SECJ2203: Software Engineering

PROPOSAL FOR HOTEL BOOKING SYSTEM

Team Name: Bara Api

Team Members:

Name	Matric No.	Roles
Nurul Najwa Binti Hussein	A19EC0303	Leader
Nur Azizah binti Mohammad Mokhtar	A17KM0351	Software Developer
Muhammad Haziq bin Azli	A20EC0240	UI Designer I
Difa Ega Adrian	A19EC0229	UI Designer II

Stakeholder(s):

1. Customer
2. Hotel manager
3. Hotel company
4. Software Engineering Team

1. Introduction

For our proposal, we have decided to do the Hotel Booking System. It includes three actors which are the customer, who is making the purchase, the hotel system that makes the reservation and the accounting department which is in charge of monitoring payment made by the customer and in charge of extended checkout time.

N: For the need, this system is designed to meet the needs of the customer. The hotel management needs to apply this system to make sure that all the booking and transaction run smoothly. Without the system, the customer is not able to check the hotel conditions before making any purchase.

A: For our approach, we started by looking for the existing examples for hotel booking systems like Agoda, Traveloka and Trivago. From there, we start to implement the ideas that we obtained into the system. For example, websites like Traveloka feature the search bar for the hotels and cities that we want to look at, together with the duration of our stay.

B: The advantage of our system is it makes other people's life easier. Customers who want to book rooms do not need to call the hotel customer service in order to know whether the room is available or not. Instead, they can open their smartphone and search for the desired hotel and its availability without wasting any time calling the customer service. Our system provides real life status of hotel rooms to make it easier for customers to look for available rooms.

C: Our project is already started and it will take some time to finish and fully implement it into the system. However, even though it is not finished yet, we are confident that the system that we develop through this proposal will be a success. We have been working day and night to ensure that the planning will run smoothly.

2. Existing Systems

The current hotel reservation systems such as Agoda, Hotels.com and Traveloka provide many amazing features for user's convenience. These existing systems allow the guest to create secure online reservations directly without having to go through manual reservations. They also allow the users to change the language and country, thus these systems can be used not only in Malaysia but all around the world. However, there are some problems that can be issued in these existing systems. The first main problem is some of the hotel booking system websites do not have "Add to cart" feature or function. "Add to cart" feature allows the users to add the hotels that they might book and this option will give the space for them to compare the price and the accommodation of hotels selected. Based on the observation towards three hotel booking websites such as Agoda, Hotels.com, and Traveloka, only Agoda implemented this feature in their website. Below is the screenshot from Agoda website that show the feature :

