions

- ❖ Manage group of people who use Finding Companions function.
- ❖ Manage travel places obtained from Google Map.

1.5.1.4 Special Approaches

- ❖ Using Microservices architecture for application's deployment.
- ❖ Using Docker to compose the project into containers to deploy on Google Cloud.

- ❖ Using Google Cloud Kubernetes Engine as deployment host for scaling and load balancing.
- ❖ Use Git as source code version control, hosted on Github.
- ❖ Having a separate background service to handle heavy tasks.
- ❖ Using Google Pub Sub for communicating between microservices.
- ❖ Using Google Cloud Storage for images.
- ❖ For web frontend system:
 - Using Angular 7 for web component rendering.
 - Using Angular Material to create all web form components.

Chapter 2: Project plan

2.1 Purpose

This chapter provides an overview of the project plan includes project organization and project management plan

2.2 Project Organization

2.2.1 Software Development Process



Figure 2-1: Iterative and Incremental Software Development Process⁴

TripSharing project uses the Iterative and Incremental Software Process Model as show in the figure above, which describes the overall lifecycle process.

The Iterative and Incremental Software Process Model is mostly used when the scope of the project is big, the major requirements are defined clearly, some more details will be added later. By using this process model, we break down the developing system tasks into series of smaller tasks which will complete separately, evaluated, and subsequently re-worked until the system perform adequately. In addition, the iterative model is easier than other models when

⁴ <https://www.topsinfosolutions.com/methodology/>

the issues are discovered. The feedbacks are immediately given, and solutions are proposed right on the spot.

2.2.2 Role and Responsibilities

Role	Responsibilities
Project Manager	Planning, developing schedules, coordinating communication, generally responsible for keeping the team's focus on the main goal
Business Analysis Leader	Responsible for managing Business Analyst team and working with them in Analyzing an organization or business domain.
Business Analyst	Analyzes an organization or business domain and documents its business or processes or systems.
Design Leader	Responsible for managing Design team and working with them to create a best user interface design for our product.
Designer	Involve to design product's user interface.
Technical Leader	Responsible for choosing and deciding what technologies should be used, as well as for overseeing the work being done by other developers.
Developer	Involve to code the product and review code of other developers.
Test Leader	Responsible for choosing and deciding what testing tools and techniques should be used, as well as keep the progress of test team on track.
Tester	Involve testing the product.

Table 2-1: Role and Responsibilities

2.2.3 Organization Structure

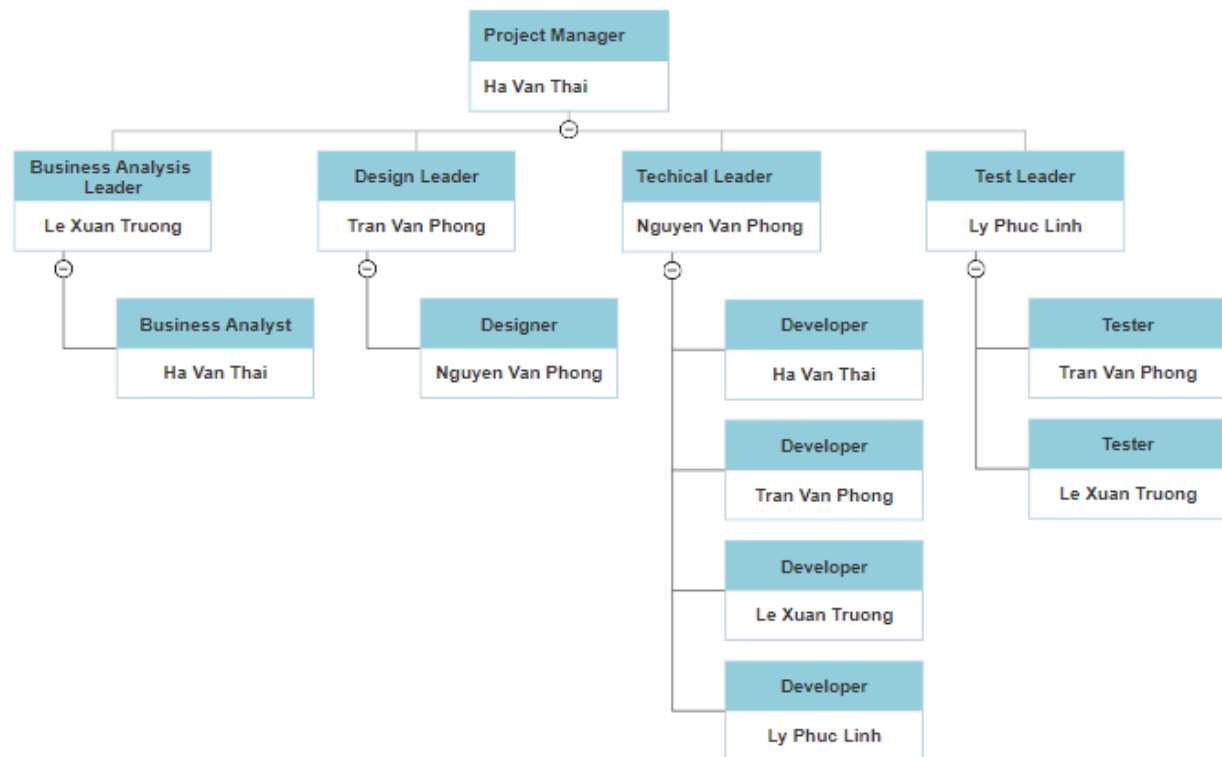


Figure 2-2: Organization Structure

2.2.4 Project Team Member

Team Member	Role
Ha Van Thai	Project manager, business analyst, developer
Nguyen Van Phong	Technical leader, designer

Tran Van Phong	Design leader, developer, tester
Le Xuan Truong	Business analysis leader, developer, tester
Ly Phuc Linh	Test leader, developer

Table 2-2: Project Team Member

2.2.5 Tools and Techniques

Programing Languages:	C#, JavaScript
Frameworks:	Angular 7, Angular material
Software Architecture:	Microservices
Version control:	Git
IDEs / Editors:	Visual studio, Visual studio code
UML Tools:	Astah UML
Web Server:	Nginx
DBMS:	MongoDB
Deployment Server:	Google cloud
Project Management Tools:	Microsoft Project 2013
Process Model:	Iterative and Incremental Software Process Model
Development Process:	Behavior-driven development, Test-driven development, Continuous integration, Continuous delivery
CI, CD Tools:	Travis-CI

Table 2-3: Tools and Techniques

2.3 Project Management Plan

2.3.1 Tasks

2.3.2 Meeting Minutes

All meeting minutes will be written following this template:

Meeting/Project Name:	TripSharing		
Date of Meeting:	06/06/2019	Time: (Type)	3 hours (face-to-face)
Meeting Called by:	ThaiHV	Location:	HB206L
Note Taker:	PhongTV	Time Keeper:	PhongNV
1. Meeting Objective			
-			
2. Attendance			
Name	Role	Email	Phone
ThaiHV	Project Manager Developer Business Analyst	thaihvse048010@fpt.edu.vn	0349940158
PhongNV	Technical Leader Designer	phongnvse05051@fpt.edu.vn	0978296187
PhongTV	Design Leader Developer Tester	phongtvse05048@fpt.edu.vn	0987489397
TruongLX	Business Analysis Leader Developer Tester	truonglxse04616@fpt.edu.vn	0964038801
LinhLP	Test Leader Developer	linhlpse04693@fpt.edu.vn	0362442818
3. Content			

-
4. Note
-

Table 2-4: Meeting Minutes

2.3.3 Code Conventions

We strictly follow Google JavaScript Style Guide and Microsoft C# Programing Guide as the coding convention for the project. Specific convention rules can be found on these pages.

JavaScript: <https://google.github.io/styleguide/jsguide.html>

C#: <https://docs.microsoft.com/en-us/dotnet/csharp/programming-guide/inside-a-program/coding-conventions>

Google JavaScript Style Guide

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4.5 Line-wrapping	7.11 Visibility annotations
4.6 Whitespace	8 Policies
4.7 Grouping parentheses: recommended	8.1 Issues unspecified by Google Style: Be Consistent!
4.8 Comments	8.2 Compiler warnings
5 Language features	8.3 Deprecation
5.1 Local variable declarations	8.4 Code not in Google Style
5.2 Array literals	8.5 Local style rules
5.3 Object literals	8.6 Generated code: mostly exempt
5.4 Classes	9 Appendices
5.5 Functions	9.1 JSDoc tag reference
5.6 String literals	9.2 Commonly misunderstood style rules
5.7 Number literals	9.3 Style-related tools
5.8 Control structures	9.4 Exceptions for legacy platforms

Figure 2-3: Google JavaScript Style Guide

2.3.4 Risk Management Plan

No	Name	Prevention	Correction	Status
R1	Miscommunication	Any problem raised has to be documented or filed. Team members should express their opinion clearly.	Miscommunication must be resolved early.	Closed
R2	New technology	Choosing technology carefully and based on team member's qualification. All member must develop self-learning skill.	The technology choice should be consider carefully, well explained and training for member if necessary.	Closed
R3	Member idea conflict	Member is free to express their idea and discuss with others to find the most suitable solution.	Analyze any idea carefully and base on reality and possibility, solve conflict as soon as possible.	Closed
R4	Business problem	Understand business of project, consider if its fit applicability, reality and technology possibility. Ask supervisor if needed.	Project business must be tight and realistic.	Closed
R5	Illness or absence of team members	Member must notice to the team about absence period and the plan of how to keep up with the work process.	Ensure that the absence of a member won't affect others and always have plans to deal with this problem.	Closed
R6	Resources were lost or deleted	Team must have several online and offline back up copy of project.	At least 3 back up way such as Github, Google Drive, etc. and offline	Closed

			copy on each member computer.	
R7	Illness or absence of team members	Member must notice to the team about absence period and the plan of how to keep up with the work process.	Ensure that the absence of a member won't affect others and always have plans to deal with this problem.	Closed

Table 2-5: Risk Management Plan

2.3.5 Communication Plan

Weekly meeting schedule: We follow the Iterative and Incremental Process Model, and we separate the project into two main team, back-end API team and front-end web app team. Each team will do the tasks the task assigned to team members by the Team Leader and depending on difficulty the Technical Leader will assign deadlines for each task. We have a meeting every Thursday to update all team members about what has been done during last week.

Daily meeting schedule: Each sub team has one development team with different schedule and deadlines. Before the daily meetings, each member will be telling:

- What he has completed.
- What he is working on.
- When he will finish.
- What issues he is encountering, or if he needs assistance.
- What he will be doing after finishing the task.

Unscheduled meeting: Assuming someone has encountered a serious problem that he wants to solve immediately, we will have a meeting via some online channel: Skype, or Phone. Face to face meeting in any emergency cases.

Communication channel: Our main communication channel is Skype and Facebook group. We use TeamViewer for assisting team member when he meets technical issues.

