



ITP4506 Human Computer Interaction and GUI Programming

E-commerce Website

Student ID	Name	Contribution	Signature
160450066	LamKitYu	50%	
160548082	YauTsunSing	50%	

Table of Contents

1. Background	3
2. User Analysis	4
2.1. User characteristics	4
2.1.1. Learning style.....	4
2.1.2. Tool preferences	4
2.1.3. Physical differences	5
2.1.4. Cultural differences.....	5
2.1.5. Knowledge of job	5
2.1.6. Application familiarity	5
2.1.7. Primary and secondary users	5
2.2. Techniques for observing and listening to users.....	6
2.2.1. Think aloud	6
2.2.2. Talk right after	6
2.2.3. Role-playing	6
2.2.4. Cueing recall with videotape	6
2.2.5. Focus groups	6
2.2.6. Mailed/Online surveys	6
2.3. Environment Analysis	7
2.4. Recruiting Users	7
2.5. Task Analysis (HTA).....	7
2.5.1. Use case	8
3. Web Concept	9
3.1. User Interface design.....	9
3.1.1. Home Page	9
3.1.2. Hotel page.....	10
3.1.3. Flight page.....	11
3.1.4. Register/Login Page.....	12
3.1.5. Shopping cart page.....	13
3.1.6. Payment Page.....	14
3.1.7. Profile Page	15
4.1. Function	16
4.1.1. Register/Login	16

1. Background

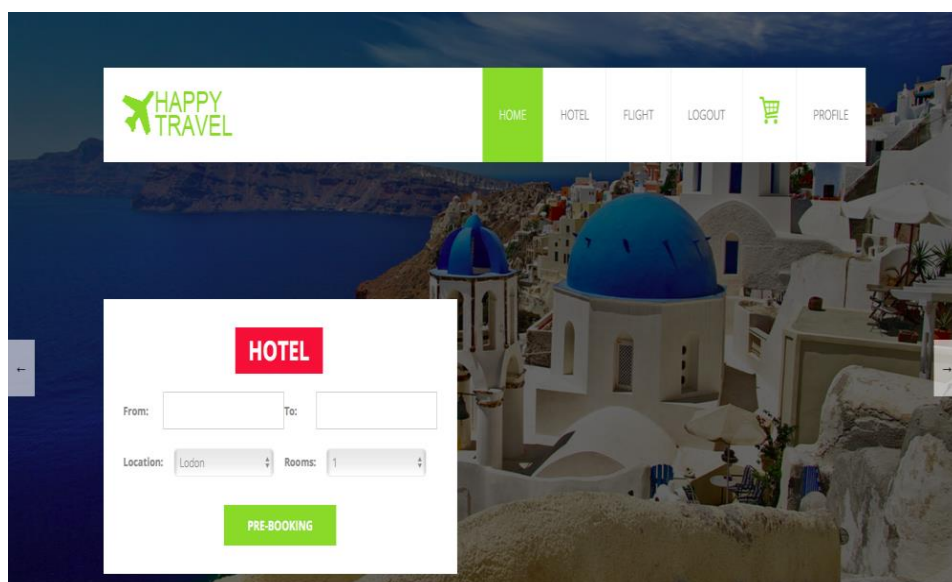
The Happy Travel Ltd is a medium-sized travel agent. This company want to build a website for the tertiary student in Hong Kong. First, the website user interface should be user-friendly. Also, the website should be provide the search function for user searching the items. Moreover, it should be offer the hotel and flight function for user choosing. In addition, the website should be provide a shopping cart, let the user add the item to the cart. Furthermore, it would be having a membership system for user since they need to login to get a discount.

2. User Analysis

2.1. User characteristics

2.1.1. Learning style

The website is target on the student so the user have a high learning skills to use the website. The users' habits of learning are Read-then-do. The student will go to website first, they will see what is the information will show on the website. After they read the website, they can easy to use it. The user enter the website, they will see the photo 1. They enter this website because the want to search or buy the flight ticket or book the hotel. They can click the item on the top menu. It design can let the user easily to read the first page content.



