Travelling Service System
Software Requirement Specification

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3/22/2015	Update system overview	m	Update system overview	v1.0
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TABLE OF CONTENTS

1 INTRODUCTION 6

1.1 Purpose 6
1.2 Scope 6
1.3 Definitions, Acronyms, and Abbreviations 6
1.4 References 6
1.5 Overview 6

2 OVERALL DESCRIPTION 8

2.1 System overview 8
2.2 Product functions 8
2.3 User characteristics 8
2.4 Constraints 8

3 FUNCTIONAL REQUIREMENTS 9

3.1 The actors 9
3.2 The use cases 10
3.3 Use Cases Diagram 11
3.4 Functional Requirement one 12

4 NON-FUNCTIONAL REQUIREMENTS 33

4.1 Usability 33
4.2 Reliability 33
4.3 Performance 33
4.4 Supportability 34
4.5 Design Constraints 34
4.6 On-line User Doc0075mentation and Help System Requirements 34
4.7 Purchased Components 34
4.8 Interfaces 34
4.9 Licensing Requirements 38

4.10 Legal, Copyright, and Other Notices 38
4.11 Applicable Standards.....38

5 SUPPORTING INFORMATION.....39

1 INTRODUCTION

TSS is Travelling Service System. This system is going to help user to manage their trip, make them comfortable and save their time to find flight, book hotel and find anywhere to entertainment by get information from another travelling companies, another food website, forum review places.

1.1 Purpose

- *This document describes functional and non-functional requirements, constraints, and other factors necessary to provide a complete and comprehensive description of the requirements for the software.*
- *This system is helping to save time in travelling. It should be run in browser, tablet, and smart phone.*
- *It is intended for Moderator, Administrator, and User.*

1.2 Scope

- *This document describes the requirements about TSS which will manage activities in travelling.*
- *This software runs on internet.*
- *It is used by many types of user in many countries with many languages.*

1.3 Definitions, Acronyms, and Abbreviations

- *TSS: Travelling Service System*
- *DB: Database*
- *Admin: Administrator*

1.4 References

1.5 Overview

The rest of this SRS is organized 4 sections:

- *2nd section provides overall description of this software. It provides information about the relationship and level of accounts, some constraints while making this software, some assumptions and dependencies and product functions.*
- *3rd section describes functional requirements.*

- *4th section describes non-functional requirements.*
- *5th section provides some supporting and additional information.*

2 OVERALL DESCRIPTION

2.1 System overview

This system is used to help tourist who from many countries in the world can save time to book plane ticket, book hotel, find entertainment places. It should be run in all browser, tablet smart phone use android and iOS.

2.2 Product functions

	Manage Flight	*Manage User*	*Manage Comment*	*Search Service*	*Search & Compare Flight*	*Rate*
Admin	*X*	*X*				
Mod			*X*			
User				*X*	*X*	*X*

2.3 User characteristics

- *The Users of TSS are four types but they have some same characteristics:*
- *Don't have much knowledge about IT.*
- *Can't spend much time to using TSS.*
- *Have good English about travelling*

2.4 Constraints

- *TSS should be run in browser (Google Chrome, Fire Fox, Safari), smart phone and table have android or iOs.*
- *It is used by casual user so that it must be ease-of-use and comfortable.*
- *Develop by J2ME and using NetBeans IDE.*

