Faculty of Science, Engineering and Computing



# Usability Test Report

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**CI7700 User Experience** (System) UX Web Redesign Project

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## Executive Summary

The primary aim of the study is to improve the user experience of Anantara.com and bring it up to the standard of Industry benchmarks. Anantara has built a complex website with a variety of contents and services. It is essential to evaluate usability and improve the web's user experience so that the company can maintain its competitiveness with the market and attract more users to book their properties. I am aiming to redesign the website by solving all usability issues and creating a mobile application that facilities users to book hotels and resorts more efficiently via Anantara. This usability session was conducted by Yixuan Peng from October to December 2021.

38.75

Average SUS score is 38.75 (Grade F) which identified as a "poor" and "not acceptable" usability score. 62.5%

62.5% of participants failed more than 4 tasks and 3/8 of them did not complete the last task. 25%

Only 25% of the participants would recommend the website to others or friends.

## Introduction

### Background

The global hospitality industry has experienced dramatic growth in the last two decades; also, with the increase of tourism and hotel properties, people now are becoming more and more critical and choosy about their hotel and resort choices. Therefore, for most hotel companies, "it is not enough to simply open their doors for business and expect their property to fill up" (Bryan Bailey). In order to be competitive, hoteliers must ensure they are offering the best services at the right time to attract the right guest.



### Website - Anantara

**anantara.com** - the website is operated by the Anantara company, a hotels & resorts industry which founded in 2001 by William Heinecke. Anantara is operating more than 40 properties in 20 different countries across Asia, Europe, the Middle East, and Africa.

**Goal:** Providing online hotels & resorts booking services to attract more potential customers and enhance company's reputation.

## Aims

The aim of the evaluation is to study and improve user experience of Anantara.com.

Anantara has built a very complex website with a variety of contents and services. It is essential to evaluate usability and improve web's user experience so that the company can maintain their competitiveness with the market and attract more users to book their properties.

**1.** The primary objective of the study is to improve the user experience of Anantara.com and bring it up to standard of Industry benchmarks. The objectives will be achieved by: i) measuring usability, ii) analyzing usability issues, and iii) providing redesign recommendations. **2.** Evaluating system's navigation findability, AI, and practicality is also the main goal of the study. This will be covered by the following tasks: find and book a hotel or resort, view detailed information, compare accommodations, etc.

**3.** Answering these questions: "Whether it's easy and quick to book a hotel through anantara.com and rosewoodhotels.com" and "How is the over experience of using the Anantara.com?". To explore that, methods such as, repeated measures, comparison, and address unique were implemented.

## Method

### 1. Experimental Design

### Format

I Implemented standard industry method - the Common Industry Format (CIF) for reporting usability and evaluation findings.

### Methodologies

- An AB test: a comparison between two different websites (Anantara and Rosewood).

"Can users perform <tasks> more quickly and easily on system A compare to B?"

- A repeated measure test: each participant were required to complete the same type of task repeatedly during the testing session.

### Timetable and Venue

The evaluation process was conducted in a total of five weeks. All of the participants were performed remotely at home and completed tasks by using their personal computer during the most convenient time and under the best circumstances.

### Evaluation procedures

- 1. Background Research & Field studies
- 2. Observation
- 3. Tasks
- 4. Questionnaire
- 5. Analyzing results

### 2. Participants

According to Jakob Nielsen, "testing with five people is enough to get an ideal number of usability problems and reliable feedback from a usability study" (2012).

There was a total of 8 participants involved in the usability study, which is an appropriate sample size; 4 female adults and 4 male adults, respectively. Participants' ages ranged from 20 - 35. All of the participants had more than 5 years of experience with the Internet and online booking platforms; most importantly, none of the participants had used anantara.com before. Lastly, 5/8 of the participants had a background in design and art.

Our participants were selected by several characteristics:

- Strong speaking and listening skills in English.
- Experience with online bookings.
- Frequent internet usage.

There were eight one-on-one remote usability sessions, each of them lasting from 40 - 60 minutes. In the beginning, participants received a consent form and an overview procedure of the testing. Participants did not have prior access to the instructions of the usability session. They were provided with the same type of scenarios and required to complete a set of tasks. Participants were directed to provide honest feedback right after the tasks regarding the usability of the web interface and to participate in the post-test questionnaire.