(Photo 1)

2.1.2. Tool preferences

The website will provide the search engines, menu and slide show. For the search engines, the website is used the flexible box to include the search item. The user can select the date from the date picker, location, number of room and number of people are also is drop-down menu. When they click the input box, it will pop up the drop down menu or date picker. It is no need to enter the information. The user chooses it only. For the menu, the website is clearly to set the name of the menu. Also, the shopping cart uses a cart logo to present it. Using photo can easy to show the meaning. For the slideshow, the slideshow both side have a button of changing. That can show to user the slide have another information.

2.1.3. Physical differences

Abilities among different people may be different but this website is target on the tertiary student. So the age is around 18-30. Also, the target group has men and female.

Furthermore, considering of the vision limitations such as color blindness so the website would be set the color of green, white and grey of main color. The font sizes are not too large and too small. The title set to 18px. The content may set 14-16px.

Font sizes (Title)	18px
Font sizes (content)	14-16px
Main color of website	Green, white and grey

2.1.4. Cultural differences

The target customer is the tertiary student so they have a higher education level. Also, the reading level is also higher. For the website using specialized vocabularies, the user also can understand the meaning and they no need to check the dictionary. The website language could use English.

2.1.5. Knowledge of job

For the travel agent is using specialized vocabularies. For example, customer service, booking, flight, hotel, deals, available, main amenities etc.

2.1.6. Application familiarity

For the novice, they need to a guideline to follow the step-by-step using the website.

About the Expert, they no need a guideline to follow the step-by-step using the website.

They can learn

2.1.7. Primary and secondary users

Primary User	Secondary User
Hotel reservation clerk	Customer who called the support line
Flight reservation clerk	Tertiary student
Travel agent	

2.2. Techniques for observing and listening to users

2.2.1. Think aloud

Ask the user what they want in this website. Doing the website before, we should do a search and questionnaire to collect the requirements. Listening to users think and plan, it will be able to examine their expectations for the website. Also, Listening to users as they work could provide enormous amount of useful information about develop the website.

2.2.2. Talk right after

After collected the information or feedback, we should discuss which comment or suggest it quite good. After the decision, we should talk about the work of "effective or easy to do".

2.2.3. Role-playing

Flight reservation clerk and hotel reservation clerk are no way to observe. So we need to play the role of these users in that situation.

2.2.4. Cueing recall with videotape

We should mark the requirements after the decision that can remind us to the website what should we have. The records should be having the user explain what was going on.

2.2.5. Focus groups

Regarding some students are less willing to express opinions in the public, we can do an online observation. About a group of people are asked about their perceptions, opinions, beliefs, and attitudes towards a product or service, we can search another travel agent website for our reference. It can collect some ideas for the new website for student.

2.2.6. Mailed/Online surveys

We would like to do an online survey because this is inexpensive. Also, in this century, the student also uses the computer and mobile. They are willing to do it in online.

2.3. Environment Analysis

The user also use the website at home. Therefore, we need to set the color is not too bright or too dark. We should provide a comfortable interface for user. Also, the website has enough areas to show the information since the user's computer screen is big. We can offer a scroll to move the web page.