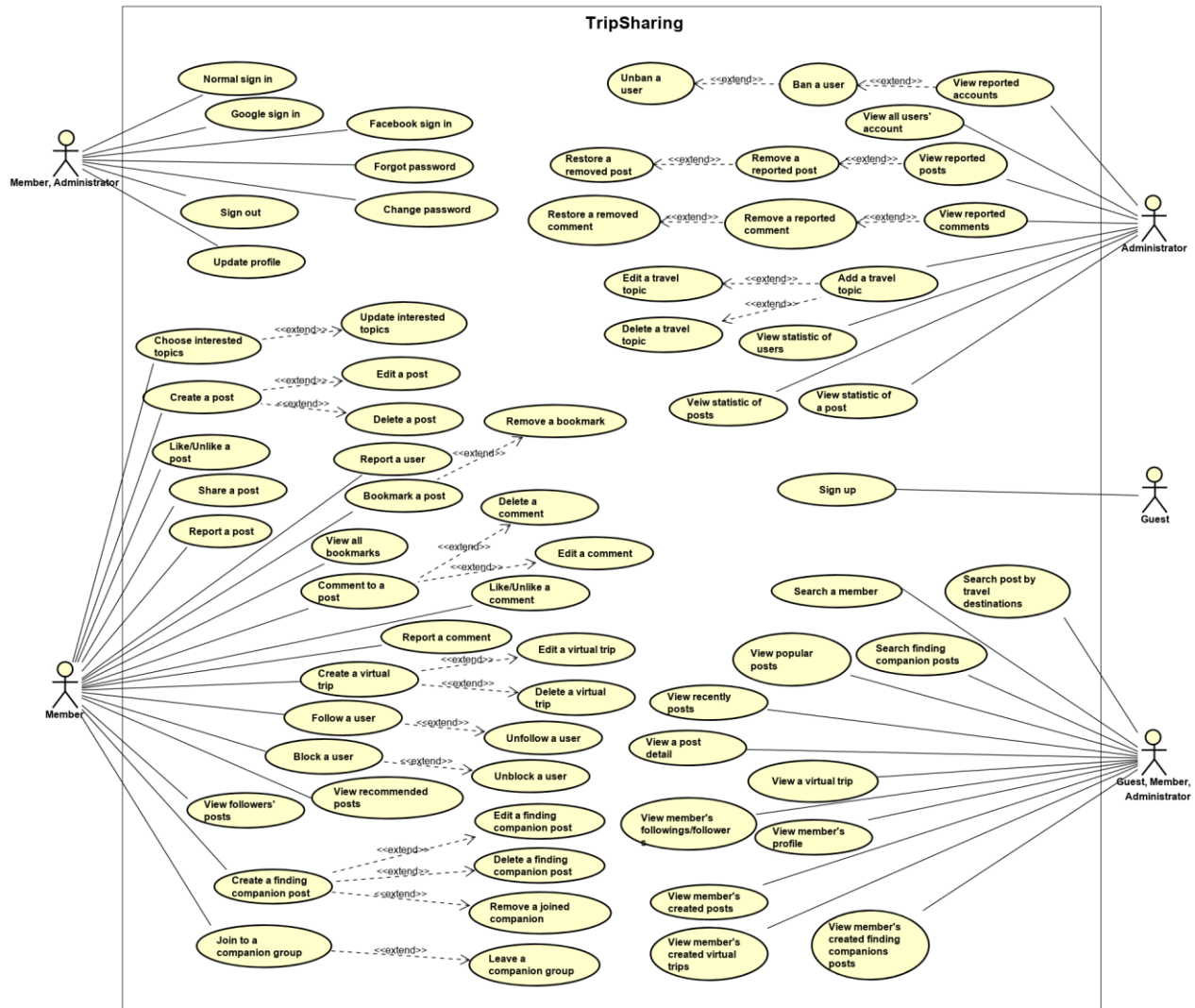
Chapter 3: Software Requirement Specification

3.1 Purpose

This chapter contains details about functional and non-functional requirements the website. Constraints and detailed requirements are specifically described for developers to follow when completing the tasks.

3.2 Functional Requirements

3.2.1 Use Case Diagram



3.2.2 Business Rules

No	Description
B1	The email must not be empty and valid.
B2	The confirm password must be matched with the new password.
B3	Username must not be empty and not be longer than 100 characters
B4	Image file's mime type must be: "image/png" or "image/jpeg".
B5	Maximum file size allowed is 10Mb
B6	Every user has one of the following roles: Member or Administrator.
B7	The root Administrator has the highest privilege.
B8	An Administrator can: ban/unban users, remove/restore posts, remove/restore comments.
B9	A banned user can't post articles, comment to a post or chat with other users.
B10	When user sign out, his/her current access token is blacklisted.
B11	An article title must not be empty and not be longer than 1000 characters.
B12	An article content must not be empty and not be longer than 100,000 characters.
B13	An article must be tagged to at least one travel place.
B14	An article must be tagged to at least one travel topic.
B15	If an he/she has be blocked by another user, then the blocked user can't she any post, comment or other activities of him/her.
B16	A comment must not be empty and not be longer than 10,000 characters.
B17	A chat message must not be empty and not be longer than 10,000 characters.
B18	Authors can delete any comment on his/her posts.
B19	When a finding companion post is expired, users can't join to that companion group.
B20	Contribution points formula: <ul style="list-style-type: none">- Post an article: +5 (points)- Each five likes on an article: +1 (point)- Create a virtual trip: +3 (points)- Create a finding companion post: +3 (points)- Comment to article: +1 (point)

	<ul style="list-style-type: none"> - Each five likes on a comment: +1 (point) - Report a user/an article/a comment correctly: +3 (points) - Users were reported: -10 (points)
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3.2.3 Use Cases

Actor	Description
Guest	Anyone who visits the website and doesn't have an account yet.
Member	Those who has registered an account on TripSharing.
Administrator	Those who has the highest the permission level and has responsible for managing the entire website.

ID	Actor	Name
UC-001	Guest	Sign up
UC-002	Member, Administrator	Google sign in
UC-003	Member, Administrator	Facebook sign in
UC-004	Member, Administrator	Normal sign in
UC-005	Member, Administrator	Forgot password
UC-006	Member, Administrator	Sign out
UC-007	Member, Administrator	Change password
UC-008	Member, Administrator	Update profile
UC-009	Member	Choose interested topic
UC-010	Member	Update interested topic
UC-011	Member	Create a post
UC-012	Member	Edit a post
UC-013	Member	Delete a post
UC-014	Member	Like/Unlike a post
UC-015	Member	Share a post
UC-016	Member	Report a post
UC-017	Member	Bookmark a post

UC-018	Member	View all bookmarks
UC-019	Member	Remove a bookmark
UC-020	Member	Comment to a post
UC-021	Member	Edit a comment
UC-022	Member	Delete a comment
UC-023	Member	Like/Unlike a comment
UC-024	Member	Report a comment
UC-025	Member	Create a virtual trip
UC-026	Member	Edit a virtual trip
UC-027	Member	Delete a virtual trip
UC-028	Member	Follow an user
UC-029	Member	Unfollow an user
UC-030	Member	Block an user
UC-031	Member	Unblock an user
UC-032	Member	Report an user
UC-033	Member	Create a finding companions post
UC-034	Member	Edit a finding companions post
UC-035	Member	Delete a finding companions post
UC-036	Member	Join to a companion group
UC-037	Member	Leave a companion group
UC-038	Member	Remove a joined companion
UC-039	Member	Send/receive messages
UC-040	Member	View followers' posts
UC-041	Member	View recommended posts
UC-042	Administrator	View all users' account
UC-043	Administrator	View reported accounts
UC-044	Administrator	Ban an user
UC-045	Administrator	Unban an user
UC-046	Administrator	View reported posts
UC-047	Administrator	Remove a reported post
UC-048	Administrator	Restore a removed post

UC-049	Administrator	View reported comments
UC-050	Administrator	Remove a reported comment
UC-051	Administrator	Restore a removed comment
UC-052	Administrator	Add a travel topic
UC-053	Administrator	Edit a travel topic
UC-054	Administrator	Delete a travel topic
UC-055	Administrator	View statistic of users
UC-056	Administrator	View statistic of posts
UC-057	Guest, Member, Administrator	Search post by travel destinations
UC-058	Guest, Member, Administrator	Search a member
UC-059	Guest, Member, Administrator	Search finding companion posts
UC-060	Guest, Member, Administrator	View popular posts
UC-061	Guest, Member, Administrator	View recently posts
UC-062	Guest, Member, Administrator	View a post detail
UC-063	Guest, Member, Administrator	View a virtual trip
UC-064	Guest, Member, Administrator	View member's profile
UC-065	Guest, Member, Administrator	View member's followings/followers
UC-066	Guest, Member, Administrator	View member's created posts
UC-067	Guest, Member, Administrator	View member's created virtual trips
UC-068	Guest, Member, Administrator	View member's created finding companions posts

3.2.3.1 Guest

3.2.3.1.1 Sign up

Use Case Specification

UC ID and Name:	UC-001 Sign Up		
Created by:	PhongTV	Date created:	05/06/2019
Primary Actor:	Guest	Secondary Actor:	
Trigger:	N/A		

Description:	User creates an account to sign in to the website.
Preconditions:	PRE-1.1. User hasn't registered an account PRE-1.2. User can not signed in the website
Post conditions:	POST-1.1. User has signed up successfully POST-1.2. User icon is displayed in the top bar.
Normal Flow:	1.0 Sign up <ol style="list-style-type: none"> 1. User visits website. 2. System displays Welcome page. 3. User clicks “Đăng nhập” button in navbar at the top of the web page. 4. System display Login form 5. User clicks “Đăng ký” button on the login form. 6. Browser displays another window that contains sign up form. 7. User enters his/her name, email, password and repassword. 8. System verifies information and closes the popup. 9. 9. System directs to home page.
Alternative Flows:	N/A
Exceptions:	1.0-E1 – Cannot communicate with API server <ol style="list-style-type: none"> 1. Web page displays error message.
Priority:	High
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	
Assumptions:	N/A

3.2.3.2 Member, Administrator

3.2.3.2.1 Google sign in

Use Case Specification

UC ID and Name:	UC-002 Google sign in		
Created by:	PhongTV	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	Administrator
Trigger:	N/A		
Description:	Use a Google account to sign in to the website.		
Preconditions:	PRE-2.1. User has registered an account PRE-2.2. User has not signed in the website		
Post conditions:	POST-2.1. User has signed in successfully POST-2.2. User icon is displayed in the top bar.		
Normal Flow:	2.0 Google sign in <ol style="list-style-type: none"> 1. User visits website. 2. System displays Welcome page. 3. User clicks “Đăng nhập” button in navbar at the top of the web page. 4. System display Login form 5. User clicks “Đăng nhập với Google” button on the login form. 6. Browser displays another window that contains Google sign in form. 7. User enters his/her Google account and Password 8. Google verifies login and closes the popup. 9. System directs to home page. 		
Alternative Flows:	N/A		
Exceptions:	2.0-E1 – Cannot communicate with API server <ol style="list-style-type: none"> 1. Web page displays error message. 		
Priority:	High		
Frequency of Use:	Medium		
Business Rules:	N/A		
Other Information:			

Assumptions:	N/A
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3.2.3.2.2 Facebook sign in

Use Case Specification

UC ID and Name:	UC-003 Facebook sign in		
Created by:	PhongTV	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	Administrator
Trigger:	N/A		
Description:	Use a Facewbook account to sign in to the website.		
Preconditions:	PRE-3.1. User has registered an account PRE-3.2. User has not signed in the website		
Post conditions:	POST-3.1. User has signed in successfully POST-3.2. User icon is displayed in the top bar.		
Normal Flow:	3.0 Facebook sign in <ol style="list-style-type: none"> 1. User visits website. 2. System displays Welcome page. 3. User clicks “Đăng nhập” button in navbar at the top of the web page. 4. System display Login form 5. User clicks “Đăng nhập với Facebook” button on the login form. 6. Browser displays another window that contains Facebook sign in form. 7. User enters his/her Email or phone number and password 8. Facebook verifies login and closes the popup. 9. System directs to home page. 		
Alternative Flows:	N/A		
Exceptions:	3.0-E1 – Cannot communicate with API server		

	1. Web page displays error message.
Priority:	High
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	
Assumptions:	N/A

3.2.3.2.3 Normal sign in

Use Case Specification

UC ID and Name:	UC-004 Normal sign in		
Created by:	PhongTV	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	Administrator
Trigger:	N/A		
Description:	Use a normal account to sign in to the website.		
Preconditions:	PRE-4.1. User has registered an account PRE-4.2. User has not signed in the website		
Post conditions:	POST-4.1. User has signed in successfully POST-4.2. User icon is displayed in the top bar.		
Normal Flow:	4.0 Normal sign in <ol style="list-style-type: none"> 1. User visits website. 2. System displays Welcome page. 3. User clicks “Đăng nhập” button in navbar at the top of the web page. 4. System display login form 5. User enters his/her Email and Password 6. User click “Đăng nhập” button on login form 7. System verifies username, password and close the popup. 		