### 2.1 Participants

In order to discover UX problems in the website, the sample of participants sought is appropriate. All participants were recruited through social media and in person, and they all agreed to attend the recording session and provide personal information.

#### • Participants table

Participant	Gender	Age	Occupation	Education	Internet Experience	Design Experience
1	Female	18-25	Art curator	MA	> 5 years	Yes
2	Male	26-35	Student	MA	> 5 years	No
3	Female	18-25	UX designer	MSc	> 5 years	Yes
4	Male	18-25	Student	BA	> 5 years	Yes
5	Male	18-25	Photographer	MSc	> 5 years	Yes
6	Female	26-35	Student	MA	> 5 years	Yes
7	Male	18-25	Student	MSc	> 5 years	No
8	Female	18-25	Student	MSc	> 5 years	No

### 3. Tasks

To discover usability issues of the website, participants were asked to complete 7 tasks with unique scenarios during the usability session. Participants were only required to use the website once and stop using the website after the session. The first and second task was an AB test which aims to compare the usability between <u>anantara.com</u> and <u>rosewoodhotesl.com</u>. From task three to task six, the main objective is to identify problems in navigation, information architecture, and findability of the system. The last task was an open-test in which participants just needed to simply browse the product for 5 to 10 minutes.

Types of tasks provided:

- Completing a hotel & resort booking
- Finding specific and detailed information
- Comparing properties and facilities
- Checking budget
- Evaluating AI and navigation
- Identifying potential usability issues

All the tasks were created to obtain efficiency and effectiveness. The post-test questionnaire was applied to measure user satisfaction.



#### Tasks table

#	Task name	Reason for creating the task	Correct walkthrough
1	Find and book a villa with private pool via anantara.com in Phuket from January 13 <sup>th</sup> – 16 <sup>th</sup> for under £2000.	Anantara is a hotels & resorts website which mainly provide services for booking both luxury accommodations and events. This task helps us to understand the main workflow for users of the webpage.	Home > Destination > Mai Khao Villas > Accommodation > Pool Villa > See more > Book now > Enter data > Select Pool Villa > Enter personal information > Enter payment information > Complete booking
2	Find and book a villa with private pool via rosewoodhotels.com in Phuket from January 13 <sup>th</sup> – 16 <sup>th</sup> for under £2000.	Rosewood is one the competitors of Anantara, understanding the difference of user experience between the two websites is significant. During this task, we can evaluate and identify the difference of user experience in completing one's booking and transaction between rosewoodhotels.com and anantara.com.	Home > Hotels > Rosewood Phuket > Accommodation > Villas > Details > Check rates > Book Now > Continue to book > Enter personal and payment information > Complete booking
3	Pick a favourite resort and compare the price and highlight of three different rooms.	Anantara provides a variety of hotels and resorts from all over the world. This task aims to evaluate the user experience of comparing different rooms and understand how users access the details of different properties.	Home > Destination > Select Hotel or Resort > Rooms / Accommodations > Compare > Add rooms up to 3 > Confirm compare
4	In your selected destination, find three activities or events provided by Anantara which you would be interested in doing with family or children.	Heuristic evaluation that aims to identify issues regarding navigation and information findability in provided leisure.	Home > Destination > Select Resort > Leisure
5	In your selected destination find information about special promotions and make a reservation.	Heuristic evaluation that aims to identify issues regarding navigation and information findability in provided offers.	Home > Destination > Select Resort > Offers > Book Now
6	Come up with a budget for a five-day trip for a family with 2 adults and 2 children.	Heuristic evaluation that aims to identify issues regarding navigation and information findability via completing one trip budget.	Home > Book Now > Enter information > Book Now > Select Villa > Check prices
7	Browse the website for 5-10 min.	This task was created to identify more potential problems and to facilitate more informed feedback for the SUS survey.	

### 4. Metrics

According to the ISO 9241-11 standard, it defines usability as "the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction."

Usability in this study was measured by three indicators:

### **1.Effectiveness**

The completeness and accuracy in which users achieve specified goals - Task Success Rate.

### 2.Efficiency

The resources expended in relation to the accuracy and completeness with which users achieve goals - **number of errors, number of assists, and time to complete task**.

### **3.Satisfaction**

The acceptability and comfort of use - SUS questionnaire.