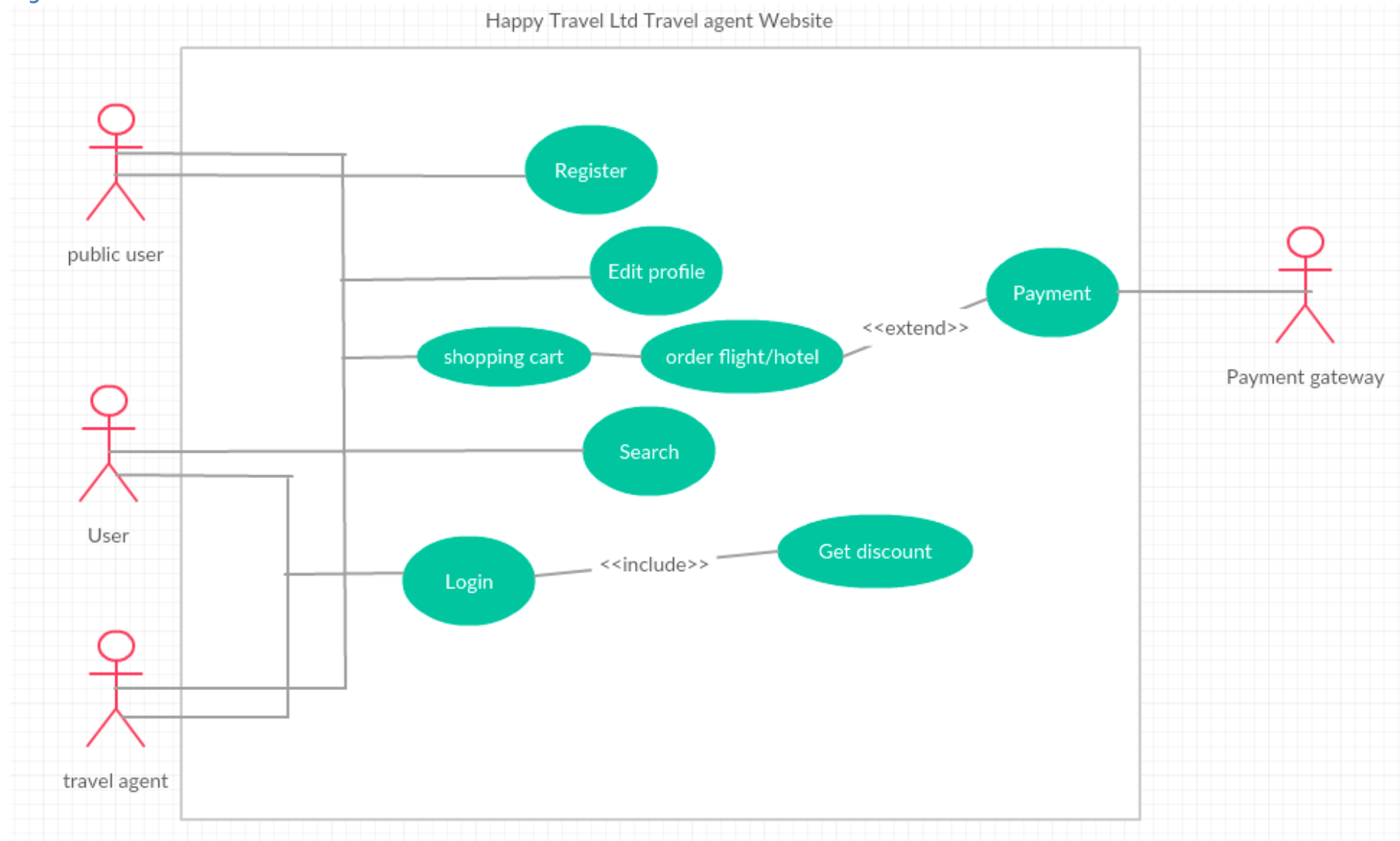
2.4. Recruiting Users

In the website, post notice or ask a professor to announce provide incentives, if they are do an online survey, they can get the prize. It is a good way to get the feedback when we are want to improve the website.

2.5. Task Analysis (HTA)

0. In order to book a hotel from the happy travel Ltd website
 1. Go to the website
 2. Find the required hotel
 - 2.1 access website catalogue
 - 2.2 access the search screen
 - 2.3 enter search criteria
 - 2.4 identify required hotel
 - 2.5 note location
 3. Add to shopping cart
 4. Go to shopping cart to check out
 5. Fill in all the information to pay
0. In order to buy a flight ticket from the happy travel Ltd website
 1. Go to the website
 2. Find the required flight ticket
 - 2.1 access website catalogue
 - 2.2 access the search screen
 - 2.3 enter search criteria
 - 2.4 identify required flight ticket
 - 2.5 note location
 3. Add to shopping cart
 4. Go to shopping cart to check out
 5. Fill in all the information to pay