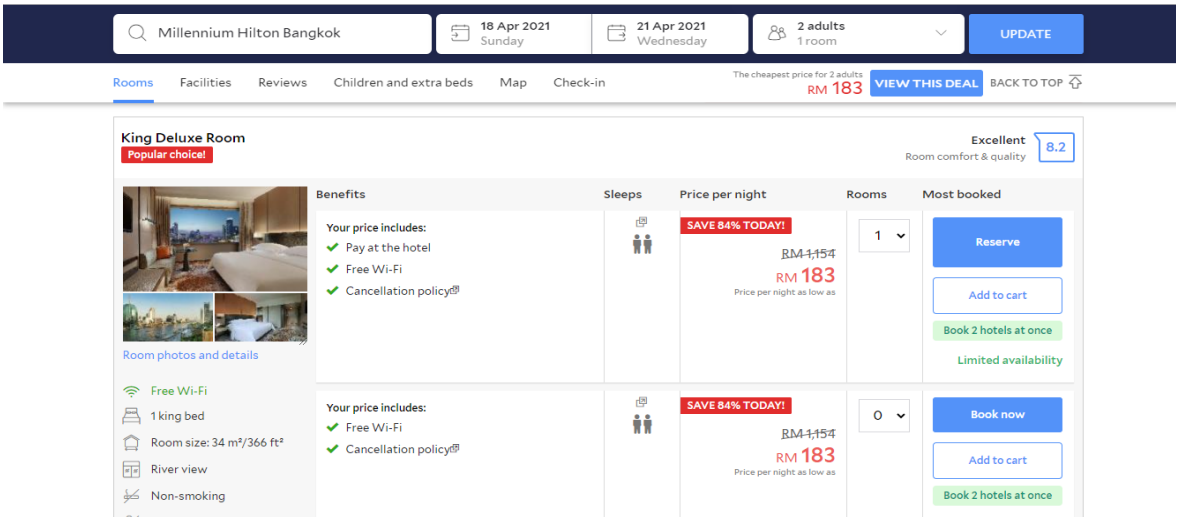

Figure 1: Screenshot from Agoda website

With adding this feature, it intends to offer an efficient, informative, and user-friendly website for users to book reservations for their vacations. Next, hotel booking systems should provide vast payment options. The usual payment methods are through online or pay at the hotel. Based on the hotel reservation systems that we observed, they accept credit card and paypal only. It will become disadvantage for non-credit card holders to do the online payment. As a solution, we suggest for all of these websites to add FPX as one of the alternative payment channels. For FPX, the users can just use the Internet Banking accounts

through checkout in a click. It can simplify the way they pay online. Among the three websites, only Traveloka adds FPX as one of the payment methods.

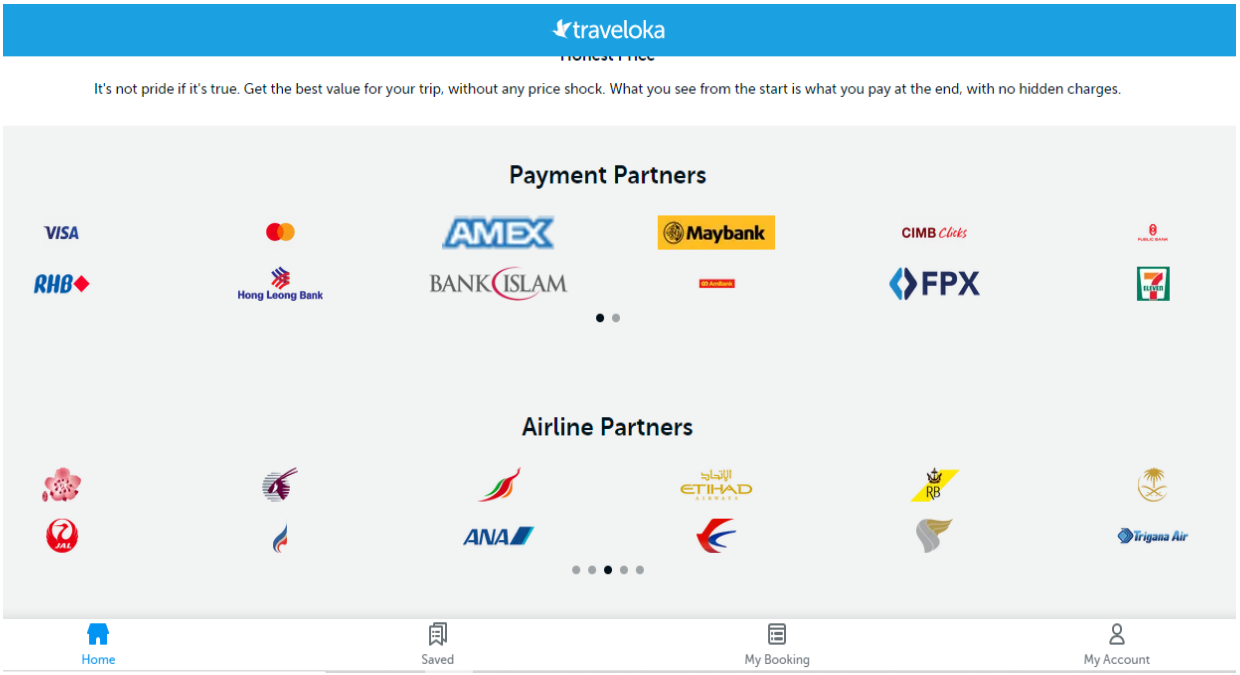

Figure 2: Screenshot from Traveloka website

Features	Agoda [1]	Hotels.com[2]	Traveloka [3]
Add to cart	Yes	No	No
Payment through FPX	No	No	Yes