### 5. Materials

Google Doc links - remote sharing (click to view)



#### Participant's computing environment

- Six participants were using MacBook Pro 13-15" with macOS Big Sur version 11.5.2 and macOS version Monterey12.0.1.
- Two participants were using Alienware laptop with Windows 10 OS.
- Browser: Google Chrome and Safari.
- Zoom video communication









#### Moderator's computing environment

- MacBook Pro 13-inch, 2017, macOS Big Sur version 11.5.2.
- Safari Browser
- Google Doc (document sharing)
- Zoom video communication (interview, screen share, screen recording)
- Iphone Stopwatch

### 6. Procedure

The participants in this study were tested remotely in a separate one-on-one session. All test instructions were conducted in English and Chinese by the moderator via using an online communication tool - Zoom video communication. Participants were all required to complete the exact same type of tasks by following provided scenarios and instructions. Each usability test lasted for 40-60 minutes approximately.

#### The usability test contained five important steps:

### 1. Communication setup

Inviting participants to Zoom meeting by sending private invitation. Participants were not required to turn on the camera but using microphone was mandatory.

### 2. Introduction

The moderator briefly introduced the session to each participant and asked participant's permission for screen recording. All participants were given a link to access Participant Information Sheet and Consent Form to understand and state that they were guaranteed anonymity and allowed the moderator to use their comments and feedback in the test report.

#### 3. Pre-test Questionnaire

Participants were asked to complete a background profile questionnaire before the testing.

#### 4. Test

After completing the pre-test questionnaire, participants were given a link to an online Task Instruction Sheet and were required to perform tasks using the provided system and website. The moderator instructed the participants to read and understand the task instruction and encouraged them to 'think aloud' while completing the tasks. Moderator started the screen recording and observed users' behavior. Moderator used the Observation Sheet to collect information, such as the number of errors, assists, time on task, and comments & quotes.

### 5. Post-test Questionnaire

Once all tasks have been completed, moderator provided a post-test questionnaire to the participants. Test participant received a link to both the questionnaire and SUS form and was asked to provide more comments and opinions about the overall experience with the product. Lastly, moderator ended the recording and dismissed the participants from the meeting.

### 7. Expected results

- Significant differences in the user experience between two websites, anantara.com and rosewoodhotels.com. The majority of participants would prefer using rosewoodhotels.com more likely than anantara.com as its has better navigation and findability.
- Having fractions and confusion while performing the tasks:
  - 1. Users wouldn't be able to direct the villa correctly or successfully find the required destination.
  - 2. Users couldn't go back to the home page.
  - 3. Users couldn't find the page for comparing rooms' highlight and prices.
  - 4. The majority of users would ignore the "Leisure" section while finding activities information.
  - 5. Having difficulties on booking rooms and confirming reservations.

## **Evaluation Results**

### 1. Summary of overall findings

75% of the participants would not recommend the website to others, and only 37.5% of participants pointed out they obtained a good experience from using the website.

None of the participants had completed all the tasks successfully. 62.5% of participants failed more than 4 tasks, and 3/8 of them did not complete the last task because they were tired and had been testing for more than 40 minutes.

In experiencing anantara.com for the first time, the majority of the participants found various functions of the website inconsistency and unnecessarily complex. The complicated web navigation caused a lot of confusion for users, especially when they were finding information about activities and special promotions. Also, most users were frustrated while booking the properties due to inconsistent information and content. Furthermore, according to the post-test questionnaire, 6/8 of the participants stated that they prefer using <u>rosewoodhotels.com</u> rather than <u>anantara.com</u> to book hotel and resort. The majority mentioned that the website of Rosewood hotels had better navigation and its booking process is more clear and straightforward.

The average SUS score is 38.75 (Grade F), which is classified as a "poor" and "not acceptable" usability score. The highest score of the session is 50.0 and the lowest is 17.5.

"I felt very tired now. There are so many things on this website that I can't find what I want."

### **2.1 Performance Data**

### **Task 1** - Find and book a villa with private pool via anantara.com in Phuket from January 13<sup>th</sup> – 16<sup>th</sup> for under £2000.

The table below indicates the Task 1 data per users. All participants have completed the task successfully. Three participants made several errors during the task and only two participants asked for assistance. Average time that taken to completed the task was 07:34.

Participants have encountered a lots of problem while using the website. For instance, they were not able to find the hotel directly, the majority of them sent 1-2 minutes on searching the destination. Also, participants noticed that the website did not show the total price for the selected room. There was one obvious issue pointed out by most participants is that the website kept showing all types of room after one have already decided the room.