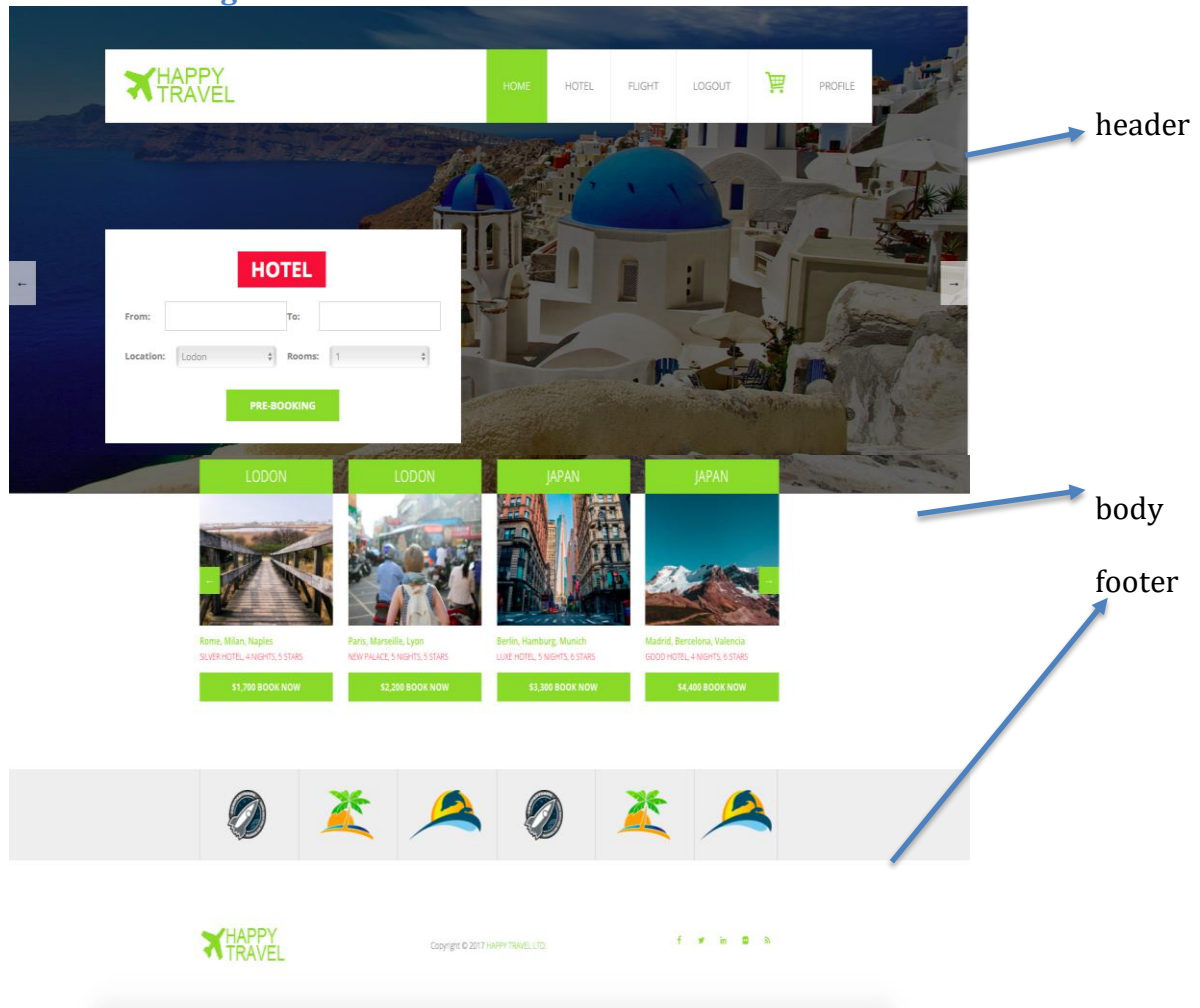
2.5.1. Use case



3. Web Concept

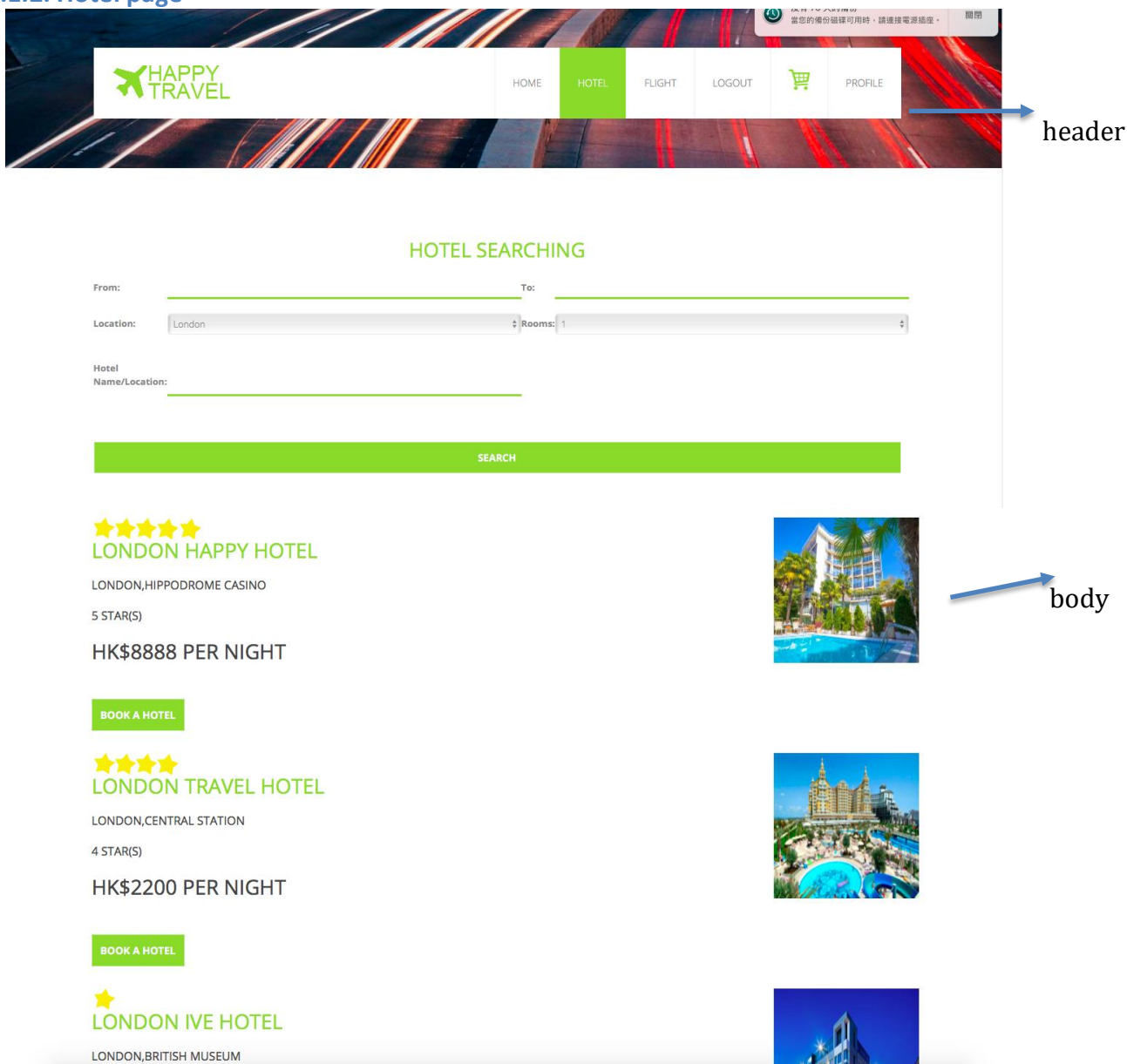
3.1. User Interface design

3.1.1. Home Page



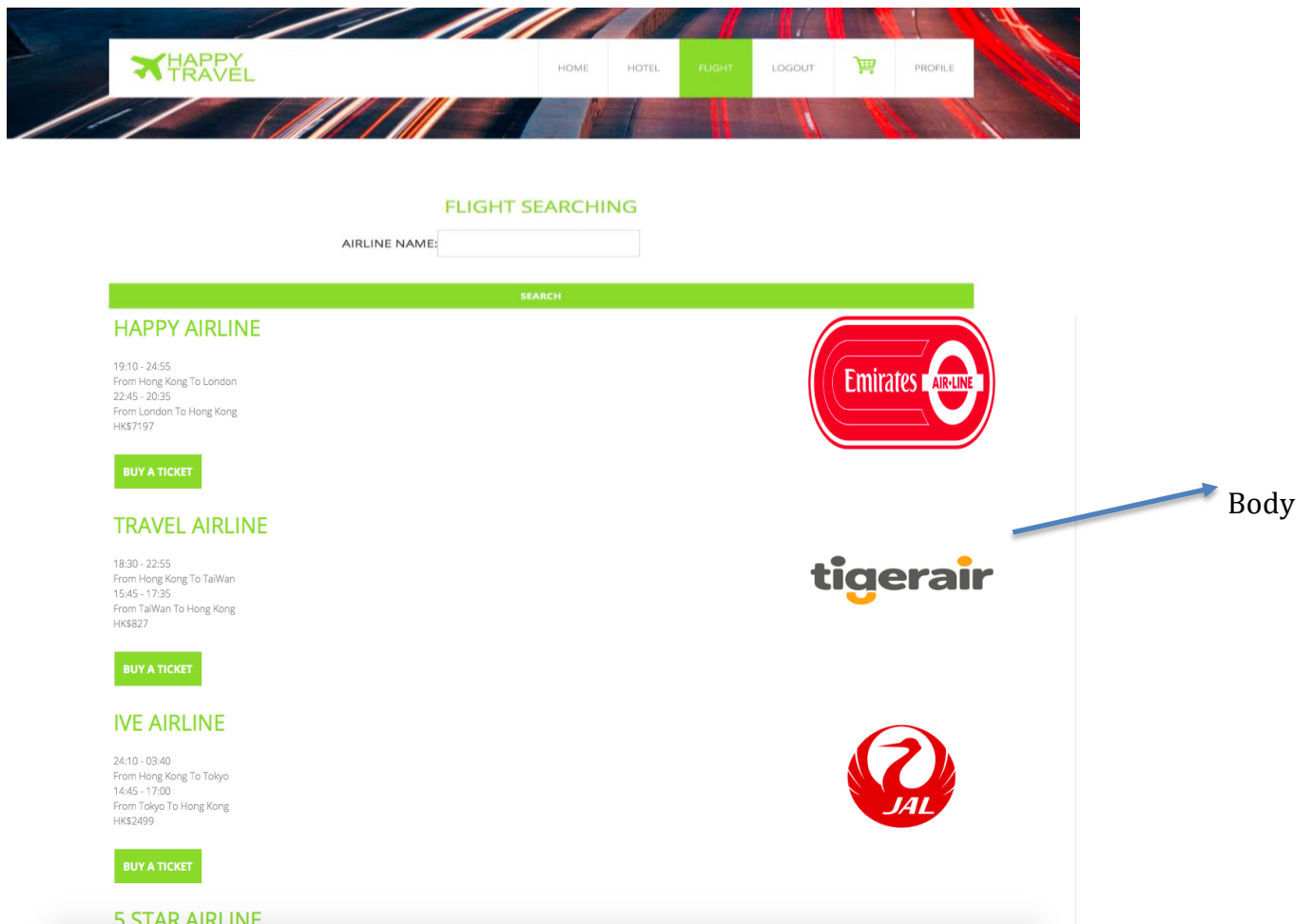
Design Principles	Description
Mental Model	Arrow logo: move left or right
Affordance	Search function, move the slide (left or right)
Content Organization	Header: menu and search function (hotel or flight) Body: package of flight and hotel suggestion Footer: company logo
Visual Organization	If click the menu, they body will change the content only. Also, which menu is clicked, it will be change to green color.
Navigation	The company logo will connect to home page. All menu will connect to their own page.