3 FUNCTIONAL REQUIREMENTS

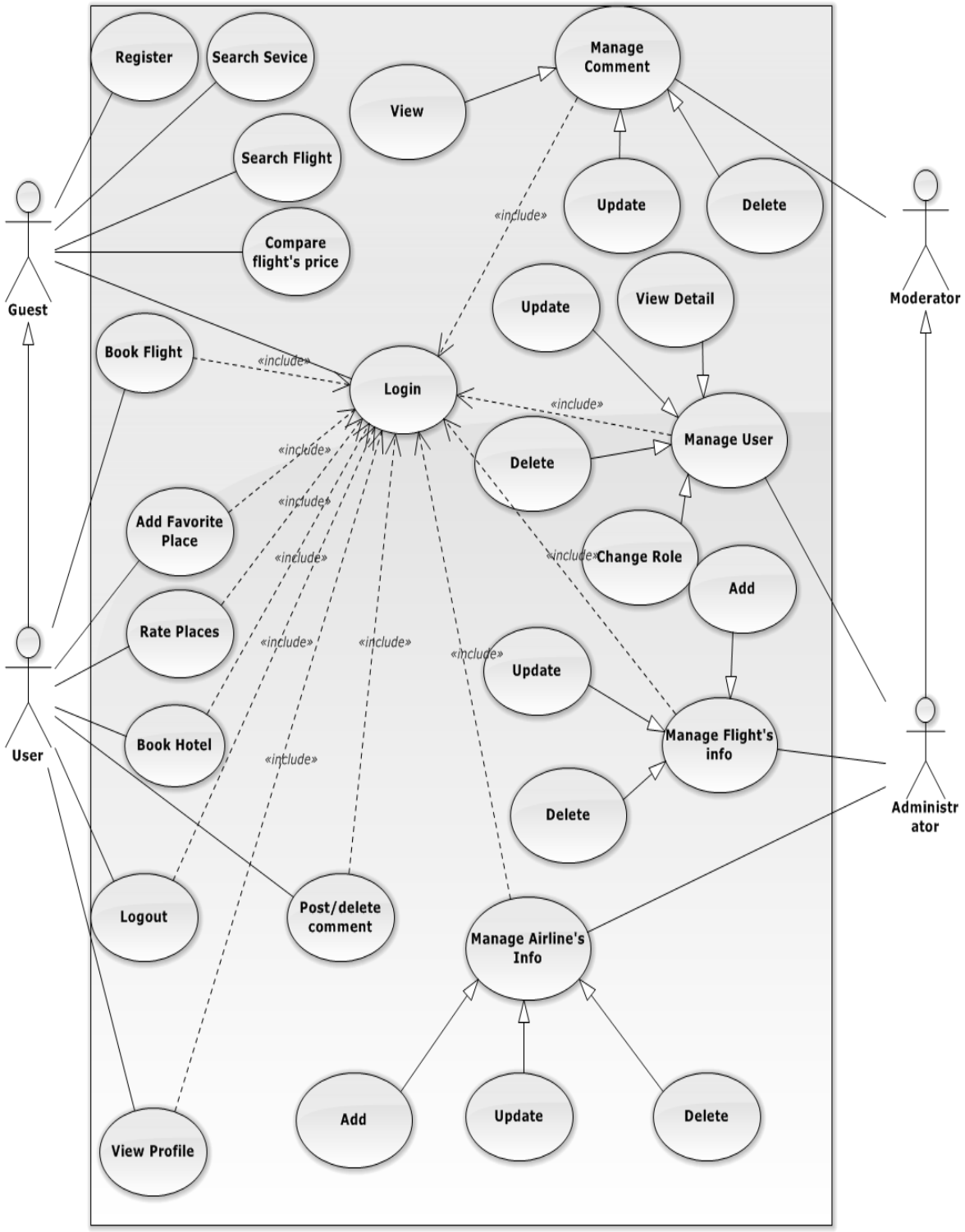
3.1 The actors

#	**Main functions**	**Admin**	**Mod**	**User**
1	Login	X	x	x
2	Logout	X	x	x
3	Register new account			x
4	Search flight	x	x	x
5	Book flight			X
6	Compare flight			X
7	Search service	x	x	x
8	Book hotel			x
9	Add favorite places			x
10	Post comment	x	x	x
11	Delete Comment	x	x	x
12	Rate service			x
13	View user's detail	X		x
14	View comment	X	x	x
15	Update comment	X	x	
16	Update user account	X		x
17	Delete user account	X		
18	Update role	X		
19	Add flight's information	X		
20	Update flight's information	X		
21	Delete flight's information	X		
22	Add airline's information	X		
23	Update airline's information	X		
24	Delete airline's information	X		

3.2 The use cases

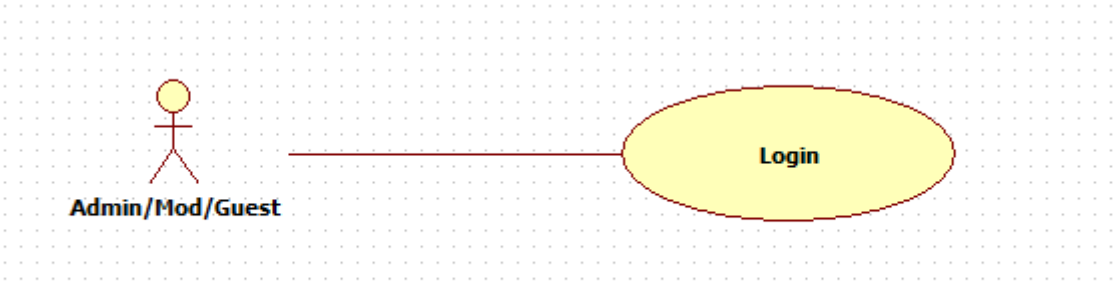
System Functions	Main Use Cases	Use Case #
Functional Requirement One		
Login/Logout	Login/Logout	UC_1.1
Register new account	Register new account	UC_2
Search flight	Search flight	UC_3
Book flight	Book flight	UC_4
Compare flight	Compare flight	UC_5
Search service	Search service	UC_6
Book hotel	Book hotel	UC_7
Add favorite places	Add favorite places	UC_8
Post comment	Post comment	UC_9
Delete Comment	Delete Comment	UC_10
Rate service	Rate service	UC_11
View user's detail	View user's detail	UC_12
View comment	View comment	UC_13
Update comment	Update comment	UC_14
Update user account	Update user account	UC_15
Delete user account	Delete user account	UC_16
Update role	Update role	UC_17
Add flight's information	Add flight's information	UC_18
Update flight's information	Update flight's information	UC_19
Delete flight's information	Delete flight's information	UC_20
Add airline's information	Add airline's information	UC_21
Update airline's information	Update airline's information	UC_22
Delete airline's information	Delete airline's information	UC_23

3.3 Use Cases Diagram



3.4 Functional Requirement one

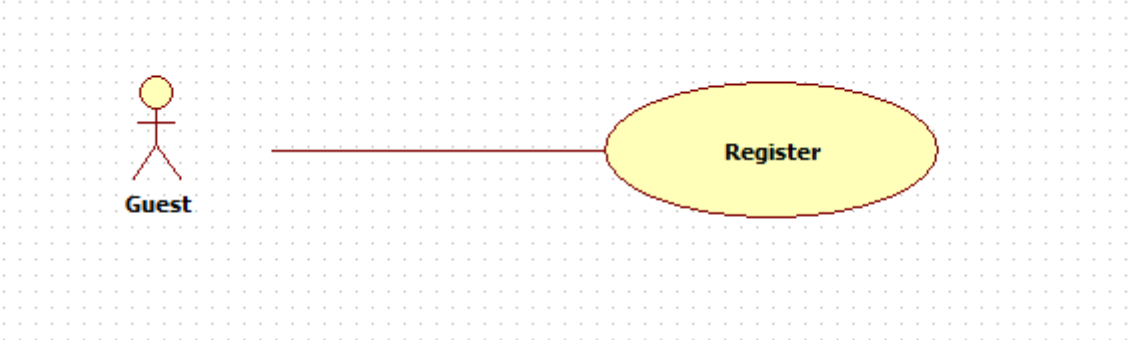
3.4.1.1 Login/Logout



User Case ID	UC_1.1	
Name	Login	
Author	Vietvqse60647	
Goal	Login help TTS can define rights of each user	
Actors	Admin/Mod/User	
Pre-conditions	User must had account on TTS User accessed login page	
Post-conditions	Return homepage	
Main Flow	1. Admin/Mod/User click “login” button 3. Fill username, password 4. Click “login” button	2. Show form to fill username and password. 5. TTS check information username, password. +If right: allow access they system +If wrong: refill the username, password.
Exception	4A: Username or password maximum 12 characters, if they over user can’t login, return login page 5A: If user fill in wrong information, then show error message to and ask to log in again	

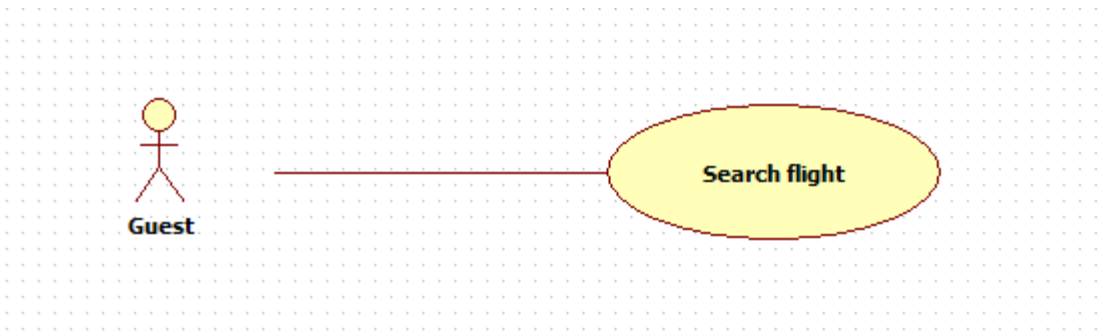
User Case ID	UC_1.2	
Name	Logout	
Author	Vietvqse60647	
Goal	Logout TTS	
Actors	Admin/Mod/User	
Pre-conditions	User must login with role “User” User accessed logout page	
Post-conditions	Return homepage	
Main Flow	1. Admin/Mod/User click “logout” button	2. TTS reject user from the system and return the homepage.
Exception	N/A	