	8. System directs to home page.
Alternative Flows:	N/A
Exceptions:	4.0-E1 – Cannot communicate with API server 1. Web page displays error message.
Priority:	High
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	
Assumptions:	N/A

3.2.3.2.4 Forgot password

Use Case Specification

UC ID and Name:	UC-005 Forgot Password		
Created by:	PhongTV	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	Administrator
Trigger:	N/A		
Description:	User forgot password to sign in to the website.		
Preconditions:	PRE-5.1. User has signed up with a account successfully PRE-5.2. User forgot password to sign in to the website.		
Post conditions:	POST-5.1. User have a new password and signed in successfully		
Normal Flow:	5.0 Forgot Password 1. User visits website. 2. User clicks “Đăng nhập” button in navbar at the top of the web page.		

	<ol style="list-style-type: none"> 3. System display Login Form 4. User clicks “Quên mật khẩu” link on login form 5. System display forgot password form 6. User enter email registered account 7. Click “Tạo lại mật khẩu” button on the form 8. Display success message and user open mail to get new password
Alternative Flows:	N/A
Exceptions:	5.0-E1 – Cannot communicate with API server <ol style="list-style-type: none"> 1. Web page displays error message.
Priority:	High
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	
Assumptions:	N/A

3.2.3.2.5 Sign out

Use Case Specification

UC ID and Name:	UC-006 Sign out		
Created by:	PhongTV	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	Administrator
Trigger:	N/A		
Description:	User sign out the website		
Preconditions:	PRE-6.1. User has signed in with a account successfully PRE-6.2. User icon is display in the top bar.		
Post conditions:	POST-6.1. User has signed out the website POST-6.2. User icon isn't display in the top bar.		

Normal Flow:	6.0 Sign out <ol style="list-style-type: none"> 1. User visits website. 2. User clicks user icon button in navbar at the top of the web page. 3. System display a list options 4. User clicks option “Đăng xuất” on the navbar 5. User sign out the website
Alternative Flows:	N/A
Exceptions:	6.0-E1 – Cannot communicate with API server <ol style="list-style-type: none"> 1. Web page displays error message.
Priority:	High
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	
Assumptions:	N/A

3.2.3.2.6 Change password

Use Case Specification

UC ID and Name:	UC-007 Change password		
Created by:	PhongTV	Date created:	01/06/2019
Primary Actor:	Member	Secondary Actor:	Administrator
Trigger:	N/A		
Description:	User wants to change password.		
Preconditions:	PRE-7.1. User has signed up and signed in with a account successfully		
Post conditions:	POST-7.1. User change new password		

Normal Flow:	7.0 Change password <ol style="list-style-type: none"> 1. User visits website. 2. User clicks user icon button in navbar at the top of the web page. 3. System display a list options 4. User clicks option “Thay đổi mật khẩu” on the navbar 5. Display change password page. 6. User enter old password after enter new password and repassword. 7. After complete, user click “Luu” button 8. System will display message confirm and change new password 		
Alternative Flows:	N/A		
Exceptions:	7.0-E1 – Cannot communicate with API server <ol style="list-style-type: none"> 1. Web page displays error message. 		
Priority:	Medium		
Frequency of Use:	Medium		
Business Rules:	N/A		
Other Information:			
Assumptions:	N/A		

3.2.3.2.7 Update profile

Use Case Specification

UC ID and Name:	UC-008 Update profile		
Created by:	PhongTV	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	Administrator
Trigger:	N/A		
Description:	User want to update profile		

Preconditions:	PRE-8.1. User has signed up an account successfully and provide information for system		
Post conditions:	POST-8.1. User update new information in profile		
Normal Flow:	8.0 Update profile <ol style="list-style-type: none"> 1. User visits website. 2. User clicks user icon button in navbar at the top of the web page. 3. System display a list options 4. User clicks option “Thông tin tài khoản” on the navbar 5. Display “Thông tin tài khoản” page with a lot of text field 6. User enter information that they want edit on text field 7. Click “Lưu” button after edit complete 8. Display popup with message “Đã lưu thay đổi” 		
Alternative Flows:	N/A		
Exceptions:	8.0-E1 – Cannot communicate with API server <ol style="list-style-type: none"> 1. Web page displays error message. 		
Priority:	Medium		
Frequency of Use:	Medium		
Business Rules:	N/A		
Other Information:			
Assumptions:	N/A		

3.2.3.3 Member

3.2.3.3.1 Choose interesting topic

Use Case Specification

UC ID and Name:	UC-009 Choose interesting topic		
Created by:	PhongTV	Date created:	05/06/2019

Primary Actor:	Member	Secondary Actor:	
Trigger:	N/A		
Description:	User want to choose interesting topic		
Preconditions:	PRE-9.1. User has registered an account		
Post conditions:	POST-9.1. User can read topics in home page		
Normal Flow:	9.0 Choose interesting topic <ol style="list-style-type: none"> 1. User visits website. 2. System displays Welcome page. 3. User clicks “Đăng nhập” button in navbar at the top of the web page. 4. System display Login form 5. User clicks “Đăng ký” button on the login form. 6. Browser displays another window that contains sign up form. 7. User enters his/her name, email, password and repassword. 8. System verifies information and closes the popup. 9. System display interesting topic popup 10. User choose one or more topic 11. User clicks “Lưu” button on the popup. 12. System directs to home page. 		
Alternative Flows:	9.0 Choose interesting topic <ol style="list-style-type: none"> 1. User clicks user icon button in navbar at the top of the web page. 2. System display a list options 3. User clicks “Trang cá nhân” option. 4. System display profile page 5. User click “Cập nhật chủ đề mà bạn quan tâm” button 6. Display interesting topic popup 7. User choose one or more topic 8. User clicks “Lưu” button on the popup. 		

	9. Display message “Cập nhật thông tin thành công”
Exceptions:	9.0-E1 – Cannot communicate with API server 1. Web page displays error message.
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	
Assumptions:	N/A

3.2.3.3.2 Update interested topic

Use Case Specification

UC ID and Name:	UC-010 Update interested topic		
Created by:	PhongTV	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	
Trigger:	N/A		
Description:	User want to update interested topic		
Preconditions:	PRE-10.1. User has signed in with a account successfully		
Post conditions:	POST-10.1. User can update interested topic		
Normal Flow:	10.0 Update interested topic <ol style="list-style-type: none"> 1. User visits website. 2. User clicks user icon button in navbar at the top of the web page. 3. System display a list options 4. User clicks “Trang cá nhân” option. 5. Display profile page 		

	6. User click “Cập nhật chủ đề mà bạn quan tâm” button 7. Display interesting topic popup 8. User choose one or more topic 9. User clicks “Lưu” button on the popup. 2. 10. Display message “Cập nhật thông tin thành công”
Alternative Flows:	N/A
Exceptions:	10.0-E1 – Cannot communicate with API server 1. Web page displays error message.
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	
Assumptions:	N/A

3.2.3.3.3 Create a post

Use Case Specification

UC ID and Name:	UC-011 Create a post		
Created by:	PhongTV	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	
Trigger:	N/A		
Description:	User want to create a post		
Preconditions:	PRE-11.1. User has signed in with a account successfully		
Post conditions:	POST-11.1. User can write and post on profile		

Normal Flow:	11.0 Create a post <ol style="list-style-type: none"> 1. User visits website. 2. User clicks “Viết ngay” button navbar at the top of the web page. 3. System shows a list options. 4. User clicks “Chia sẻ bài viết” option. 5. System display post page 6. User can add image, add title, add content, add link, ..., tags location, and add category of posts 7. After completed, user click “Đăng bài” button. 		
Alternative Flows:	N/A		
Exceptions:	11.0-E1 – Cannot communicate with API server <ol style="list-style-type: none"> 1. Web page displays error message. 		
Priority:	Medium		
Frequency of Use:	Medium		
Business Rules:	N/A		
Other Information:			
Assumptions:	N/A		

3.2.3.3.4 Edit a post

Use Case Specification

UC ID and Name:	UC-012 Edit a post		
Created by:	PhongTV	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	
Trigger:	N/A		
Description:	User want to edit a post		

Preconditions:	PRE 12-1. User has signed in with a account successfully
Post conditions:	POST 12-1. User can edit and post on profile
Normal Flow:	12.0 Edit a post <ol style="list-style-type: none"> 1. User visits website. 2. User clicks user icon button in navbar at the top of the web page. 3. Display more options 4. User clicks “Trang cá nhân” option. 5. Display profile page 6. User can find a post that they want to edit 7. Click ellipsis button at right of post 8. Display more options 9. User click “Sửa bài đăng” option 10. User can edit image, edit title, edit centent, edit link, ..., tags location, and edit category of posts 11. After completed, user click “Luu bài viết” button.
Alternative Flows:	N/A
Exceptions:	12.0-E1 – Cannot communicate with API server <ol style="list-style-type: none"> 1. Web page displays error message.
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	
Assumptions:	N/A

3.2.3.3.5 Delete a post

Use Case Specification

UC ID and Name:	UC-013 Delete a post		
Created by:	PhongTV	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	
Trigger:	N/A		
Description:	User can delete a post		
Preconditions:	PRE-13.1. User has signed in with a account successfully		
Post conditions:	PRE-13.1 User can delete a post on profile		
Normal Flow:	13.0 Delete a post <ol style="list-style-type: none"> 1. User visits website. 2. User clicks user icon button in navbar at the top of the web page. 3. Display more options 4. User clicks “Trang cá nhân” option. 5. Display profile page 6. User can find a post that they want to edit 7. Click ellipsis button at right of post 8. Display more options 9. User click “Xóa bài đăng” option 10. Show confirm message with user 		
Alternative Flows:	N/A		
Exceptions:	13.0-E1 – Cannot communicate with API server <ol style="list-style-type: none"> 1. Web page displays error message. 		
Priority:	Medium		
Frequency of Use:	Medium		
Business Rules:	N/A		