#### Participants' comments and quotes:

"I cannot find Phuket from the provided destination."

"Where I can find it? I am so frustrated."

"Why they didn't show the whole price for 4days? I don't know which one is under my budget."

"Didn't know how to find hotel directly. Which one should I choose?"

"Instead of showing the one that I selected, the websites kept showing all types of room. What's going on here?"

"I don't know how to do now."

#### • Performance Data Task 1 table

User #	Task Success	Errors	Assists	Assisted task completion rate (%)	Unassisted task completion rate (%)	Task Time (mm:ss)
1	1	2	0	0	100	07:12
2	1	1	1	100	0	08:23
3	1	1	1	100	0	09:34
4	1	0	0	0	100	06:45
5	1	0	0	0	100	04:58
6	1	0	0	0	100	09:19
7	1	0	0	0	100	05:46
8	1	0	0	0	100	08:47
Mean	1.00	0.50	0.25	25.00	75.00	07:34
Standard Deviation	0.00	0.71	0.43	43.30	43.30	02:04
Min	1.00	0.00	0.00	0.00	0.00	04:58
Max	1.00	2.00	1.00	100.00	100.00	09:34

### **2.2 Performance Data**

### **Task 2** - Find and book a villa with private pool via rosewoodhotels.com in Phuket from January 13<sup>th</sup> – 16<sup>th</sup> for under £2000.

In task 2, the average time taken to complete the task is 04:52, which is 2:42 min faster than on anantara.com. All participants completed the tasks successfully and efficiently; there were only two participants who asked for small assistance in this task.

Compared with task 1, participants have spent less time on finding the destination in task 2. Participants noticed two significant differences between Rosewoodhotels and Anantara, which were the filter options, and rosewood did show the total price for the selected room.

Furthermore, according to the post-test questionnaire, 6/8 of the participants stated that they prefer using <u>rosewoodhotels.com</u> rather than <u>anantara.com</u> to book hotels and resorts.

#### Participants' comments and quotes:

"It has filter options which is good!"

"I cannot find Phuket, could you please tell me how to find it?"

"The images that provided in this website have higher quality and I really like the layout of the content is clear and concise."

#### • Performance Data Task 2 table

User #	Task Success	Errors	Assists	Assisted task completion rate (%)	Unassisted task completion rate (%)	Task Time (mm:ss)
1	1	0	1	0	100	05:12
2	1	0	0	0	100	04:02
3	1	0	0	0	100	05:03
4	1	0	0	0	100	03:03
5	1	0	0	0	100	04:04
6	1	0	0	0	100	06:45
7	1	0	0	0	100	03:02
8	1	0	1	100	0	06:09
Mean	1.00	0.00	0.25	12.50	87.50	04:52
Standard Deviation	0.00	0.00	0.43	33.07	33.07	1.46
Min	1.00	0.00	0.00	0.00	0.00	03:02
Max	1.00	0.00	1.00	100.00	100.00	06:45

### **2.3 Performance Data**

### **Task 3** - Pick a favourite resort and compare the price and highlight of three different rooms.

According to Task 3 data table, 5/8 (62.5%) of the participants failed to complete the task and only two participants completed the task without causing any errors. The majority of the participants did not notice there is a compare options provided in the accommodation page.

The major reason that caused the participants failing the task was they were not using the navigation bar to browse rooms' information. The way that they used to compare rooms was using the "book now" function where compare option was not available.

Average time that taken to complete the task was 04:43. None of the participants noticed there was compare option in the page at the first time, they spent more than 2 minutes on finding information about rooms' comparison.

#### Participants' comments and quotes:

"There are just two images of the room. Why they are not showing more images?"

"I cannot find compare options."

"I don't have high budget; I would choose the first cheaper one which has similar highlights."

"I think don't this is what we want."

"I need help."

#### • Performance Data Task 3 table

User #	Task Success	Errors	Assists	Assisted task completion rate (%)	Unassisted task completion rate (%)	Task Time (mm:ss)
1	1	0	0	0	100	03:03
2	0	1	1	0	0	05:12
3	1	0	0	0	100	05:28
4	1	1	0	0	100	03:44
5	0	0	0	0	0	03:22
6	0	3	0	0	0	05:57
7	0	0	0	0	0	03:25
8	0	0	1	0	0	06:43
Mean	0.37	0.63	0.25	0.00	37.5	04:43
Standard Deviation	0.48	0.99	0.43	0.00	48.41	01:23
Min	0.00	0.00	0.00	0.00	0.00	03:03
Max	1.00	3.00	1.00	0.00	100.00	06:43

### **2.4 Performance Data**

### Task 4 -In your selected destination, find three activities or events provided by<br/>Anantara which you would be interested in doing with family or children.