3.4.1.2 Register new account



User Case ID	UC_2	
Name	Register new account	
Author	Vietvqse60647	
Goal	Register new account	
Actors	User	
Pre-conditions	User must on register page	
Post-conditions	Return login page	
Main Flow	1. Actor click “register” button 3. Actor fill in the form and submit	2. Show the form to fill TTS accept and submit for manager process. 4. If success, it will inform via email for user
Exception	3A: Username, password maximum 12 characters, if they over 12 characters user can’t submit 4A: If not success, it will show error and return register page	

3.4.1.3 Search flight



User Case ID	UC_1.4	
Name	Search flight	
Author	Vietvqse60647	
Goal	Want to search a flight	
Actors	Admin/Mod/User	
Pre-conditions	User accessed homepage	
Post-conditions	The information about flights will show on the screen Return search box on hompage	
Main Flow	1. Fill information in search box	2. The system set information to the query string and find with database, then the system return the result to the search page will show on the screen
Exception	2A: A flight dosen't have database, return search box on homepage	

3.4.1.4 Book flight

User Case ID	UC_4
Name	Book flight
Author	Phatntse60610
Goal	Want to book a flight
Actors	Users
Pre-conditions	User must login with role "User" Users accessed Flight Detail page
Post-conditions	Return Flight Detail page

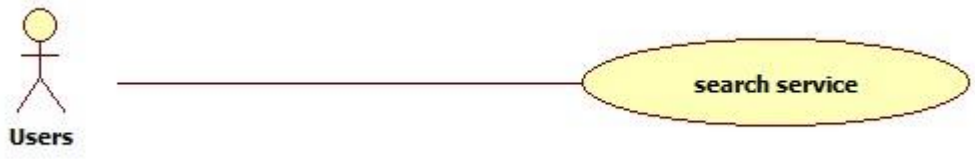
Main Flow	1. User click “book flight “ 3. choose flight and fill information to flight hotel	2. Go to book flight page 4. Check information, system confirm is true and update to DB. 5. show “ booking successful”
Exception	1A: If role is not correct, return home page. 4A: If they book a flight full of passengers or near departure times a message show on screen that choose another flight.	

3.4.1.5 Compare flight

User Case ID	UC_5	
Name	Compare flight’s price	
Author	Phatntse60610	
Goal	Want to compare flight’s price	
Actors	User	
Pre-conditions	Users accessed Flight Detail page	
Post-conditions	The compare page will show on the screen	
Main Flow	1. User click search Flight page 3. Choose Flights then click “compare “ button	2.Go to Flight page 4.Show compare flight’s price box on screen
Exception	1A: If role is not correct , return homepage	

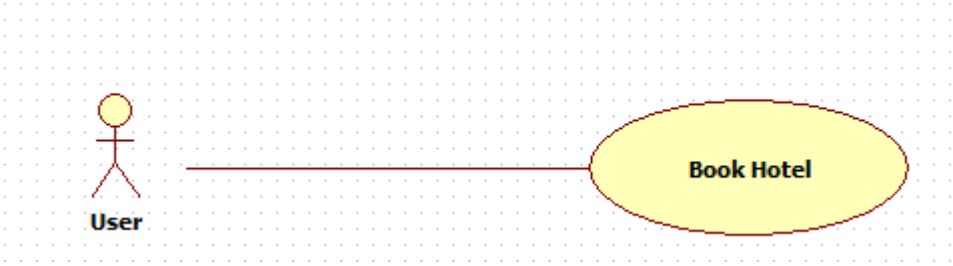
	4A: If user choose less than two flights, return Flight page .

3.4.1.6 Search service



User Case ID	UC_1.7	
Name	Search service	
Author	Phatntse60610	
Goal	Want to search service	
Actors	Admin, mod , user	
Pre-conditions	Users accessed homepage	
Post-conditions	The result of service they search display on screen	
Main Flow	1. User click search box and fill service	2. Check and Show information about service user choose
Exception	Service haven't in DB , return search box in home page	

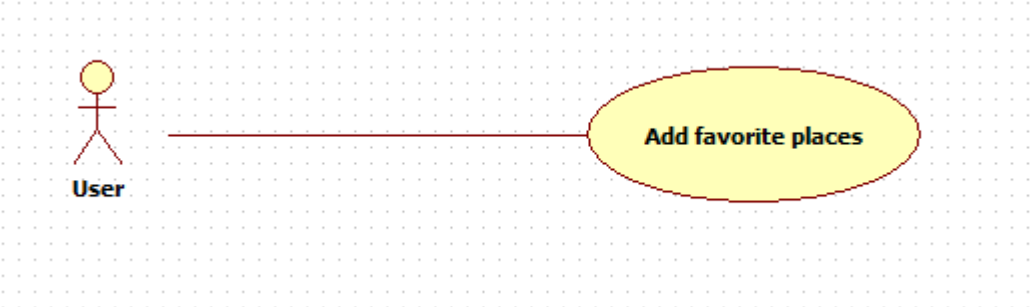
3.4.1.7 Book hotel



User Case ID	UC_7

Name	Book Hotel	
Author	DuongPSSE61028	
Goal	User can book hotel in page	
Actors	User	
Pre-conditions	User must log in with role “User” User accessed Hotel Detail page.	
Post-conditions		
Main Flow	1. User click “Book Hotel” 3. Choose hotel and fill information to book hotel.	2. Go to Book Hotel page. 4. Check information, System set confirm is true and update to DB. 5. Show “Booking successful”
Exception	1A: if role is not correct, show error message and ask to log in again. 4A: If they book hotel full show on screen that choose another hotel.	

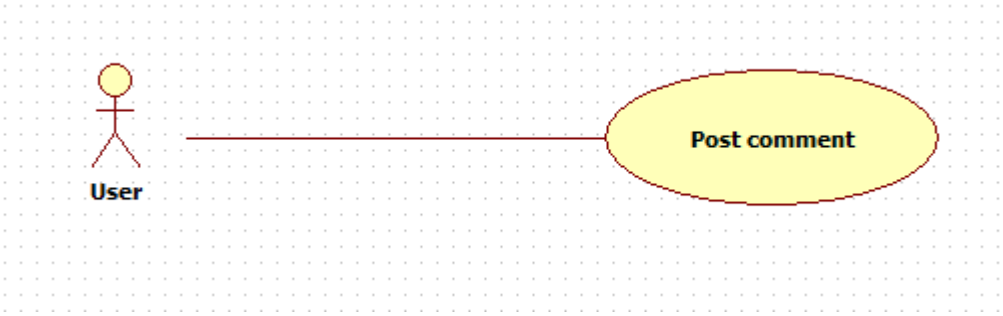
3.4.1.8 Add favorite place



User Case ID	UC_8
Name	Add favorite places
Author	DuongPSSE61028
Goal	User add favorite places of them.
Actors	User
Pre-conditions	User must log in with role “User” User accessed home page.