Other Information:	
Assumptions:	N/A

3.2.3.3.6 Like/Unlike a post

Use Case Specification

UC ID and Name:	UC-014 Like/Unlike a post		
Created by:	PhongTV	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	
Trigger:	N/A		
Description:	User want to like/unlike a post		
Preconditions:	PRE-14.1. User has signed in with a account successfully		
Post conditions:	POST-14.1. User can like/unlike a post		
Normal Flow:	14.0 Like/Unlike a post <ol style="list-style-type: none"> 1. User visits website. 2. User can see a lot of posts in home page. 3. User can find a post to like/unlike 4. User clicks “Thích” button in below the post. 5. Number of like of post is increase/decrease and “Thích” button change color 		
Alternative Flows:	N/A		
Exceptions:	14.0-E1 – Cannot communicate with API server <ol style="list-style-type: none"> 1. Web page displays error message. 		
Priority:	Medium		
Frequency of Use:	Medium		
Business Rules:	N/A		
Other Information:			
Assumptions:	N/A		

3.2.3.3.7 Share a post

Use Case Specification

UC ID and Name:	UC-015 Share a post		
Created by:	PhongTV	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	
Trigger:	N/A		
Description:	User want to share a post		
Preconditions:	PRE-15.1. User has signed in with a account successfully		
Post conditions:	POST-15.1. User can share a post		
Normal Flow:	15.0 Share a post <ol style="list-style-type: none">1. User visits website.2. User can see a lot of posts in home page.3. User can find a post to share4. User clicks “Chia sẻ” button in below the post.5. Click “Chia sẻ bằng Facebook” button or “Chia sẻ bằng Google+ ” button		
Alternative Flows:	N/A		
Exceptions:	15.0-E1 – Cannot communicate with API server <ol style="list-style-type: none">1. Web page displays error message.		
Priority:	Medium		
Frequency of Use:	Medium		
Business Rules:	N/A		
Other Information:			
Assumptions:	N/A		

3.2.3.3.8 Report a post

Use Case Specification

UC ID and Name:	UC-016 Report a post		
Created by:	PhongTV	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	
Trigger:	N/A		
Description:	User want to report a post		
Preconditions:	PRE-16.1. User has signed in with a account successfully		
Post conditions:	POST-16.1. User can report a post		
Normal Flow:	16.0 Report a post <ol style="list-style-type: none">1. User visits website.2. User can see a lot of posts in home page.3. User can find a post to report if it violate of rules4. Click ellipsis button at right of post5. Display more options6. User click “Báo cáo bài đăng này” option7. System will display reason popup to user choice8. User can choice one or more reason9. User click “Gửi” button in below the popup.10. System shows message success.		
Alternative Flows:	N/A		
Exceptions:	16.0-E1 – Cannot communicate with API server <ol style="list-style-type: none">1. Web page displays error message.		
Priority:	High		
Frequency of Use:	Medium		
Business Rules:	N/A		
Other Information:			
Assumptions:	N/A		

3.2.3.3.9 Bookmark a post

Use Case Specification

UC ID and Name:	UC-017 Bookmark a post		
Created by:	PhongTV	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	
Trigger:	N/A		
Description:	User want to bookmark a post		
Preconditions:	PRE-17.1. User has signed in with a account successfully		
Post conditions:	PRE-17.0 User can bookmark a post		
Normal Flow:	17.0 Bookmark a post <ol style="list-style-type: none">1. User visits website.2. User can see a lot of posts in home page.3. User can find a post to bookmark4. Click bookmark icon in below the post5. Bookmark icon change color to “blue” color		
Alternative Flows:	17.1 User can find a post to bookmark (Step 3) <ol style="list-style-type: none">1. User click on title and go to detail page of post2. Click bookmark icon in left of the post3. Bookmark icon and change color to “blue” color		
Exceptions:	17.0-E1 – Cannot communicate with API server <ol style="list-style-type: none">1. Web page displays error message.		
Priority:	Medium		
Frequency of Use:	Medium		
Business Rules:	N/A		
Other Information:			

Assumptions:	N/A
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3.2.3.3.10 View all bookmark

Use Case Specification

UC ID and Name:	UC-018 View all bookmarks		
Created by:	PhongTV	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	
Trigger:	N/A		
Description:	User want to view all bookmarks		
Preconditions:	PRE-18.1. User has signed in with a account successfully		
Post conditions:	POST-18.1. User can view all bookmark in profile		
Normal Flow:	18.0 View all bookmarks <ol style="list-style-type: none"> 1. User visits website. 2. User clicks user icon button in navbar at the top of the web page. 3. Display more options 4. User clicks “Trang cá nhân” option. 5. Display profile page 6. User click bookmark icon on the navbar in the top of page 7. Display list all posts that user bookmarked. 		
Alternative Flows:	N/A		
Exceptions:	18.0-E1 – Cannot communicate with API server <ol style="list-style-type: none"> 1. Web page displays error message. 		
Priority:	Medium		
Frequency of Use:	Medium		
Business Rules:	N/A		

Other Information:	
Assumptions:	N/A

3.2.3.3.11 Remove a bookmark

Use Case Specification

UC ID and Name:	UC-019 Remove a bookmark		
Created by:	PhongTV	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	
Trigger:	N/A		
Description:	User want to remove a bookmark		
Preconditions:	PRE-19.1. User has signed in with a account successfully		
Post conditions:	POST-19.1. User can remove a bookmark		
Normal Flow:	19.0 User remove a bookmark <ol style="list-style-type: none"> 1. User visits website. 2. User can see one or more the post that they bookmarked 3. Click bookmark icon in below the post 4. Bookmark icon change color from “blue” color to default color 		
Alternative Flows:	N/A		
Exceptions:	19.0-E1 – Cannot communicate with API server <ol style="list-style-type: none"> 1. Web page displays error message. 		
Priority:	Medium		
Frequency of Use:	Medium		
Business Rules:	N/A		
Other Information:			
Assumptions:	N/A		

3.2.3.3.12 Comment to a post

Use Case Specification

UC ID and Name:	UC-20 Comment to a post		
Created by:	PhongNV	Date created:	02/06/2019
Primary Actor:	Member	Secondary Actors:	
Trigger:	N/A		
Description:	User wants to comment to a post		
Preconditions:	PRE-20.1. User is logged in. PRE-20.2. User is not banned.		
Post conditions:	POST-1. View detail post page is displayed.		
Normal Flow:	20.0 Comment to a post. 1. User visits website. 2. User chooses specific a post to read. 3. View detail post page is displayed. 4. User scrolls to the end of the page then select to the input box. 5. User inputs comment. 6. User presses key enter or click button “comment” below input box to post comment.		
Alternative Flow:	N/A		
Exceptions:	25.0-E1 – Cannot communicate with API server. 1. An error message is displayed.		
Priority:	High		
Frequency of Use:	High		
Business Rules:	N/A		
Other Informations:			
Assumptions	N/A		

3.2.3.3.13 Edit a comment

Use Case Specification

UC ID and Name:	UC-21 Edit a comment		
Created by:	PhongNV	Date created:	02/06/2019
Primary Actor:	Member	Secondary Actors:	
Trigger:	N/A		
Description:	User wants to update their comment.		
Preconditions:	PRE-21.1. User is logged in. PRE-21.2. User is not banned. PRE-21.3. User's comment is not deleted.		
Post conditions:	POST-1. View detail post page is displayed.		
Normal Flow:	21.0 Edit a comment. 1. User visits website. 2. User chooses specific a post to read. 3. View detail post page is displayed. 4. User scrolls to the end of the page to read comments. 5. User clicks on icon “...” in the top right hand of the comment. 6. A popup is displayed 7. User clicks on “edit” option in popup. 8. User updates comment. 9. User presses key enter or click button below input box to update comment.		
Alternative Flow:	N/A		
Exceptions:	21.0-E1 – Cannot communicate with API server. 1. An error message is displayed.		
Priority:	Low		
Frequency of Use:	Low		
Business Rules:	N/A		
Other Informations:			
Assumptions	N/A		

3.2.3.3.14 Delete a comment

Use Case Specification

UC ID and Name:	UC-22 Delete a comment		
Created by:	PhongNV	Date created:	02/06/2019
Primary Actor:	Member	Secondary Actors:	
Trigger:	N/A		
Description:	User wants to delete their comments		
Preconditions:	PRE-22.1. User is logged in. PRE-22.2. User is not banned.		
Post conditions:	POST-1. View detail post page is displayed.		
Normal Flow:	22.0 Create virtual trip. <ol style="list-style-type: none"> 1. User visits website. 2. User chooses specific a post to read. 3. View detail post page is displayed. 4. User scrolls to the end of the page to read comments. 5. User clicks on icon “...” in the top right hand of the comment. 6. A popup is displayed 7. User clicks on “delete” option in popup. 8. Popup confirm is displayed. 9. User select “ok” button to confirm delete a comment. 		
Alternative Flow:	N/A		
Exceptions:	22.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> 1. An error message is displayed. 		
Priority:	Low		
Frequency of Use:	Low		
Business Rules:	N/A		
Other Informations:			
Assumptions	N/A		

3.2.3.3.15 Like/Unlike a comment

Use Case Specification

UC ID and Name:	UC-23 Like/Unlike a comment		
Created by:	PhongNV	Date created:	02/06/2019
Primary Actor:	Member	Secondary Actors:	
Trigger:	N/A		
Description:	User wants to like/unlike a comments		
Preconditions:	PRE-23.1. User is logged in. PRE-23.2. User is not banned.		
Post conditions:	POST-1. View detail post page is displayed.		
Normal Flow:	24.0 Like a comment. <ol style="list-style-type: none">1. User visits website.2. User chooses specific a post to read.3. View detail post page is displayed.4. User scrolls to the end of the page to read comments.5. User click icon “like” below each comment to like a comment like icon to be highlighted. 23.1 Unlike a comment. <ol style="list-style-type: none">1. User visits website.2. User chooses specific a post to read.3. View detail post page is displayed.4. User scrolls to the end of the page to read comments.5. User click icon “like” below each comment to like a comment, the like icon to be unhighlighted.		
Alternative Flow:	N/A		
Exceptions:	23.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none">1. An error message is displayed.		
Priority:	Low		
Frequency of Use:	Low		

Business Rules:	N/A
Other Informations:	
Assumptions	N/A

3.2.3.3.15 Report a comment

Use Case Specification

UC ID and Name:	UC-24 Report a comment		
Created by:	PhongNV	Date created:	02/06/2019
Primary Actor:	Member	Secondary Actors:	
Trigger:	N/A		
Description:	User wants to report a comments		
Preconditions:	PRE-24.1. User is logged in. PRE-24.2. User is not banned.		
Post conditions:	POST-1. View detail post page is displayed.		
Normal Flow:	24.0 Report a comment. <ol style="list-style-type: none"> 1. User visits website. 2. User chooses specific a post to read. 3. View detail post page is displayed. 4. User scrolls to the end of the page to read comments. 5. User clicks on icon “...” in the top right hand of comment. 6. A popup is displayed. 7. User clicks on “report” option in popup. 8. Popup Report comment is displayed. 10. User selects reason to report or write other reason by input to other’s input box. 11. User clicks to button “report” to send report. 		
Alternative Flow:	N/A		
Exceptions:	24.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> 1. An error message is displayed. 		