Task 4 was the most unsuccessful task of the whole usability session, with only a 25% task success rate. There were only two participants completed the task without any assists, and the rest of the participants were not able to find the correct activities that were provided by the company.

The major cause of test failure was that most participants were not aware of the "Leisure" section. 75% (6/8) of the participants ignored the "Leisure" page since they were not familiar with the term "Leisure"; 4 participants actually clicked into the Leisure page, but they were not confident with the provided information and went into other pages instead.

#### Participants' comments and quotes:

"It is what we want?"

"Not sure whether the information is needed or not."

"It is the activities that we are looking for?"

"It is what we want? I am totally blind now."

"I cannot find the activities here, the site is annoying"

"Where I can find it? I am so frustrated."

#### • Performance Data Task 4 table

User #	Task Success	Errors	Assists	Assisted task completion rate (%)	Unassisted task completion rate (%)	Task Time (mm:ss)
1	0	3	0	0	0	04:12
2	1	0	0	0	100	04:27
3	0	0	0	0	0	03:43
4	0	1	0	0	0	05:45
5	0	0	0	0	0	04:34
6	1	0	0	0	100	04:16
7	0	1	0	0	0	04:46
8	0	3	0	0	0	04:35
Mean	0.25	1.00	0.00	0.00	25.00	04:32
Standard Deviation	0.43	1.22	0.00	0.00	43.30	00:52
Min	0.00	0.00	0.00	0.00	0.00	04:12
Max	1.00	3.00	0.00	0.00	100.00	05:45

### **2.5 Performance Data**

### Task 5 -In your selected destination find information about special<br/>promotions and make a reservation.

In task 5, 5/8 of the participants were able to discover information that related to promotions and offers. Users in this stage were getting familiar with the web page and content. However, 3/8 of the Participants were not able to complete the task because they were not aware of the "Offers" section in the navigation.

Average time taken to completed the task was 03:53 which is shortest task time of the whole session.

In this task, we also discovered one usability issue of the website:

Participants cannot go back to the home page, they found out that clicking the web's icon at the top would not help them to direct to the home page of the web.

#### Participants' comments and quotes:

"I believe I should look at the exclusive offers here?"

"I didn't find anything about promotions."

"I cannot go back to the home page! The web logo is not working I think."

"I am not sure whether this room has exclusive offer."

"I am so tired. There is nothing about promotions."

#### • Performance Data Task 5 table

User #	Task Success	Errors	Assists	Assisted task completion rate (%)	Unassisted task completion rate (%)	Task Time (mm:ss)
1	1	1	0	0	100	03:42
2	1	0	0	0	100	04:35
3	1	0	0	0	100	04:12
4	0	0	0	0	0	02:01
5	0	0	0	0	0	02:29
6	1	0	1	100	0	05:03
7	1	0	0	0	100	04:49
8	0	2	0	0	0	02:59
Mean	0.63	0.37	0.12	12.50	50.00	03:53
Standard Deviation	0.48	0.69	0.33	33.07	50.00	01:06
Min	0.00	0.00	0.00	0.00	0.00	02:01
Max	1.00	2.00	1.00	100.00	100.00	05:03

### **2.6 Performance Data**

### **Task 6** - Come up with a budget for a five-day trip for a family with 2 adults and 2 children.

88% of the participants successfully completed the task and provided corresponding budget for a five-day trip; however, error rate in this task was the highest among all tasks.

#### Problems that discovered in this task:

- 1. Property selected is restricted.
- 2. Web currencies cannot be changed.

3. Some web pages not working well with long loading time.

4. After selecting specific time date and types of room, the total budget was not shown on the page.

#### Participants' comments and quotes:

"The web is not showing the total budget after selecting all the required information, which is not acceptable."

"They should indicate the total price after we decide the date and types of room."

"Oh my god. The website is loading very slow."

"Why the currencies was not changed?"