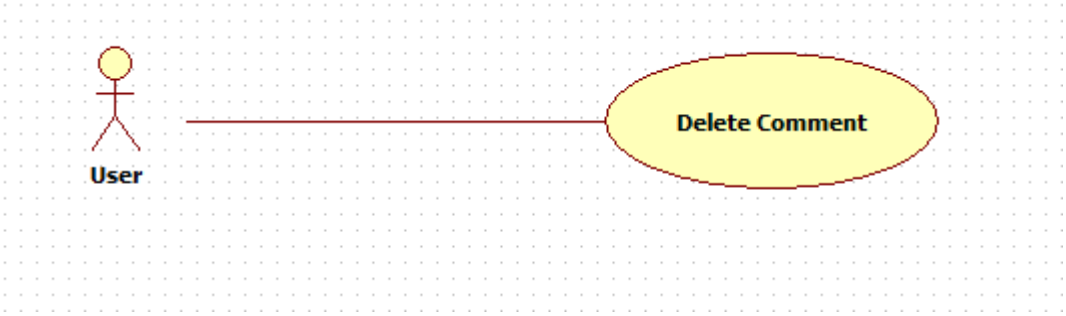
Post-conditions		
Main Flow	1. User choose favorite place at home page and click “Like”	2. System set confirm is true and update to DB.
Exception	1A: if role is not correct, show error message and ask to log in again.	

3.4.1.9 Post comment



User Case ID	UC_9	
Name	Post comment	
Author	DuongPSSE61028	
Goal	User post comment in page.	
Actors	User	
Pre-conditions	User must log in with role “User”	
Post-conditions		
Main Flow	1. User input comments in comment box and click “OK”	2. The comment will be insert to DB and post to page.
Exception	1A: if role is not correct, show error message and ask to log in again.	

3.4.1.10 Delete comment



User Case ID	UC_10	
Name	Delete comment	
Author	DuongPSSE61028	
Goal	User delete comment of them in page.	
Actors	User	
Pre-conditions	User must log in with role “User”	
Post-conditions		
Main Flow	1.User select comment click “Delete”	2. The comment will be delete in system DB.
Exception	1A: if role is not correct, show error message and ask to log in again.	

3.4.1.11 Rate service

User Case ID	UC_11
Name	Rate service
Author	CuongNKSE90180
Goal	view ratings from customers

Actors	User	
Pre-conditions	User must log in with role “User”	
Post-conditions		
Main Flow	1. User click “Rate service” of place.	2. User can see immediate result. The rate is displayed on the monitor.
Exception	1A: if role is not correct, show error message and ask to log in again. Or you can call 08.123 or send mail to contact@fpt.edu.vn for advice..	

3.4.1.12 View user’s detail

User Case ID	UC_12	
Name	View user’s detail	
Author	CuongNKSE90180	
Goal	View information user’s detail	
Actors	Admin, User	
Pre-conditions	User must log in with role “User” or ”Admin”.	
Post-conditions		
Main Flow	1. User click “View user’s detail” of place. 3.Admin click “View user’s detail” of place.	2.The system will display the results of a user's information. 4. The system will display the results of a user's information.
Exception	1A: if role is not correct, show error message and ask to log in again.	

	Or you can call 08.123 or send mail to contact@fpt.edu.vn for advice..

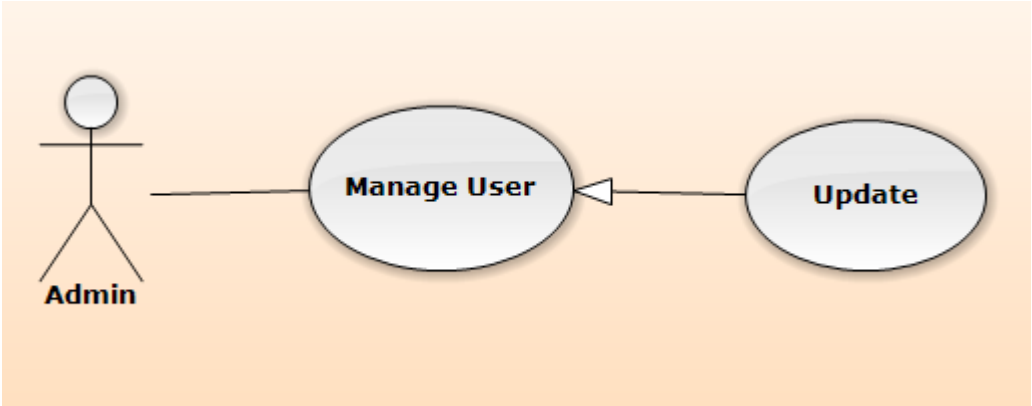
3.4.1.13 View comment

User Case ID	UC_1.9	
Name	View comment	
Author	CuongNKSE90180	
Goal	View comment from customers	
Actors	Admin, User, Mod.	
Pre-conditions	User must log in with role “User” or “Admin”, “Mod”.	
Post-conditions		
Main Flow	1. User click “View comment” of place. 3. Admin click “View user’s detail” of place. 5. Mod click “View user’s detail” of place	2. The system will display the results of a user's comment. 4. The system will display the results of a user's comment. 6. The system will display the results of a user's comment.
Exception	1A: if role is not correct, show error message and ask to log in again. Or you can call 08.123 or send mail to contact@fpt.edu.vn for advice...	

3.4.1.14 Update comment

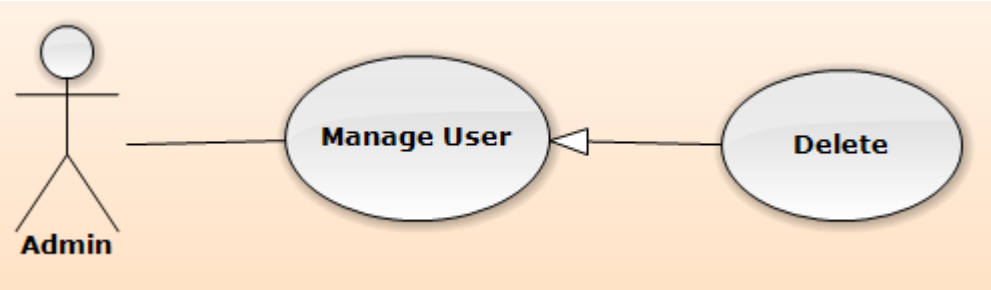
User Case ID	UC_1.9	
Name	Update comment	
Author	CuongNKSE90180	
Goal	Update comment from customers	
Actors	Admin, Mod	
Pre-conditions	User must log in with role “Admin” or “Mod”	
Post-conditions		
Main Flow	1. Admin click “Update comment” of place. 3. Click “Update comment” of place	2. The system to update automatically and displayed on the monitor. 4. The system to update automatically and displayed on the monitor.
Exception	1A: if role is not correct, show error message and ask to log in again.	