Priority:	Low
Frequency of Use:	Low
Business Rules:	N/A
Other Informations:	
Assumptions	N/A

3.2.3.3.16 Comment to a post

Use Case Specification

UC ID and Name:	UC-25 Create virtual trip		
Created by:	PhongNV	Date created:	2/06/2019
Primary Actor:	Member	Secondary Actors:	
Trigger:	N/A		
Description:	User wants to create his/her own trip		
Preconditions:	PRE-25.1. User is logged in. PRE-25.2. User is not banned.		
Post conditions:	POST-1. Create virtual page is displayed.		
Normal Flow:	25.0 Create virtual trip. <ol style="list-style-type: none"> 1. User visits website. 2. User click the “Chuyến đi” icon on the navigation bar. 3. View user’s created virtual trips page display. 4. User click the circle plus ion “Tạo chuyến đi” on the blank box. 5. Dialog create a virtual trip displayed, user iput trip’s title and select radio button to choose privacy (public/ private) then click “Ok” button. 6. Create virtual page is displayed. 7. Use input search bar to choose the location. 		
Alternative Flow:	25.1 Create virtual trip at “personal page”. <ol style="list-style-type: none"> 1. User visits website. 2. User click the “avatar” icon on the navigation bar. 		

	<ol style="list-style-type: none"> 3. View personal page is displayed. 4. User select tab created virtual trips on the tab bar. 5. View user's created virtual trips page display. 6. User click the circle plus icon "Tạo chuyến đi" on the blank box. 7. Dialog create a virtual trip displayed, user input trip's title and select radio button to choose privacy (public/ private) then click "Ok" button. 8. Create virtual page is displayed. 9. Use input search bar to choose the location.
Exceptions:	25.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> 1. An error message is displayed.
Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Informations:	
Assumptions	N/A

3.2.3.3.17 Edit a virtual trip

Use Case Specification

UC ID and Name:	UC-26 Edit a virtual trip		
Created by:	PhongNV	Date created:	02/06/2019
Primary Actor:	Member	Secondary Actors:	
Trigger:	N/A		
Description:	User wants to update their created virtual trip.		
Preconditions:	PRE-26.1. User is logged in. PRE-26.2. User is not banned.		
Post conditions:	POST-1. View created virtual trips page is displayed.		
Normal Flow:	26.0 Edit a virtual trip. <ol style="list-style-type: none"> 1. User visits website. 		

	<ol style="list-style-type: none"> 2. User clicks the “Chuyến đi” icon on the navigation bar. 3. View user’s created virtual trips page display. 4. User selects a specify created virtual trip to edit. 5. Detail virtual trip page is displayed. 6. User updates for the virtual trip.
Alternative Flow:	N/A
Exceptions:	26.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> 1. An error message is displayed.
Priority:	Low
Frequency of Use:	Low
Business Rules:	N/A
Other Informations:	
Assumptions	N/A

3.2.3.3.18 Delete a virtual trip

Use Case Specification

UC ID and Name:	UC-27 Delete a virtual trip		
Created by:	PhongNV	Date created:	02/06/2019
Primary Actor:	Member	Secondary Actors:	
Trigger:	N/A		
Description:	User wants to delete their created virtual trip.		
Preconditions:	PRE-27.1. User is logged in. PRE-27.2. User is not banned.		
Post conditions:	POST-1. View created virtual trips page is displayed.		
Normal Flow:	27.0 Delete a virtual trip. <ol style="list-style-type: none"> 1. User visits website. 2. User clicks the “Chuyến đi” icon on the navigation bar. 3. View user’s created virtual trips page display, the list created virtual trip displayed by list boxes 		

	4. User clicks on icon “...” on the top right hand of the specific created virtual trip box. 5. Popup optional displayed. 6. User chooses option “delete” to delete the virtual trip.
Alternative Flow:	N/A
Exceptions:	27.0-E1 – Cannot communicate with API server. 1. An error message is displayed.
Priority:	Low
Frequency of Use:	Low
Business Rules:	N/A
Other Informations:	
Assumptions	N/A

3.2.3.3.19 Follow a user

Use Case Specification

UC ID and Name:	UC-28 Follow a user		
Created by:	PhongNV	Date created:	02/06/2019
Primary Actor:	Member	Secondary Actors:	
Trigger:	N/A		
Description:	User wants to follow the posts of a member		
Preconditions:	PRE-28.1. User is logged in. PRE-28.2. User is not banned.		
Post conditions:			
Normal Flow:	27.0 Edit a virtual trip. 1. User visits website. 2. User clicks the “Chuyến đi” icon on the navigation bar. 3. View user’s created virtual trips page display, the list created virtual trip displayed by list boxes		

	4. User clicks on icon “...” on the top right hand of the specific created virtual trip box. 5. Popup optional displayed. 6. User chooses option “delete” to delete the virtual trip.
Alternative Flow:	N/A
Exceptions:	28.0-E1 – Cannot communicate with API server. 7. An error message is displayed.
Priority:	Low
Frequency of Use:	Low
Business Rules:	
Other Informations:	
Assumptions	N/A

3.2.3.3.20 Unfollow a user

Use Case Specification

UC ID and Name:	UC-28 Unfollow a user		
Created by:	PhongNV	Date created:	02/06/2019
Primary Actor:	Member	Secondary Actors:	
Trigger:	N/A		
Description:	User wants to follow the posts of a member		
Preconditions:	PRE-28.1. User is logged in. PRE-28.2. User is not banned.		
Post conditions:			
Normal Flow:	28.0 Edit a virtual trip. 8. User visits website. 9. User clicks the “Chuyến đi” icon on the navigation bar. 10. View user’s created virtual trips page display, the list created virtual trip displayed by list boxes		

	11. User clicks on icon “...” on the top right hand of the specific created virtual trip box. 12. Popup optional displayed. 13. User chooses option “delete” to delete the virtual trip.
Alternative Flow:	N/A
Exceptions:	30.0-E1 – Cannot communicate with API server. 14. An error message is displayed.
Priority:	Low
Frequency of Use:	Low
Business Rules:	N/A
Other Informations:	
Assumptions	N/A

3.2.3.3.21 Block a user

Use Case Specification

UC ID and Name:	UC-30 Block a user		
Created by:	PhongNV	Date created:	02/06/2019
Primary Actor:	Member	Secondary Actors:	
Trigger:	N/A		
Description:	User wants to block a user		
Preconditions:	PRE-30.1. User is logged in. PRE-30.2. User is not banned.		
Post conditions:			
Normal Flow:	30.0 Block a user. 1. User visits website. 2. User selects input search box in navbar. 3. User inputs member’s name wants to block. 4. Press key enter or click button “search” to search member. 5. The search result page is displayed.		

	6. User selects tap “peoples” on navbar tap. 7. User click on avatar or member’s name. 8. Redirect to member’s personal page. 9. User click on icon “lock” on top right hand below cover image. 10. Dialog confirm is displayed. 11. User select “ok” button to block the member.
Alternative Flow:	30.1 Block a user (redirect to personal page through member’s posts). 30.2 Block a user (redirect to personal page through member’s comments).
Exceptions:	30.0-E1 – Cannot communicate with API server. 1. An error message is displayed.
Priority:	Low
Frequency of Use:	Low
Business Rules:	N/A
Other Informations:	
Assumptions	N/A

3.2.3.3.22 Unblock a user

Use Case Specification

UC ID and Name:	UC-31 Unblock a user		
Created by:	PhongNV	Date created:	02/06/2019
Primary Actor:	Member	Secondary Actors:	
Trigger:	N/A		
Description:	User wants to unblock a user		
Preconditions:	PRE-31.1. User is logged in. PRE-31.2. User is not banned. PRE-31.3. The member has blocked by the user.		
Post conditions:			
Normal Flow:	31.0 Unblock a user.		

	<ol style="list-style-type: none"> 1. User visits website. 2. User clicks on item “avatar” on navbar menu. 3. Redirect to user’s personal page. 4. User selects tab Blocked on navbar tab. 5. List members blocked is displayed by list box view. 6. User clicks on item “x” on the top-right of each box to unblock member. 7. Dialog confirm is displayed. 8. User selcets “ok” button to confirm.
Alternative Flow:	N/A
Exceptions:	31.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> 1. An error message is displayed.
Priority:	Low
Frequency of Use:	Low
Business Rules:	N/A
Other Infromations:	
Assumptions	N/A

3.2.3.3.23 Report a user

Use Case Specification

UC ID and Name:	UC-32 Report a user		
Created by:	PhongNV	Date created:	02/06/2019
Primary Actor:	Member	Secondary Actors:	
Trigger:	N/A		
Description:	User wants to unblock a user		
Preconditions:	PRE-32.1. User is logged in. PRE-31.2. User is not banned. PRE-32.2. The user isn’t blocked.		
Post conditions:			

Normal Flow:	32.0 Report a user. <ol style="list-style-type: none"> 1. User visits website. 2. User selects input search box in navbar. 3. User inputs member's name wants to report. 4. Press key enter or click button "search" to search member. 5. The search result page is displayed. 6. User selects tap "peoples" on navbar tap. 7. User clicks on avatar or member's name. 8. Redirect to member's personal page. 9. User clicks on icon "..." on top-right below the cover image. 10. The Dialog report is displayed. 11. User selects reasons and inputs message to report. 12. User click button "report" to send report. 		
Alternative Flow:	N/A		
Exceptions:	32.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> 1. An error message is displayed. 		
Priority:	Low		
Frequency of Use:	Low		
Business Rules:	N/A		
Other Informations:			
Assumptions	N/A		

3.2.3.3.24. Create a finding companions post

Use Case Specification

UC ID and Name:	UC-33 Create a finding companions post		
Created by:	PhongNV	Date created:	02/06/2019
Primary Actor:	Member	Secondary Actors:	
Trigger:	N/A		
Description:	User wants to create a finding companions post		

Preconditions:	PRE-33.1. User is logged in. PRE-33.2. User is not banned.
Post conditions:	POST-1. Create a finding companions post page is displayed.
Normal Flow:	33.0 Create a finding companions post. <ol style="list-style-type: none"> 1. User visits website. 2. User clicks icon “+” on navbar menu. 3. A popup optional is displayed. 4. User selects option “Tìm bạn đồng hành”. 5. Redirect to create a finding companions post page. 6. User input title for post. 7. User fills the form. 8. User clicks on icon “+” to set schedule for the trip. 9. Popup schedule is displayed. 10. User fills the schedule form and submit. 11. User clicks on button “Đăng bài viết”. 12. Popup step 1 chooes the location is displayed. 13. User input the location for the post. 14. Popup step 2 choose the intersting topics is displayed. 15. User selects on interesting topics for the post.
Alternative Flow:	N/A
Exceptions:	33.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> 1. An error message is displayed.
Priority:	Low
Frequency of Use:	Low
Business Rules:	N/A
Other Infromations:	
Assumptions	N/A

3.2.3.3.25 Edit a finding companions post

Use Case Specification

UC ID and Name:	UC-34 Edit a finding companions post		
Created by:	PhongNV	Date created:	02/06/2019
Primary Actor:	Member	Secondary Actors:	
Trigger:	N/A		
Description:	User wants to update a finding companions post.		
Preconditions:	PRE-34.1. User is logged in. PRE-34.2. User is not banned.		
Post conditions:	POST-1. Finding companion posts page is displayed.		
Normal Flow:	34.0 Edit a finding companions post. <ol style="list-style-type: none"> 1. User visits website. 2. User clicks on icon avatar on navbar menu. 3. User clicks on tab “Tìm bạn đồng hành” in tab menu. 4. Redirect to finding companions posts list page by list boxes. 5. User clicks on icon “...”on the top-right of the specific post box. 6. Popup optional is displayed. 7. User selects “edit” option. 8. User updates the companion post and saved. 		
Alternative Flow:	N/A		
Exceptions:	34.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> 1. An error message is displayed. 		
Priority:	Low		
Frequency of Use:	Low		
Business Rules:	N/A		
Other Informations:			
Assumptions	N/A		