#### • Performance Data Task 6 table

User #	Task Success	Errors	Assists	Assisted task completion rate (%)	Unassisted task completion rate (%)	Task Time (mm:ss)
1	1	4	0	0	100	08:21
2	1	0	0	0	100	06:45
3	1	0	0	0	100	02:57
4	1	0	0	0	100	04:24
5	1	1	0	0	100	03:01
6	1	0	0	0	100	07:03
7	1	0	0	0	100	02:46
8	0	3	0	0	0	02:23
Mean	0.88	1.00	0.00	0.00	87.50	04:52
Standard Deviation	0.33	1.50	0.00	0.00	33.07	02:22
Min	0.00	0.00	0.00	0.00	0.00	02:23
Max	1.00	4.00	0.00	0.00	100.00	08:21

### **2.7 Performance Data**

### Task 7 - Browse the website for 5-10 min.

Task 7 was the final task of the session. 3 participants decided to not complete the task since they were pretty tired and they have been testing for over 40 minutes.

#### Problems that discovered in this task:

1. The 360 image view is not working properly.

2. Participants cannot go back to home page, clicking hotel logo for 3 times.

3. Participants did not frequently use the navigation bar; instead, they spent most of the time on browsing the main page.

#### Participants' comments and quotes:

"I don't want to continue. Let's end the session please."

"Can I skip this task? I feel very tired now."

"I am done with this website. I don't want to spend more time looking at it."

"It is great to see all the provided experience."

"The 360 image view function is not working properly. I think they should fix it."

#### • Performance Data Task 7 table

User #	Task Success	Errors	Assists	Assisted task completion rate (%)	Unassisted task completion rate (%)	Task Time (mm:ss)
1	1	0	0	0	100	05:01
2	1	0	0	0	100	08:03
3	1	0	0	0	100	08:13
4	1	0	0	0	100	07:03
5						
6						
7	1	0	0	0	100	06:02
8						
Mean	1.00	0.00	0.00	0.00	100.00	7:21
Standard Deviation	1.00	0.00	0.00	0.00	100.00	01:12
Min	1.00	0.00	0.00	0.00	100.00	06:02
Max	1.00	0.00	0.00	0.00	100.00	08:13

### **2.8 Performance Data**

#### Combined-Task performance data

User #	Total Task Success	Total Errors	Total Assists	Total assisted task completion rate (%)	Total unassisted task completion rate (%)	Total Session Time (mm:ss)
1	6	10	1	14.28	75.72	45:40
2	6	2	2	28.57	71.42	47:27
3	6	1	1	14.28	75.72	48:37
4	5	2	0	0	100	45:24
5	2	1	0	0	100	52:25
6	5	3	1	14.28	75.72	50:23
7	5	1	0	0	100	40:46
8	2	8	2	28.57	71.42	46:36
Mean	4.63	3.50	0.87	12.49	83.75	44.34
Standard Deviation	1.58	3.28	0.78	11.15	12.69	03:33
Min	2.00	10.00	0.00	0.00	71.42	52:25
Max	6.00	1.00	2.00	28.57	100.00	40:46

### **2.9 Performance Data**

• Average SUS score is 38.75 (Grade F) which identified as "poor" and "not acceptable" usability score. The highest score of the session is 50.0 and the lowest is 17.5.

					F							
User #	Score											·
1	32.5			Not Acc	eptable			Marginal		Accep	otable	
2	42.5											
3	47.5			1								
4	50.0		_				_					
5	32.5	- 2		1	1	1						
6	45.0		_		_							
7	42.5											
8	17.5											
Mean	38.75											
Standard Deviation	10.00											
		0	10	20	30	40	50	60	70	80	90	10

### 3. Usability issues

### - Booking process issues -

Issue #	Description of issue	Observation	Priority
1	Users have already decided the room and wanted to book the room; however, the website kept showing all different types of room.	Participants selected the room and clicked "Book now" to book the room. The website did not show information about the room; instead, it showed all the accommodations again.	High
2	Total accommodation cost is not shown after confirming all the booking details.	After inputting all the required information, the website did not indicate the total cost of the rooms.	High
3	Properties' currency cannot be changed or modified.	Participants cannot find the way to changed to currency when booking the rooms.	High
4	Filter options are not provided.	Participants were not able to filter the information while selecting the rooms.	High
5	Limited properties' information and images.	7/8 of the participants mentioned that there were not enough images to view the properties.	Medium
6	Room comparison is hard to find and not consistency.	The majority of the participants could not find the room compare options which leading to task failures.	Medium