3.4.1.15 Update User account



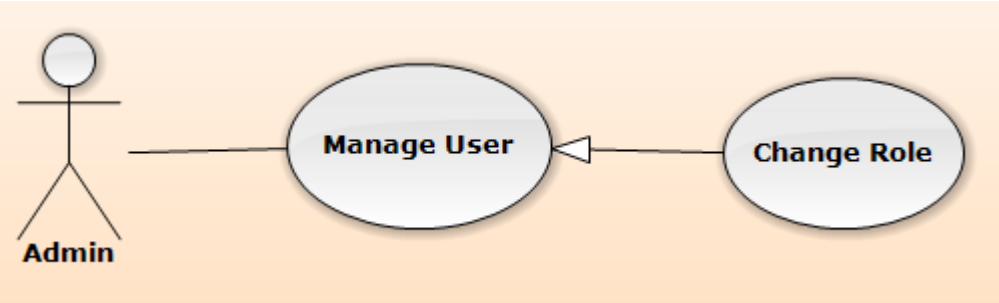
User Case ID	UC_15	
Name	Update User account	
Author	QuanVMHSE61002	
Goal	Update User's information	
Actors	Admin	
Pre-conditions	User must log in with role "Admin", accessed "Admin" page	
Post-conditions	Forward to "User Management" page	
Main Flow	1.Click [User Management] link	
		2.Forward User Management page and
		3.Display all User account
	4.Select User account need to update information	
		5.Forward User's Detail page
		6.Display Information form and request Manager enter information
	7.Enter new information	
	8.Click [Save] button	
		9.Validate new information
		10.Update DB
		11.Display Success message
Exception	9.1: If new information is not valid, display message show Information is not valid and request user enter again 9.2: If new information have wrong format, display message show Format of information and request user enter again 9.3: If Role is not exist, display message Role is not exist and request user enter again 1.1: If User doesn't have role Admin, forward to Login page 7.1: If Admin edit account ID, display message show Can't change ID	

3.4.1.16 Delete User account



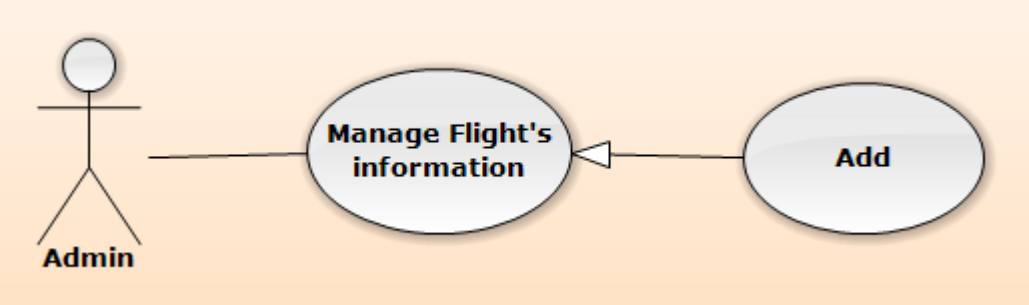
User Case ID	UC_16	
Name	Delete User account	
Author	QuanVMHSE61002	
Goal	Delete User	
Actors	Admin	
Pre-conditions	User must log in with role “Admin”, accessed “Admin” page	
Post-conditions	Forward to “User Management” page	
Main Flow	1.Click [User Management] link	
		2.Forward User Management page and
		3.Display all User account
	4.Click [Delete] button	
		5.Check User ID
		6.Delete User’s information by User ID in DB
		7.Display Success message
Exception	5.1: If ID is not exist, display message show User is not exist and forward to “User Management” page 1.1: If User doesn’t have role Admin, forward to Login page	

3.4.1.17 Update role



User Case ID	UC_17	
Name	Update role	
Author	QuanVMHSE61002	
Goal	Update User's role	
Actors	Manager	
Pre-conditions	User must log in with role "Manager", accessed "Manager" page	
Post-conditions	Forward to "User Management" page	
Main Flow	1.Click [User Management] link	
		2.Forward User Management page and
		3.Display all User account
	4.Select User account need to update role	
		5.Forward User's Detail page
		6.Display Information form
	7.Select new role in dropdown list	
	8.User [Save] button	
		9.Validate new information
		10.Update DB
		11.Display Success message
Exception	9.1: If new information is not valid, display message show Information is not valid and request user enter again 9.2: If new information have wrong format, display message show Format of information and request user enter again 9.3: If Role is not exist, display message Role is not exist and request user enter again 1.1: If User doesn't have role Admin, forward to Login page 7.1: If Admin edit account ID, display message show Can't change ID	

3.4.1.18 Create Flight's information



User Case ID	UC_18	
Name	Create Flight's information	
Author	QuanVMHSE61002	
Goal	Add Flight	
Actors	Admin	
Pre-conditions	User must log in with role "Admin", accessed "Admin" page	
Post-conditions	Forward to "Flight Management" page	
Main Flow	1.Click [Flight Management] link	
		2.Forward Flight Management page and
		3.Display all Flight
	4.Click [Create] button	
		5.Forward Flight's information page
		6.Display Information form
	7.Enter new Flight's information	
	8.User [Save] button	
		9.Validate new information
		10.Insert DB
		11.Display Success message
Exception	9.1: If new information is not valid, display message show Information is not valid and request user enter again 9.2: If new information have wrong format, display message show Format of information and request user enter again 1.1: If User doesn't have role Admin, forward to Login page	