3.2.3.3.26 Delete a finding companions post

Use Case Specification

UC ID and Name:	UC-35 Delete a finding companions post		
Created by:	PhongNV	Date created:	02/06/2019
Primary Actor:	Member	Secondary Actors:	
Trigger:	N/A		
Description:	User wants to delete a finding companion post.		
Preconditions:	PRE-35.1. User is logged in. PRE-35.2. User is not banned.		
Post conditions:	POST-1. Finding companion posts page is displayed.		
Normal Flow:	35.0 Delete a finding companions post. <ol style="list-style-type: none">1. User visits website.2. User clicks on icon avatar on navbar menu.3. User clicks on tab “Tìm bạn đồng hành” in tab menu.4. Redirect to created finding companion posts list page.5. User clicks on icon “...” on the top-right of the specific post box.6. Popup optional is displayed.7. User selects “delete” option.8. Popup confirm is displayed9. User clicks “Xoá” button to delete the finding companion post.		
Alternative Flow:	N/A		
Exceptions:	35.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none">1. An error message is displayed.		
Priority:	Low		
Frequency of Use:	Low		
Business Rules:	N/A		
Other Informations:			
Assumptions	N/A		

3.2.3.3.27 Join to a companion group.

Use Case Specification

UC ID and Name:	UC-36 Join to a companion group		
Created by:	PhongNV	Date created:	02/06/2019
Primary Actor:	Member	Secondary Actors:	
Trigger:	N/A		
Description:	User wants to join to a companion group.		
Preconditions:	PRE-36.1. User is logged in. PRE-36.2. User is not banned. PRE-36.3. User is not blocked.		
Post conditions:	POST-1. The Detail finding companion posts page is displayed.		
Normal Flow:	36.0 Join to a companion group <ol style="list-style-type: none"> 1. User visits website. 2. User clicks on the icon “Tìm bạn đồng hành” in navbar menu. 3. List finding companion posts recently is displayed. 4. User chooses a post to read detail post. 5. Redirect to detail the finding companion post. 6. User clicks on the icon “Tham gia” on the top-right next to title’s post. 7. Popup confirm is displayed. 8. User clicks “ok” button to send request. 		
Alternative Flow:	N/A		
Exceptions:	36.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> 1. An error message is displayed. 		
Priority:	Low		
Frequency of Use:	Low		
Business Rules:	N/A		
Other Informations:			
Assumptions	N/A		

3.2.3.3.28 Leave a companion group.

Use Case Specification

UC ID and Name:	UC-37 Leave a companion group		
Created by:	PhongNV	Date created:	02/06/2019
Primary Actor:	Member	Secondary Actors:	
Trigger:	N/A		
Description:	User wants to leave a companion group.		
Preconditions:	PRE-37.1. User is logged in. PRE-37.2. User is not banned. PRE-37.3. User is joined the group.		
Post conditions:	POST-1. The Group chat companion page is displayed.		
Normal Flow:	37.0 Leave to a companion group <ol style="list-style-type: none"> 1. User visits website. 2. User clicks on the icon “Tìm bạn đồng hành” in navbar menu. 3. Finding companions posts page is displayed. 4. User clicks on tab “Nhóm hoạt động” in tab menu. 5. Groups Active is displayed. 6. On block Joined groups, user selects the group want to leave. 7. Group chat companion page is displayed. 8. User click on the item “rời nhóm” to leave the group. 9. A popup confirm is displayed, user confirm to leave the group. 		
Alternative Flow:	N/A		
Exceptions:	37.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> 1. An error message is displayed. 		
Priority:	Low		
Frequency of Use:	Low		
Business Rules:	N/A		
Other Informations:			
Assumptions	N/A		

3.2.3.3.29 Remove a joined companion

Use Case Specification

UC ID and Name:	UC-38 Remove a joined companion		
Created by:	PhongNV	Date created:	02/06/2019
Primary Actor:	Member	Secondary Actors:	
Trigger:	N/A		
Description:	User wants to remove a joined companion in group.		
Preconditions:	PRE-38.1. User is logged in. PRE-38.2. User is not banned. PRE-38.3. User is joined the group.		
Post conditions:	POST-1. The Group chat companion page is displayed.		
Normal Flow:	38.0 Leave to a companion group <ol style="list-style-type: none"> 1. User visits website. 2. User clicks on the icon “Tìm bạn đồng hành” in navbar menu. 3. Finding companions posts page is displayed. 4. User clicks on tab “Nhóm hoạt động” in tab menu. 5. Groups Active is displayed. 6. On block created group, user chooses group want to manage. 7. Group chat companion page is displayed. 8. User click on the item “x” to remove a joined companions on list companions on left. 9. A popup confirm is displayed, user confirm to remove the companion. 		
Alternative Flow:	N/A		
Exceptions:	38.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> 1. An error message is displayed. 		
Priority:	Low		
Frequency of Use:	Low		
Business Rules:	N/A		
Other Informations:			

Assumptions	N/A
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3.2.3.3.30 Send/recieve a message.

Use Case Specification

UC ID and Name:	UC-39 Send/recieve a message		
Created by:	PhongNV	Date created:	02/06/2019
Primary Actor:	Member	Secondary Actors:	
Trigger:	N/A		
Description:	User wants to send and recieve a message.		
Preconditions:	PRE-39.1. User is logged in. PRE-39.2. User is not banned. PRE-39.3. User is not blocked.		
Post conditions:			
Normal Flow:	39.0 Send a message <ol style="list-style-type: none"> 1. User visits website. 2. User clicks on the member's avatar. 3. User clicks on the item "Tin nhắn" in left box member detail. 4. User inputs message in message box. 5. User presses enter key or clicks on "gửi" button to send message. 39.1 Recieve a message <ol style="list-style-type: none"> 1. User visits website. 2. User clicks on the icon "tin nhắn". 3. User selects the notify message. 4. User reads and reply message. 		
Alternative Flow:	N/A		
Exceptions:	39.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> 1. An error message is displayed. 		
Priority:	High		
Frequency of Use:	High		

Business Rules:	N/A
Other Informations:	
Assumptions	N/A

3.2.3.3.31 View followers' posts

Use Case Specification

UC ID and Name:	UC-40 View followers' posts		
Created by:	PhongNV	Date created:	02/06/2019
Primary Actor:	Member	Secondary Actors:	
Trigger:	N/A		
Description:	User wants to view followers' posts.		
Preconditions:	PRE-40.1. User is logged in. PRE-40.2. User is not banned. PRE-40.3. User is not blocked.		
Post conditions:			
Normal Flow:	40.0 Send a message <ol style="list-style-type: none"> 1. User visits website. 2. User clicks on the "Followers' posts" tab in navbar tab. 3. Followers' posts is displayed 		
Alternative Flow:	N/A		
Exceptions:	40.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> 1. An error message is displayed. 		
Priority:	High		
Frequency of Use:	Low		
Business Rules:	N/A		
Other Informations:			
Assumptions	N/A		

3.2.3.3.32 View recommended posts

Use Case Specification

UC ID and Name:	UC-41 View recommended posts		
Created by:	PhongNV	Date created:	02/06/2019
Primary Actor:	Member	Secondary Actors:	
Trigger:	N/A		
Description:	User wants to view recommended posts.		
Preconditions:	PRE-41.1. User is logged in. PRE-41.2. User is not banned.		
Post conditions:			
Normal Flow:	41.0 View recommended posts 1. User visits website. 2. User clicks on the “Đề xuất cho bạn” tab in navbar tab. 3. Follower’s posts is displayed		
Alternative Flow:	N/A		
Exceptions:	40.0-E1 – Cannot communicate with API server. 1. An error message is displayed.		
Priority:	High		
Frequency of Use:	Low		
Business Rules:	N/A		
Other Informations:			
Assumptions	N/A		

3.2.3.4 Administrator

3.2.3.4.1 View all users' account

Use Case Specification

UC ID and Name:	UC-042 View all users' account		
Created by:	LinhLP	Date created:	04/06/2019

Primary Actor:	Administrator	Secondary Actor:	
Trigger:	N/A		
Description:	View all users' account		
Preconditions:	PRE-42.1. Admin has successfully logged in the system		
Post conditions:	POST-42.1. Admin has a list of user account		
Normal Flow:	42.0 View all user's account <ol style="list-style-type: none"> Admin click on “Quản lý account” tab A list of user account is displayed 		
Alternative Flows:	N/A		
Exceptions:	42.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> Display an error message. 		
Priority:	High		
Frequency of Use:	High		
Business Rules:	N/A		
Other Information:	N/A		
Assumptions:	N/A		

3.2.3.4.2 View reported accounts

Use Case Specification

UC ID and Name:	UC-043 View reported accounts
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Created by:	LinhLP	Date created:	05/06/2019
Primary Actor:	Administrator	Secondary Actor:	
Trigger:	N/A		
Description:	View reported accounts		
Preconditions:	PRE-43.1. Admin has successfully logged in the system		
Post conditions:	POST-43.1. Reported accounts is displayed to admin		
Normal Flow:	43.0 View reported accounts <ol style="list-style-type: none"> Admin click on “Báo cáo” tab Then admin click on “Quản lý tài khoản bị báo cáo” tab A list of reported account is displayed 		
Alternative Flows:	N/A		
Exceptions:	43.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> Display an error message. 		
Priority:	High		
Frequency of Use:	High		
Business Rules:	N/A		
Other Information:	N/A		
Assumptions:	N/A		

3.2.3.4.3 Ban a user

Use Case Specification

UC ID and Name:	UC-044 Ban a user		
Created by:	LinhLP	Date created:	05/06/2019
Primary Actor:	Administrator	Secondary Actor:	
Trigger:	N/A		
Description:	Ban an user		
Preconditions:	PRE-44.1. Admin has successfully logged in the system		
Post conditions:	POST-44.1. Reported account is suspended		
Normal Flow:	44.0 Ban a user <ol style="list-style-type: none">1. Admin click on “Báo cáo” tab2. Admin click on “Quản lý tài khoản bị báo cáo” tab3. A list of user account is displayed4. Admin click on option on top right of account5. A list of options is displayed6. Admin click “đình chỉ” button7. Then confirm popup dialog		
Alternative Flows:	N/A		
Exceptions:	44.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none">1. Display an error message.		
Priority:	High		
Frequency of Use:	High		

Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

3.2.3.4.4 Unban a user

Use Case Specification

UC ID and Name:	UC-045 Unban a user		
Created by:	LinhLP	Date created:	05/06/2019
Primary Actor:	Administrator	Secondary Actor:	
Trigger:	N/A		
Description:	Unban an user		
Preconditions:	PRE-45.1. Admin has successfully logged in the system		
Post conditions:	POST-45.1. Suspended account is unbanned		
Normal Flow:	45.0 Unban a user <ol style="list-style-type: none"> 1. Admin click on “Báo cáo” tab 2. Admin click on “Quản lý tài khoản bị báo cáo” tab 3. A list of user account is displayed 4. Admin click on “Đình chỉ” tab 5. Admin click on option button top right of suspended account 6. A list of options is displayed 7. Admin click on button “Khôi phục” 		
Alternative Flows:	N/A		

Exceptions:	45.0-E1 – Cannot communicate with API server. 1. Display an error message.
Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