3.1.2. Hotel page



Design Principles	Description
Mental Model	scroll: move up and down
Affordance	Search hotel function, drop down list, input box and button
Content Organization	Header: menu Body: search hotel function and hotel list view Footer: company logo
Visual Organization	If click the menu, they body will change the content only. Also, which menu is clicked, it will be change to green color. Click the "Book a hotel", it will change to "cancel the hotel"
Navigation	The company logo will connect to home page. All menus will connect to their own page.

3.1.3. Flight page



Design Principles	Description
Mental Model	scroll: move up and down
Affordance	Search flight function (input box and button)
Content Organization	Header: menu Body: search flight function and flight list view Footer: company logo
Visual Organization	If click the menu, they body will change the content only. Also, which menu is clicked, it will be change to green color. Click the "Book a ticket", it will change to "cancel the ticket"
Navigation	The company logo will connect to home page. All menus will connect to their own page.

3.1.4. Register/Login Page

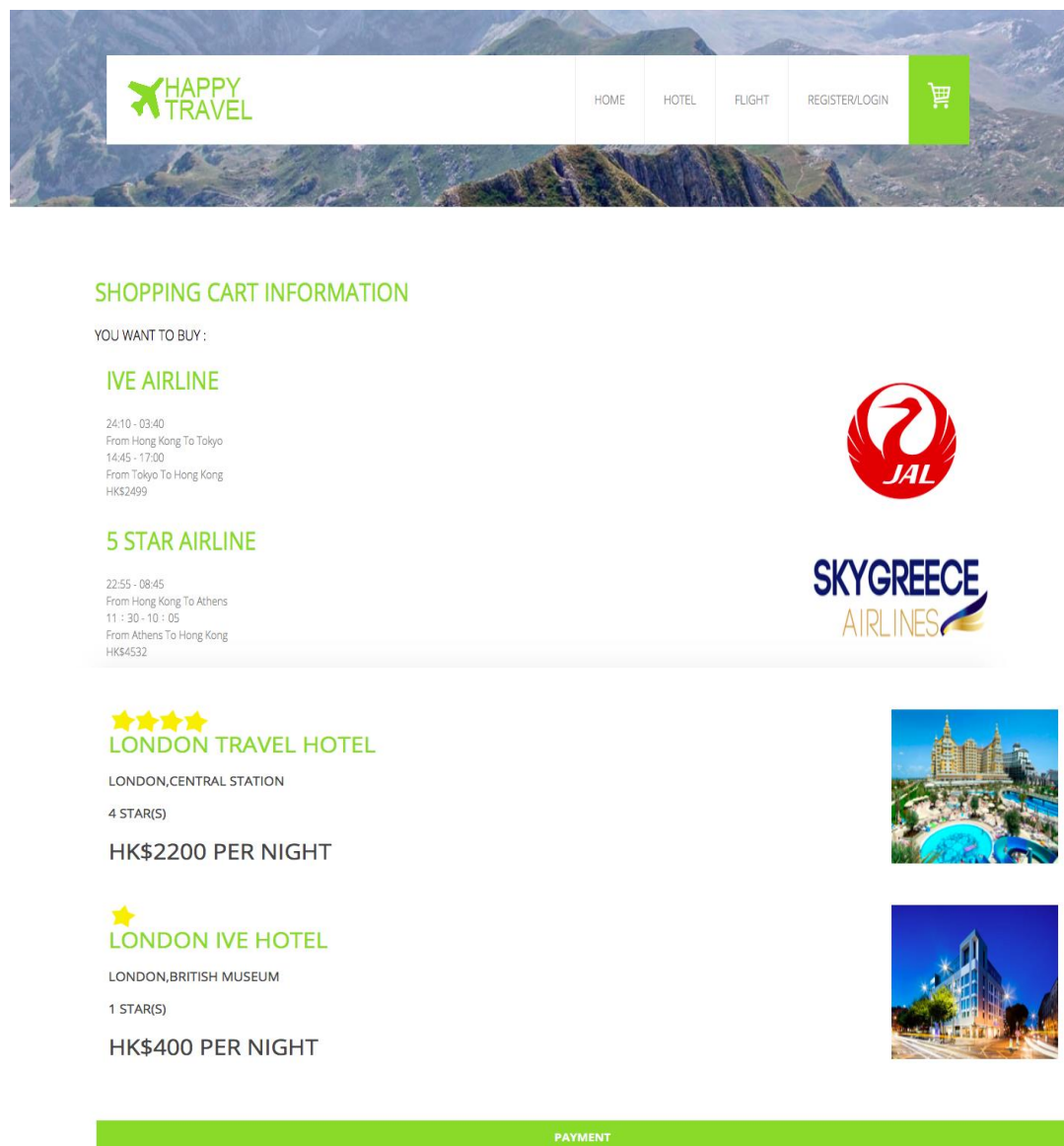
The screenshot shows the 'HAPPY TRAVEL' website header and the main content area. The header includes the company logo and navigation links: HOME, HOTEL, FLIGHT, and REGISTER/LOGIN. The main content area is divided into two sections: 'REGISTER A MEMBER' and 'LOGIN'. The 'REGISTER A MEMBER' section has input fields for First Name, Last Name, Login Name, Login password, Email Address, and School, followed by a 'REGISTER' button. The 'LOGIN' section has input fields for LOGIN NAME and LOGIN PASSWORD, followed by a 'LOGIN' button. Annotations with arrows point to the header and body sections.