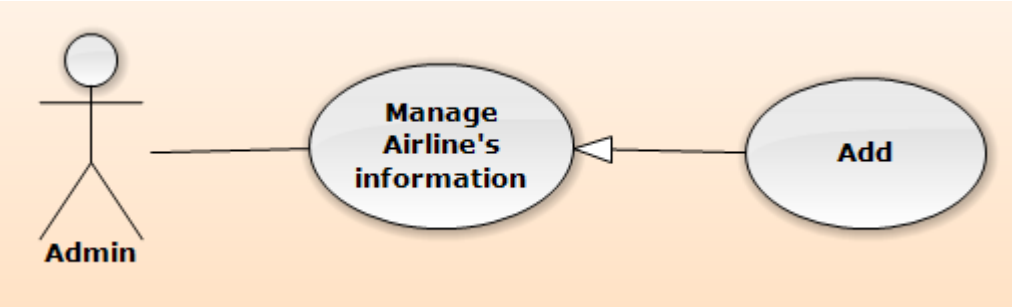
3.4.1.19 Update Flight's information

User Case ID	UC_19	
Name	Update Flight's information	
Author	QuanVMHSE61002	
Goal	Update Flight's information	
Actors	Admin	
Pre-conditions	User must log in with role "Admin", accessed "Admin" page	
Post-conditions	Forward to "Flight Management" page	
Main Flow	1.Click [Flight Management] link	
		2.Forward Flight Management page and
		3.Display all Flight
	4.Select Flight	
		5.Forward Flight's information page
		6.Display Information form
	7.Enter new Flight's information	
	8.User [Save] button	
		9.Validate new information
		10.UpdateDB
		11.Display Success message
Exception	9.1: If new information is not valid, display message show Information is not valid and request user enter again 9.2: If new information have wrong format, display message show Format of information and request user enter again 1.1: If User doesn't have role Admin, forward to Login page 7.1: If Admin edit Flight ID, display message show Can't change ID	

3.4.1.20 Delete Flight's information

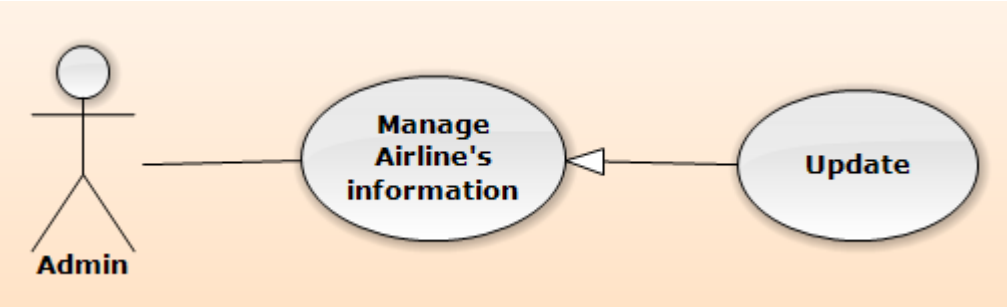
User Case ID	UC_20	
Name	Delete Flight's information	
Author	QuangTVSE61078	
Goal	Delete Flight	
Actors	Admin	
Pre-conditions	User must log in with role "Admin", accessed "Admin" page	
Post-conditions	Forward to "Flight Management" page	
Main Flow	1.Click [Flight Management] link	
		2.Forward Flight Management page and
		3.Display all Flight
	4.Click [Delete] button	
		5.Check Flight ID
		6.Delete Flight's information by Flight ID in DB
		7.Display Success message
Exception	5.1: If ID is not exist, display message show Flight is not exist and forward to "Flight Management" page	

3.4.1.21 Create Airline's information



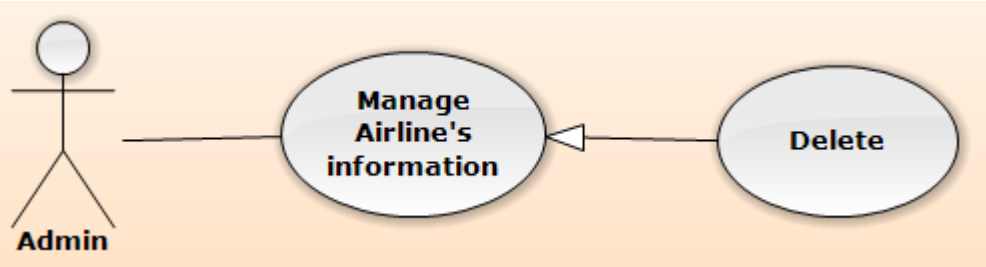
User Case ID	UC_21	
Name	Create Airline's information	
Author	QuangTVSE61078	
Goal	Add Airline	
Actors	Admin	
Pre-conditions	User must log in with role "Admin", accessed "Admin" page	
Post-conditions	Forward to "Airline Management" page	
Main Flow	1.Click [Airline Management] link	
		2.Forward Airline Management page and
		3.Display all Airline
	4.Click [Create] button	
		5.Forward Airline's information page
		6.Display Information form
	7.Enter new Airline's information	
	8.User [Save] button	
		9.Validate new information
		10.Insert DB
		11.Display Success message
Exception	9.1: If new information is not valid, display message show Information is not valid and request user enter again 9.2: If new information have wrong format, display message show Format of information and request user enter again 1.1: If User doesn't have role Admin, forward to Login page	

3.4.1.22 Update Airline's information



User Case ID	UC_22	
Name	Update Airline's information	
Author	QuangTVSE61078	
Goal	Update Airline's information	
Actors	Admin	
Pre-conditions	User must log in with role "Admin", accessed "Admin" page	
Post-conditions	Forward to "Airline Management" page	
Main Flow	1.Click [Airline Management] link	
		2.Forward Airline Management page and
		3.Display all Airline
	4.Select Airline	
		5.Forward Airline's information page
		6.Display Information form
	7.Enter new Airline's information	
	8.User [Save] button	
		9.Validate new information
		10.Update DB
		11.Display Success message
Exception	9.1: If new information is not valid, display message show Information is not valid and request user enter again 9.2: If new information have wrong format, display message show Format of information and request user enter again 1.1: If User doesn't have role Admin, forward to Login page 7.1: If Admin edit Airline ID, display message show Can't change ID	

3.4.1.23 Delete Airline's information



User Case ID	UC_23	
Name	Delete Airline's information	
Author	QuangTVSE61078	
Goal	Delete Airline	
Actors	Admin	
Pre-conditions	User must log in with role "Admin", accessed "Admin" page	
Post-conditions	Forward to "Airline Management" page	
Main Flow	1.Click [Airline Management] link	
		2.Forward Airline Management page and
		3.Display all Airline
	4.Click [Delete] button	
		5.Check Airline ID
		6.Delete Airline by Airline ID in DB
		7.Display Success message
Exception	5.1: If ID is not exist, display message show Airline is not exist and forward to "Airline Management" page	

4 NON-FUNCTIONAL REQUIREMENTS

4.1 Usability

- *Easy to use: The software should be easy to use for user travel. Has simple interface with a clearly system of functions.*
- *Quick when use: The users will do each step in less than 10s.*
- *Support one language: TSS will support in English.*