3.2.3.4.5 View reported posts

Use Case Specification

UC ID and Name:	UC-046 View reported posts		
Created by:	LinhLP	Date created:	05/06/2019
Primary Actor:	Administrator	Secondary Actor:	
Trigger:	N/A		
Description:	View reported posts		
Preconditions:	PRE-46.1. Admin has successfully logged in the system		
Post conditions:	POST-46.1. A list of reported post is displayed		
Normal Flow:	46.0 View reported posts 1. Admin click on “Báo cáo” tab 2. Admin click on “Quản lý bài đăng bị báo cáo” tab 3. A list of reported post is displayed		
Alternative Flows:	N/A		

Exceptions:	46.0-E1 – Cannot communicate with API server. 1. Display an error message.
Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

3.2.3.4.6 Remove a reported post

Use Case Specification

UC ID and Name:	UC-047 Remove a reported post		
Created by:	LinhLP	Date created:	05/06/2019
Primary Actor:	Administrator	Secondary Actor:	
Trigger:	N/A		
Description:	Remove a reported post		
Preconditions:	PRE-47.1. Admin has successfully logged in the system		
Post conditions:	POST-47.1. Reported post is removed		
Normal Flow:	47.0 Remove a reported post 1. Admin click on “Báo cáo” tab 2. Admin click on “Quản lý bài đăng bị báo cáo” tab 3. A list of reported post is displayed 4. Admin click on “Xem chi tiết” link 5. Reported post detail is displayed to admin 6. Admin click on “Gỡ bài đăng”		

	7. Then confirm popup dialog
Alternative Flows:	N/A
Exceptions:	47.0-E1 – Cannot communicate with API server. 1. Display an error message.
Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

3.2.3.4.7 Restore a removed post

Use Case Specification

UC ID and Name:	UC-048 Restore a removed post		
Created by:	LinhLP	Date created:	05/06/2019
Primary Actor:	Administrator	Secondary Actor:	
Trigger:	N/A		
Description:	Restore a removed post		
Preconditions:	PRE-48.1. Admin has successfully logged in the system		
Post conditions:	POST-48.1. Removed post is restored		

Normal Flow:	48.0 Remove a reported post <ol style="list-style-type: none"> Admin click on “Báo cáo” tab Admin click on “Quản lý bài đăng bị báo cáo” tab A list of reported post is displayed Admin click on “Đã xoá” tab A list of removed posts is displayed Admin click on “Khôi phục” button 		
Alternative Flows:	N/A		
Exceptions:	48.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> Display an error message. 		
Priority:	High		
Frequency of Use:	High		
Business Rules:	N/A		
Other Information:	N/A		
Assumptions:	N/A		

3.2.3.4.8 View reported comments

Use Case Specification

UC ID and Name:	UC-049 View reported comments		
Created by:	LinhLP	Date created:	05/06/2019
Primary Actor:	Administrator	Secondary Actor:	
Trigger:	N/A		

Description:	Restore a removed post
Preconditions:	PRE-49.1. Admin has successfully logged in the system
Post conditions:	POST-49.1. A list of reported comments is displayed
Normal Flow:	49.0 View reported comments <ol style="list-style-type: none"> Admin click on “Báo cáo” tab Admin click on “Quản lý bình luận bị báo cáo” tab A list of reported comments is displayed
Alternative Flows:	N/A
Exceptions:	49.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> Display an error message.
Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

3.2.3.4.9 Remove a reported comment

Use Case Specification

UC ID and Name:	UC-050 Remove a reported comment		
Created by:	LinhLP	Date created:	05/06/2019
Primary Actor:	Administrator	Secondary Actor:	
Trigger:	N/A		

Description:	Restore a removed post
Preconditions:	PRE-50.1. Admin has successfully logged in the system
Post conditions:	POST-50.1. Reported comment is removed from post
Normal Flow:	50.0 Remove a reported comment <ol style="list-style-type: none"> 1. Admin click on “Báo cáo” tab 2. Admin click on “Quản lý bình luận bị báo cáo” tab 3. A list of reported comments is displayed 4. Admin click “Xem chi tiết” 5. Reported comment detail is displayed 6. Admin click “Gỡ bình luận” 7. Then confirm popup dialog
Alternative Flows:	N/A
Exceptions:	50.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> 1. Display an error message.
Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

3.2.3.4.10 Restore a removed comment

Use Case Specification

UC ID and Name:	UC-051 Restore a removed comment
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Created by:	LinhLP	Date created:	05/06/2019
Primary Actor:	Administrator	Secondary Actor:	
Trigger:	N/A		
Description:	Restore a removed comment		
Preconditions:	PRE-51.1. Admin has successfully logged in the system		
Post conditions:	POST-51.1. Removed comment is restored		
Normal Flow:	51.0 Restore a removed comment <ol style="list-style-type: none"> 1. Admin click on “Báo cáo” tab 2. Admin click on “Quản lý bình luận bị báo cáo” tab 3. Admin click “Đã xoá” tab 4. A list of removed comments is displayed 5. Admin click “Xem chi tiết” 6. Reported comment detail is displayed 7. Admin click “khôi phục” 		
Alternative Flows:	N/A		
Exceptions:	51.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> 1. Display an error message. 		
Priority:	High		
Frequency of Use:	High		
Business Rules:	N/A		
Other Information:	N/A		
Assumptions:	N/A		

3.2.3.4.11 Add a travel topic

Use Case Specification

UC ID and Name:	UC-052 Add a travel topic		
Created by:	LinhLP	Date created:	05/06/2019
Primary Actor:	Administrator	Secondary Actor:	
Trigger:	N/A		
Description:	Add a travel topic		
Preconditions:	PRE-52.1. Admin has successfully logged in the system		
Post conditions:	POST-52.1. A travel topic is added to the system		
Normal Flow:	52.0 Add a travel topic 1. Admin click “Quản lý topic” 2. A list of topic is displayed 3. Admin click “Tạo mới” button 4. Admin fill the form and click save		
Alternative Flows:	N/A		
Exceptions:	52.0-E1 – Cannot communicate with API server. 1. Display an error message.		
Priority:	High		
Frequency of Use:	High		
Business Rules:	N/A		
Other Information:	N/A		
Assumptions:	N/A		

3.2.3.4.12 Edit a travel topic

Use Case Specification

UC ID and Name:	UC-053 Edit a travel topic		
Created by:	LinhLP	Date created:	05/06/2019
Primary Actor:	Administrator	Secondary Actor:	
Trigger:	N/A		
Description:	Edit a travel topic		
Preconditions:	PRE-53.1. Admin has successfully logged in the system		
Post conditions:	POST-53.1. Edited travel topic is updated on system		
Normal Flow:	53.0 Add a travel topic 1. Admin click “Quản lý topic” 2. A list of topic is displayed 3. Admin click “Chỉnh sửa” button 4. Admin fill the form and click save		
Alternative Flows:	N/A		
Exceptions:	53.0-E1 – Cannot communicate with API server. 1. Display an error message.		
Priority:	High		
Frequency of Use:	High		
Business Rules:	N/A		
Other Information:	N/A		

Assumptions:	N/A
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3.2.3.4.13 Delete a travel topic

Use Case Specification

UC ID and Name:	UC-054 Edit a travel topic		
Created by:	LinhLP	Date created:	05/06/2019
Primary Actor:	Administrator	Secondary Actor:	
Trigger:	N/A		
Description:	Delete a travel topic		
Preconditions:	PRE-54.1. Admin has successfully logged in the system		
Post conditions:	POST-54.1. A topic is remove from system		
Normal Flow:	54.0 Add a travel topic <ol style="list-style-type: none"> Admin click “Quản lý topic” A list of topic is displayed Admin click “Xoá” button Then confirm popup dialog 		
Alternative Flows:	N/A		
Exceptions:	54.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> Display an error message. 		
Priority:	High		
Frequency of Use:	High		
Business Rules:	N/A		

Other Information:	N/A
Assumptions:	N/A

3.2.3.4.14 View statistic of users

Use Case Specification

UC ID and Name:	UC-055 View statistic of users		
Created by:	ThaiHV	Date created:	05/06/2019
Primary Actor:	Administrator	Secondary Actor:	
Trigger:	N/A		
Description:	View statistic of new registered user in days, months, years		
Preconditions:	PRE-55.1. User has signed in as Administrator		
Post conditions:	POST-55.1. Chart of users' statistic is displayed.		
Normal Flow:	55. View statistic of users <ol style="list-style-type: none"> 1. User visits admin site. 2. A Chart of users' statistic is displayed 		
Alternative Flows:	N/A		
Exceptions:	55-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> 1. An error message is displayed. 		
Priority:	High		
Frequency of Use:	High		
Business Rules:	N/A		
Other Information:			
Assumptions:	N/A		

3.2.3.4.15 View statistic of posts

Use Case Specification

UC ID and Name:	UC-056 View statistic of posts		
Created by:	ThaiHV	Date created:	05/06/2019
Primary Actor:	Administrator	Secondary Actor:	
Trigger:	N/A		
Description:	View statistic of new post user in days, months, years		
Preconditions:	PRE-56.1. User has signed in as Administrator		
Post conditions:	POST-56.1. Chart of posts' statistic is displayed.		
Normal Flow:	56. View statistic of users 1. User visits admin site. 2. A Chart of posts' statistic is displayed		
Alternative Flows:	N/A		
Exceptions:	56-E1 – Cannot communicate with API server. 1. An error message is displayed.		
Priority:	High		
Frequency of Use:	High		
Business Rules:	N/A		
Other Information:			
Assumptions:	N/A		

3.2.3.5 Guest, Member, Administrator

3.2.3.5.1 Search post by travel destination

Use Case Specification

UC ID and Name:	UC-057 Search post by travel destinations		
Created by:	LinhLP	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	Guest, Administrator
Trigger:	N/A		
Description:	Search post by travel destinations		
Preconditions:	N/A		
Post conditions:	POST-57.1. Posts related to destination is displayed		
Normal Flow:	57.0 Search post by travel destination 1. user type destination in search box below “Bạn muốn đi đâu” label 2. user chose destination from drop down list		
Alternative Flows:	N/A		
Exceptions:	57.0-E1 – Cannot communicate with API server. 1. Display an error message.		
Priority:	High		
Frequency of Use:	High		
Business Rules:	N/A		
Other Information:	N/A		
Assumptions:	N/A		

3.2.3.5.2 Search a member

Use Case Specification

UC ID and Name:	UC-058 Search a member		
Created by:	LinhLP	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	Guest, Administrator
Trigger:	N/A		
Description:	Search a member		
Preconditions:	N/A		
Post conditions:	POST-58.1. Member search result is displayed		
Normal Flow:	58.0 Search a member 1. User type name, keyword into search box top-right of screen and hit enter 2. Result is displayed 3. User click “Mọi người” tab 4. A list of member related to search name is displayed		
Alternative Flows:	N/A		
Exceptions:	58.0-E1 – Cannot communicate with API server. 1. Display an error message.		
Priority:	High		
Frequency of Use:	High		
Business Rules:	N/A		
Other Information:	N/A		
Assumptions:	N/A		

3.2.3.5.3 Search finding companion posts

Use Case Specification

UC ID and Name:	UC-059 Search finding companion posts		
Created by:	LinhLP	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	Guest, Administrator
Trigger:	N/A		
Description:	Search finding companion posts		
Preconditions:	N/A		
Post conditions:	POST-59.1. Finding companion posts result is displayed		
Normal Flow:	59.0 Search finding companion posts 1. User click “Tìm bạn phượt” tab 2. User fill the form on top of result list and click search 3. Finding companion posts search result is displayed to user		
Alternative Flows:	N/A		
Exceptions:	59.0-E1 – Cannot communicate with API server. 1. Display an error message.		
Priority:	High		
Frequency of Use:	High		
Business Rules:	N/A		
Other Information:	N/A		