### 3. Usability issues

### - Navigation and terminology issues -

Issue #	Description of issue	Observation	Priority
7	Confusing Terminology. Participants were frustrated because they could not find information about activities.	75% (6/8) of the participants ignored the "Leisure" page since they were not familiar with the terminology.	High
8	Search Function is not available.	Participants were not able to find information directly by searching key words. Most participants felt tired after using the website.	High
9	Difficult to find specific location and destinations.	Most participants had difficulties on finding destinations. All destinations were displayed within one page without separated sections.	Low
10	Users cannot go back to the main web page.	Participants cannot back to home page by clicking hotel logo for 3 times.	High
11	Some provided properties cannot be selected which causing confusion.	7/8 of the participants mentioned that there were not enough images to view the properties.	Medium

### 3. Usability issues

### - General issues -

Issue #	Description of issue	Observation	Priority
12	Information is not consistency.	Participants noticed that information was very inconsistency between different hotels and resorts.	Medium
13	Website sometimes takes too long to reload or update.	Participants frequently switched between different content pages. Sometimes it took more than five second to update the pages.	Medium
14	The 360 image view is not working properly.	Participants noticed that the 360 image view function was working slowly.	High
15	Too much information in navigation bar.	There are too much information provided in the navigation bar.	High
16	Unorganized and complex web font.	Participants sometimes could not find general information because of complex and inconsistency web font.	Medium

### **3. Usability issues - Screen shots**

#### • Home page



Issue#10

Offers information page



Booking page



Issue#1

• Leisure information page



Issue#7

Accommodation page



Issue#3-6

Destination page



Issue#9

### 4. Design Recommendations

### - Booking process -

Issue #	Issue Statement	Design recommendations	Priority
1	Total accommodation cost is not shown after confirming all the booking details.	Show total accommodation cost.	High
2	Users have already decided the room and wanted to book the room; however, the website kept showing all different types of room.	Fix the booking pages and make them consistency.	High
3	Filter options are not provided.	Provide filter options when selecting rooms.	High
4	Limited properties' information and images.	Enhance properties' information and image the numbers of images.	Medium
5	Room comparison is hard to find and not consistency.	Redesign room comparison option and make it more accessible.	Medium

### 4. Design Recommendations

### - Navigation, terminology and General issues -

Issue #	Issue Statement	Design recommendations	Priority
1	Confusing Terminology. Participants were frustrated because they could not find information about activities.	Change confusing terminology. "Leisure" to "Activities".	High
2	Search Function is not available.	Add search function.	High
3	Difficult to find specific location and destinations.	Redesign destination page and provide a map for each continents.	High
4	Users cannot go back to the main web page.	Reorganized navigation features.	High
5	Information is not consistency.	Reorganize web information and provide consistency information structure.	Medium
6	Website sometimes takes too long to reload or update.	Improve site performance.	Medium
7	Unorganized and complex web font.	Organize web font.	Medium
8	Too much information in navigation bar.	Reorganized navigation contents and features.	Medium

## Discussion

#### 1. Participant Age:

In this usability session, the participants' age ranged from 18 - 26. According to online data, 46% of hotel guests nowadays are aged 18-36. It is a fact that online booking websites have already become a prior technology for both young and adult users to access hospitality information and booking services; therefore, evaluating a young age group and understanding their overall experience of the online booking process is essential and useful that provide reliable feedback for the study.

#### 2. Technology:

Due to the COVID-19 pandemic, all usability sessions in this study were conducted remotely and recorded by Zoom Video Communication which has a more stable network and can be easily accessed by the participants.

#### 3. Bias

All participants were acquaintances of the moderator (friends and family members). The majority of them felt really relaxed and comfortable throughout the whole testing session. It is undeniable that being acquainted with the participants directly helped them to reduce stress and also perform in a delighted manner.

100% of the participants had more than five years of internet experience, and 5/8 of them had high knowledge of design; therefore, they are more likely to process the website with a higher software standard and also be able to complete tasks without assistance. This might lead to a result of low assist rate.

#### 4. Further possible work:

The majority of participants are unemployed. Therefore, income was not a primary consideration when selecting properties. For future study, participants' income will be emphasized.

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## Appendices

Participant Information Sheet

Participant Profile Questionnaire

Post-test questionnaire

Task Instruction sheet

**User Observation Sheet** 

Moderator Script