4.2 Reliability

- *Availability: specify the percentage of time available is over 98.9%. The software is used stably at least 13 hours a day.*
- *Meantime Between Failures: more than 9 months.*
- *Meantime To Repair: in 24 hours*
- *Time to reactive: 5 minutes.*
- *Accuracy: 100%.*
- *Maximum Bugs: 0.2 bugs per 1000 code lines (0.2bugs/KLOC)*
- *Critical bugs:*
- *Lose data: hardly and never lose all data.*
- *Unable to use some functions: hardly*

4.3 Performance

- *Respond time for an transaction:*
- *Average time: 0.1 seconds*
- *Maximum time: 0.2 seconds*
- *Throughput: 5 transactions per second*
- *Capacity: accept 500 users and 300 concurrent users*
- *Resource utilization:*
- *Memory: 100Mb*
- *Hardware: android tablet or the same.*
- *Network: work effective with 1.5MB/second line.*

4.4 Supportability

N/A

4.5 Design Constraints

- *TSS should be code in Java and use J2ME and NetBeans IDE 7.3 to develop.*
- *Must use company's image to design interface. For example: use logo, dominant color of company…*

4.6 On-line User Doc0075mentation and Help System Requirements

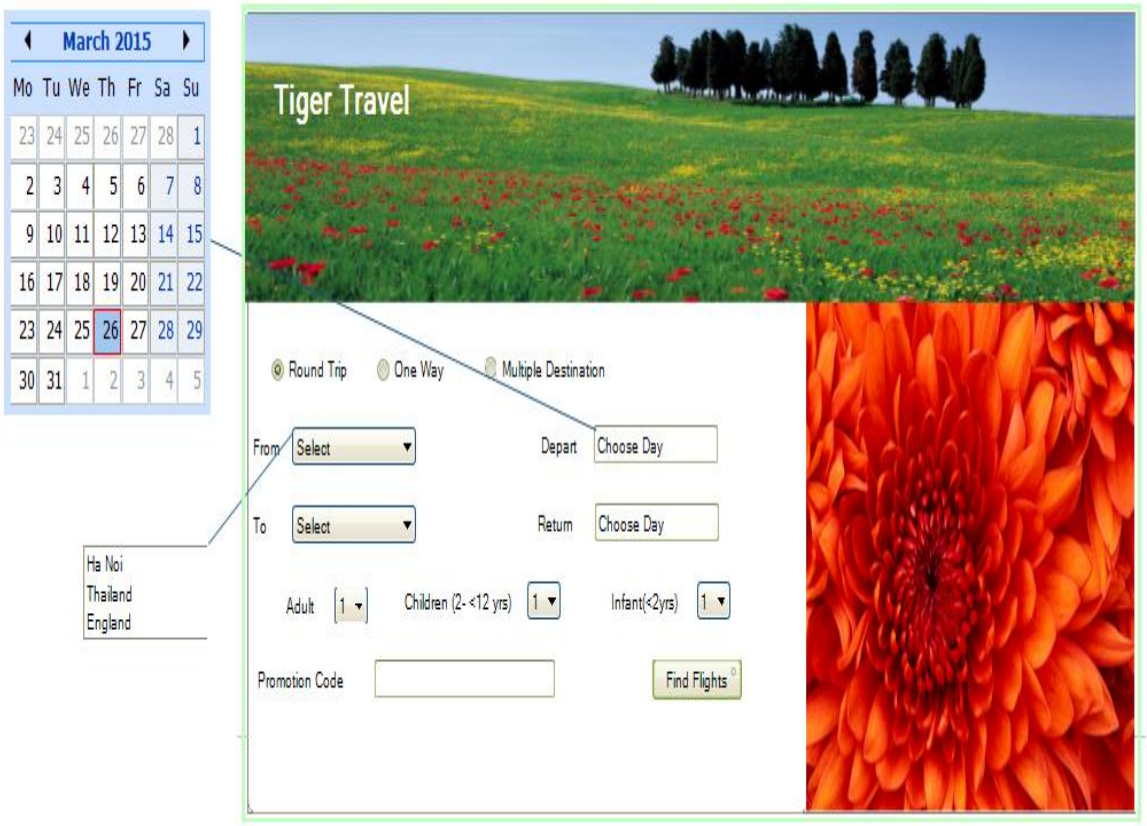
- *Software company upload help document in website and the user can access any time. This document can help user solve some normal problems or search information about the software.*
- *At least one supporter always online in working time.*