Assumptions:	N/A
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3.2.3.5.4 View popular posts

Use Case Specification

UC ID and Name:	UC-060 View popular posts		
Created by:	TruongLX	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	Guest, Administrator
Trigger:	N/A		
Description:	View popular posts		
Preconditions:	PRE-60.1. Guest visit the website or member/administrator is logged in		
Post conditions:	POST-60.1. Home page display a tab name “phổ biến”		
Normal Flow:	60.0 User view popular posts <ol style="list-style-type: none"> 1. User visit website 2. User click on “phổ biến” tab on home page 3. Display popular posts 		
Alternative Flows:	N/A		
Exceptions:	60.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> 1. Display an error message. 		
Priority:	High		
Frequency of Use:	High		
Business Rules:	N/A		
Other Information:	N/A		

Assumptions:	N/A
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3.2.3.5.5 View recently posts

Use Case Specification

UC ID and Name:	UC-061 View recently posts		
Created by:	TruongLX	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	Guest, Administrator
Trigger:	N/A		
Description:	View recently added posts		
Preconditions:	PRE-61.1. Guest visit the website or member/administrator is logged in		
Post conditions:	POST-61.1. Home page display a tab name “mới nhất”		
Normal Flow:	61.0 User view recently posts <ol style="list-style-type: none"> 1. User visit website 2. User click on “mới nhất” tab on home page 3. Display recently added posts 		
Alternative Flows:	N/A		
Exceptions:	61.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> 1. Display an error message. 		
Priority:	High		
Frequency of Use:	High		
Business Rules:	N/A		
Other Information:	N/A		

Assumptions:	N/A
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3.2.3.5.6 View a post detail

Use Case Specification

UC ID and Name:	UC-062 View a post detail		
Created by:	TruongLX	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	Guest, Administrator
Trigger:	N/A		
Description:	View a post detail		
Preconditions:	PRE-62.1. Guest visit the website or member/administrator is logged in PRE-62.2. User click on a post		
Post conditions:	POST 62-1. A post detail displayed		
Normal Flow:	62.0 User view popular posts <ol style="list-style-type: none"> 1. User visit website 2. User clicks on a post 3. Display a detail post screen 		
Alternative Flows:	N/A		
Exceptions:	62.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> 1. Display an error message. 		
Priority:	High		
Frequency of Use:	High		
Business Rules:	N/A		

Other Information:	N/A
Assumptions:	N/A

3.2.3.5.7 View a virtual trip

Use Case Specification

UC ID and Name:	UC-063 View a virtual trip		
Created by:	TruongLX	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	Guest, Administrator
Trigger:	N/A		
Description:	View a virtual trip.		
Preconditions:	PRE-63.1. Guest visit the website or member/administrator is logged in PRE-63.2. User click on tab “chuyến đi” on member’s profile page.		
Post conditions:	POST 63-1. Detail of virtual trip displayed.		
Normal Flow:	63.0 View member’s virtual trip <ol style="list-style-type: none"> 1. User visit website. 2. User click on member’s name or avatar. 3. System display member’s profile page. 4. User clicks on “chuyến đi” tab on profile page. 5. List of virtual trips display on profile page. 6. User click on trip name or image. 7. System display detail information about that trip. 		
Alternative Flows:	63.1 View member’s virtual trip <ol style="list-style-type: none"> 1. User search something. 2. System display a member. (Continue from step 3 as normal flow).		

Exceptions:	63.0-E1 – Cannot communicate with API server. 1. Display an error message.
Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

3.2.3.5.8 View member's profile

Use Case Specification

UC ID and Name:	UC-064 View member's profile		
Created by:	TruongLX	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	Guest, Administrator
Trigger:	N/A		
Description:	View a member's profile.		
Preconditions:	PRE-64.1. Guest visit the website or member/administrator is logged in. PRE-64.2. User click on member's name or avatar.		
Post conditions:	POST-64.1. A profile page of member displayed.		
Normal Flow:	64.0 View member's profile 1. User visit website. 2. User click on member's name or avatar. 3. System display member's profile page.		

Alternative Flows:	64.1 View member's profile <ol style="list-style-type: none"> 1. User search some thing. 2. System display a member. 3. User click on member's name or avatar . 4. System display member's profile page.
Exceptions:	64.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> 1. Display an error message.
Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

3.2.3.5.9 View member's followings/followers

Use Case Specification

UC ID and Name:	UC-065 View member's followings/followers		
Created by:	TruongLX	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	Guest, Administrator
Trigger:	N/A		
Description:	View a member's followings/followers.		
Preconditions:	PRE-65.1. User visit member's profile page. PRE-65.2. User click on "Followers" link on left side information panel.		
Post conditions:	POST-65.1. A list of followers is displayed.		

Normal Flow:	65.0 View member's followers <ol style="list-style-type: none"> 1. System display member's profile page. 2. User click on "Followers" link on the left side panel. 3. A list of followers displayed.
Alternative Flows:	65.1 View member's following <ol style="list-style-type: none"> 1. System display member's profile page. 2. User click on "Followings" link on the left side panel. 3. A list of followings displayed.
Exceptions:	65.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> 1. Display an error message.
Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

3.2.3.5.10 View member's created posts

Use Case Specification

UC ID and Name:	UC-066 View member's created posts		
Created by:	TruongLX	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	Guest, Administrator
Trigger:	N/A		
Description:	View a member's created posts.		
Preconditions:	PRE-66.1. User visit member's profile page.		

Post conditions:	POST-66.1. A list of created posts is displayed.
Normal Flow:	66.0 View member's created posts <ol style="list-style-type: none"> 1. User visit member's profile page. 2. A list of created posts is displayed at the middle (with title, image, short description).
Alternative Flows:	
Exceptions:	66.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> 1. Display an error message.
Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

3.2.3.5.11 View member's created virtual trips

Use Case Specification

UC ID and Name:	UC-067 View member's created virtual trips		
Created by:	TruongLX	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	Guest, Administrator
Trigger:	N/A		
Description:	View a member's created virtual trips.		
Preconditions:	PRE-67.1. User visit member's profile page.		

Post conditions:	POST-67.1. A list of created virtual trips is displayed.
Normal Flow:	67.0 View member's created virtual trip <ol style="list-style-type: none"> 1. User visit member's profile page. 2. User click “chuyển đi” tab on profile page. 3. List of created virtual trips display on profile page.
Alternative Flows:	N/A
Exceptions:	67.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> 1. Display an error message.
Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

3.2.3.5.12 View member's created finding companions posts

Use Case Specification

UC ID and Name:	UC-068 View member's created finding companions posts		
Created by:	TruongLX	Date created:	05/06/2019
Primary Actor:	Member	Secondary Actor:	Guest, Administrator
Trigger:	N/A		
Description:	View member's created finding companions posts.		
Preconditions:	PRE-68.1. User visit member's profile page.		

Post conditions:	POST-68.1. A list of created finding companions posts displayed.
Normal Flow:	68.0 View member’s created finding companions posts <ol style="list-style-type: none"> 1. User visit member’s profile page. 2. User click “tìm bạn phượt” tab on profile page. 3. List of created finding companion posts display on profile page.
Alternative Flows:	N/A
Exceptions:	68.0-E1 – Cannot communicate with API server. <ol style="list-style-type: none"> 1. Display an error message.
Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

3.3 Non-Functional Requirements

3.3.1 Security

- ✓ Token-Based Authentication, relies on a signed token that is sent to the server on each request.
- ✓ Because we use Token-Based Authentication, so all request must be made on the correct frontend website otherwise it will be rejected, which made Cross-Site Request Forgery (CSRF) is impossible.
- ✓ All query made to MongoDB must be escaped so no NoSQL Injection.
- ✓ Apply SSL encryption to restrict user access and prevent man-in-the-middle attacking.
- ✓ All passwords are encrypted by PBKDF2 algorithm with salt.

✓ The security matrix is as following table:

Function	Guest	Member	Administrator
Sign up	✓		
Google sign in		✓	✓
Facebook sign in		✓	✓
Normal sign in		✓	✓
Forgot password		✓	✓
Sign out		✓	✓
Change password		✓	✓
Update profile		✓	✓
Choose interested topic		✓	
Update interested topic		✓	
Create a post		✓	
Edit a post		✓	
Delete a post		✓	
Like/Unlike a post		✓	
Share a post		✓	
Report a post		✓	
Bookmark a post		✓	
View all bookmarks		✓	
Remove a bookmark		✓	
Comment to a post		✓	
Edit a comment		✓	
Delete a comment		✓	
Like/Unlike a comment		✓	
Report a comment		✓	
Create a virtual trip		✓	
Edit a virtual trip		✓	
Delete a virtual trip		✓	
Follow a user		✓	

Unfollow a user		✓	
Block a user		✓	
Unblock a user		✓	
Report a user		✓	
Create a finding companions post		✓	
Edit a finding companions post		✓	
Delete a finding companions post		✓	
Join to a companion group		✓	
Leave a companion group		✓	
Remove a joined companion		✓	
Send/receive messages		✓	
View followers' posts		✓	
View recommended posts		✓	
View all users' account			✓
View reported accounts			✓
Ban a user			✓
Unban a user			✓
View reported posts			✓
Remove a reported post			✓
Restore a removed post			✓
View reported comments			✓
Remove a reported comment			✓
Restore a removed comment			✓
Add a travel topic			✓
Edit a travel topic			✓
Delete a travel topic			✓
View statistic of users			✓
View statistic of posts			✓
Search post by travel destinations	✓	✓	✓
Search a member	✓	✓	✓

Search finding companion posts	✓	✓	✓
View popular posts	✓	✓	✓
View recently posts	✓	✓	✓
View a post detail	✓	✓	✓
View a virtual trip	✓	✓	✓
View member's profile	✓	✓	✓
View member's followings/followers	✓	✓	✓
View member's created posts	✓	✓	✓
View member's created virtual trips	✓	✓	✓
View member's created finding companions' posts	✓	✓	✓

3.3.2 Maintainability & Extensibility

- Microservices architecture for backend.
- Unit Tests and Integration Tests are written using Karma and NUnit.
- Using TSLint for a consistent coding convention.
- Maintainable source code and easy deployment since we follow a single coding convention & a highly maintainable architecture design.
- Object Oriented Programming paradigm is applied in order to ensure scalability & maintainability.

3.3.3 Availability and Scalability

- Google Cloud service for automatic horizontal scalability.
- Third-party services for convenient development:
 - SendGrid for sending emails.
 - Google storage for storing images.

3.3.4 Performance

- Web front-end is a Single Page Application with the goal of providing a more fluid user experience similar to a desktop application.

- Backend system uses background job for external requests, heavy processing requests such as:
 - Sending email
 - Training recommendations model

3.3.5 Usability

- The interface should be elegant and simple.
- Alt attributes are provided for non-text elements, such as images and maps.
- Links, buttons and checkboxes are easily clickable, for example a user can select a checkbox by clicking the text, not just the checkbox.
- Search box is wide enough, so that users can see what they've typed.
- Search is available on every page, not just the homepage.
- Links are easily recognizable. They look clickable. Items that aren't links don't look clickable, for example underlining text is avoided.
- Important commands are displayed as buttons, not links. For example, "Apply" or "Save" is a button, not a link.