header

body

Design Principles	Description
Mental Model	scroll: move up and down
Affordance	Register form and login form (input box and button)
Content Organization	Header: menu Body: Register form and login form Footer: company logo
Visual Organization	After the user fill in all the blank, click the “register”/”login” They will also pop up the modal box/alert window.
Navigation	The company logo will connect to home page. All menus will connect to their own page.

3.1.5. Shopping cart page



Design Principles	Description
Mental Model	Scroll: move up and down
Affordance	"Payment" button
Content Organization	Header: menu Body: list view of shopping cart Footer: company logo
Visual Organization	Click the "Payment" button, will go to payment page
Navigation	The company logo will connect to home page. All menus will connect to their own page.

3.1.6. Payment Page

Header

Body

PAY NOW

Login to get a discount!

LOGIN

Add your personal information

Personal information:

First Name:

Last Name:

Email Address:

passport Number:

Phone Number:

Payment information:

Holder's Name:

Valid Date:

Card Number:

CW:

VISA MasterCard UnionPay

PAY NOW

Design Principles	Description
Mental Model	Scroll: move up and down
Affordance	“Login” button, “Pay now” button, “Add your personal information” button, input box
Content Organization	Header: menu Body: Payment form, “Login” button, “Pay now” button, “Add your personal information” button Footer: company logo
Visual Organization	Click the “Pay now” button, will pop up the modal box. Click the “Add your personal information” button, will add the personal information to the input box. Click the “login” button, will go to the login page.
Navigation	The company logo will connect to home page. All menus will connect to their own page.

3.1.7. Profile Page



Header

MY PROFILE

PERSONAL INFORMATION

FIRST NAME: Kit Yu
LOGIN PASSWORD: A1234567

LAST NAME: Lam
EMAIL ADDRESS: kkatielam@vtc.com

LOGIN NAME: katielam
SCHOOL: HKIVE-ST



Body

Design Principles	Description
Mental Model	Scroll: move up and down
Affordance	Input box
Content Organization	Header: menu Body: personal information Footer: company logo
Visual Organization	You can see your personal information here.
Navigation	The company logo will connect to home page. All menus will connect to their own page.

4.1. Function

4.1.1. Register/Login

1. Fill in all input box.

REGISTER A MEMBER

First Name:

Last Name:

Login Name:

Login password:

Email Address:

School:

2. Click “Register” button

School:

REGISTER

3. Pop-up the Modal box

Welcome!!

Register Success!!

Close

4. Input the login name and login password.

LOGIN

LOGIN NAME:

katielam

LOGIN PASSWORD:

LOGIN

5. Click “Login” button

Welcome katielam

關閉