4.7 Purchased Components

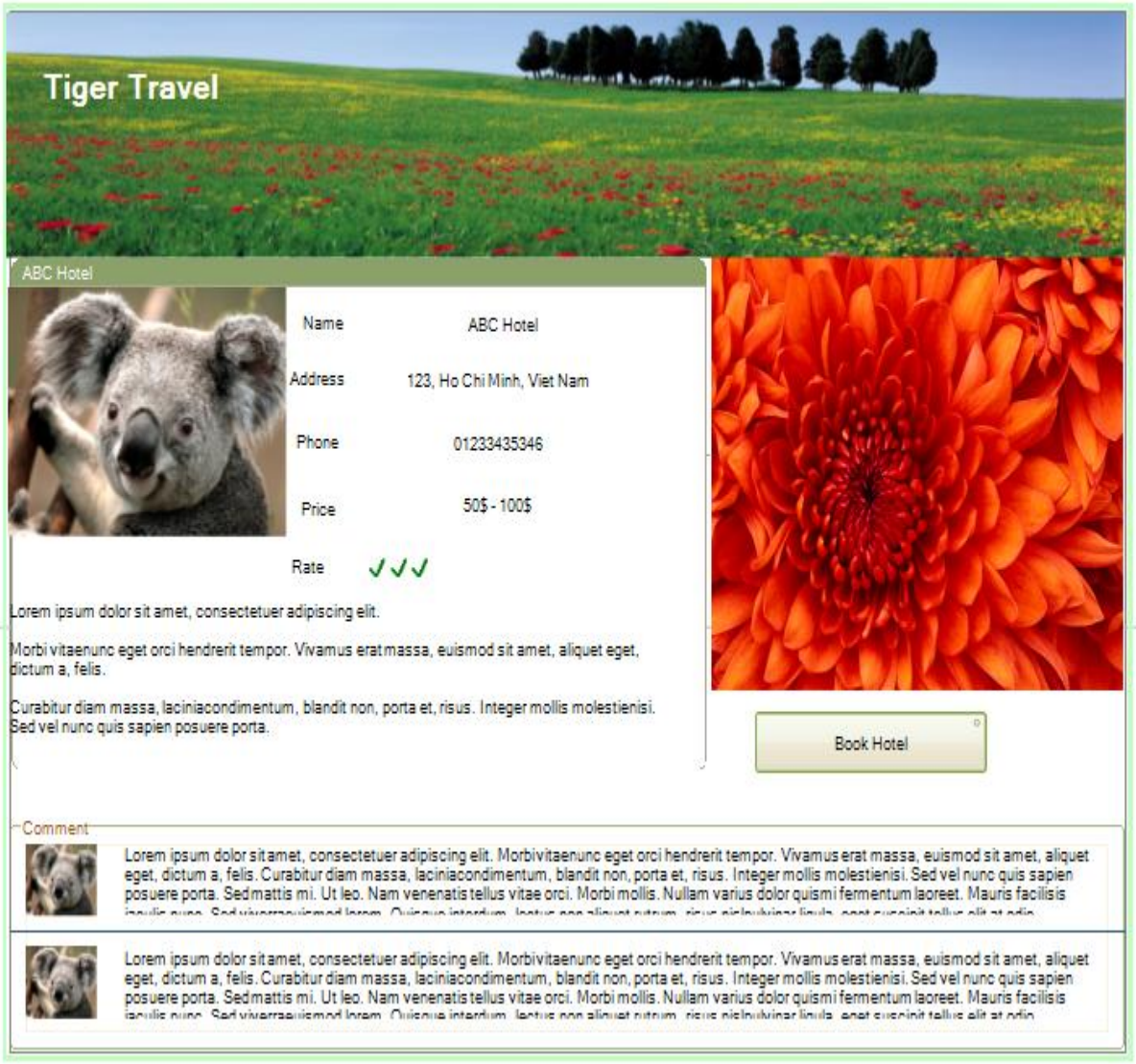
- *Projector*
- *Tablet*
- *Smartphone*

4.8 Interfaces

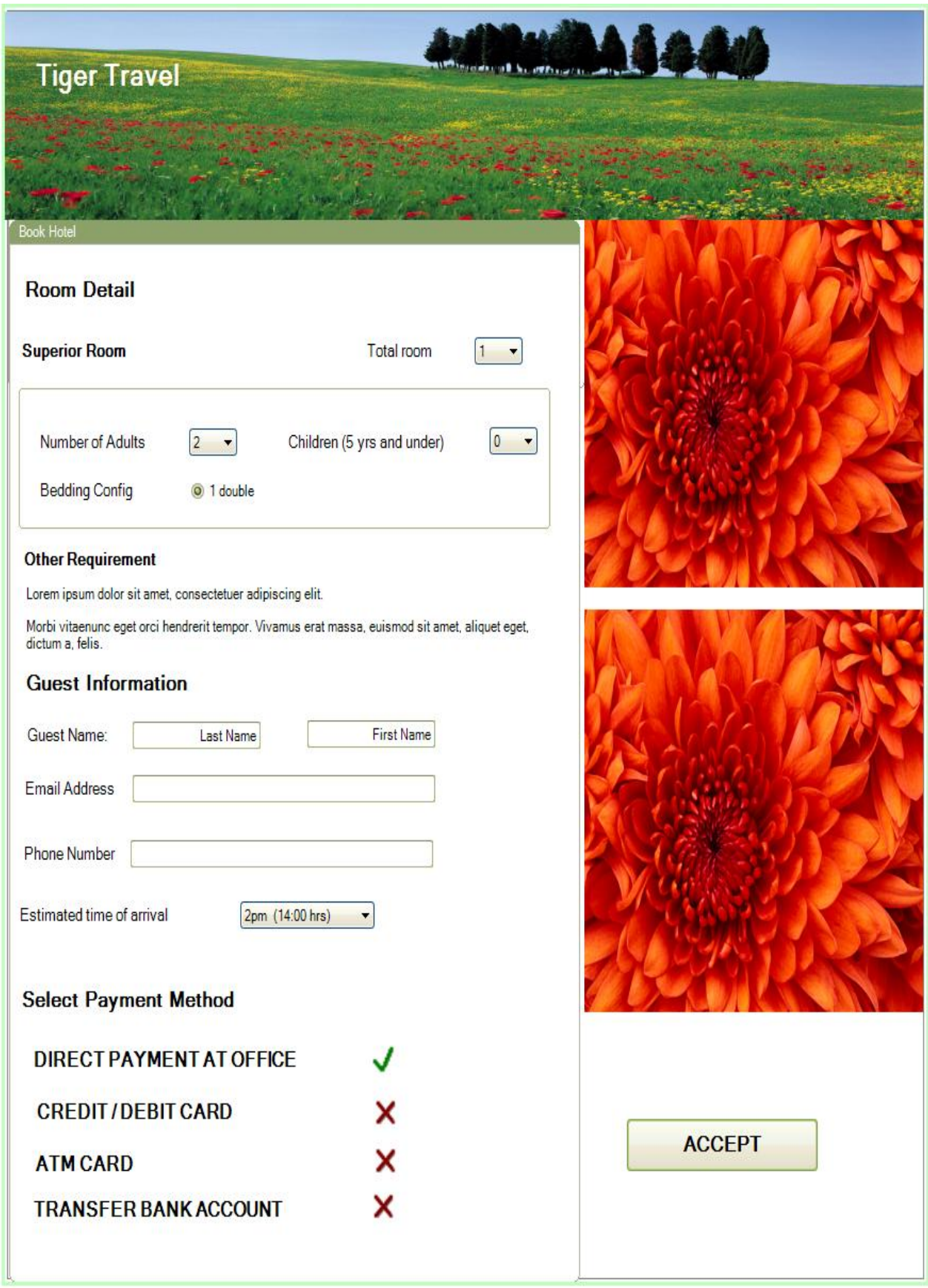
HomePage:


March 2015
Mo Tu We Th Fr Sa Su
Tiger Travel
Round Trip
One Way
Multiple Destination
From
Select
Depart
Choose Day
To
Select
Return
Choose Day
Ha Noi
Thailand
England
Adult
1
Children (2- <12 yrs)
1
Infant(<2yrs)
1
Promotion Code
Find Flights

Hotel's Detail



Book hotel


Tiger Travel
Book Hotel
Room Detail
Superior Room
Total room
1
Number of Adults
2
Children (5 yrs and under)
0
Bedding Config
1 double
Other Requirement
Lorem ipsum dolor sit amet, consectetuer adipiscing elit.
Morbi vitaenunc eget orci hendrerit tempor. Vivamus erat massa, euismod sit amet, aliquet eget, dictum a, felis.
Guest Information
Guest Name:
Last Name
First Name
Email Address
Phone Number
Estimated time of arrival
2pm (14:00 hrs)
Select Payment Method
DIRECT PAYMENT AT OFFICE
CREDIT / DEBIT CARD
ATM CARD
TRANSFER BANK ACCOUNT
ACCEPT

4.9 Licensing Requirements

N/A

4.10 Legal, Copyright, and Other Notices

Must use Company's image to design interface. For example: use logo, dominant color of company…

4.11 Applicable Standards

5 SUPPORTING INFORMATION