Table 1: Comparison of existing systems

3. **Proposed System**

Refer to Figure 3 below, our proposed hotel booking system consists of several main functions and involves three main users, customer, accounting department and the booking system itself. In this system, the customer is allowed to create an account by register or login if they have created one. Having their own account allows them to bookmark any type of room or hotel they are interested with and check back their visited page or booking history. Apart from that, the main function of this system is to book rooms. In order to check the availability of any hotel, the customer needs to search the hotel first by inserting all the criteria and details such as amount of person, the bed size and room type. If there are any availability that match with the customer's need, they can directly make a reservation or add to favourite/wishlist. All these processes will be saved and updated by the booking system. The customer can also manage their reservation either to confirm or cancel it. If they wish to confirm the booking, payment needs to be done. Otherwise, if they cancel the booking after settling the payment, there will be no refund. All the transactions made will be updated by the accounting department as well as confirmation email and invoice will be sent. Lastly, the customer can check their check-in and check-out date and time after the booking has been confirmed. If they exceed the check-out time, they will be charged. It also gives the option to users to choose language before browsing the system.

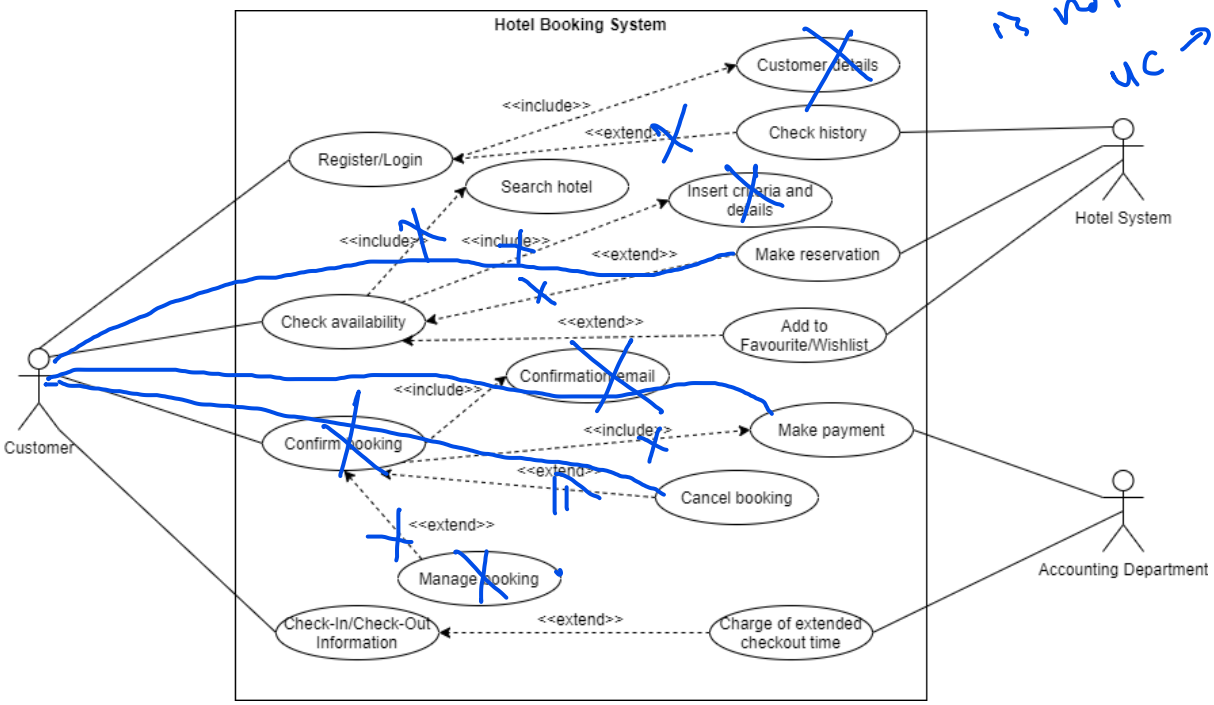

Figure 3 : Use Case Diagram of Hotel Booking System

4. Functional Requirements

[this must = use case].

1 use case → 1 functional req.

4.1 Functional 1 <Wishlist>

Customer shall be able to do a Wishlist/Favorite any type of room or hotel they interested.

4.2 Functional 2 <Check-in and Check-out>

Customer shall be able to check their check-in and check-out date and time.

4.3 Functional 3 <Language Option>

Customer shall be able to choose the language to use before browsing the system.

4.4 Functional 4 <Notified>

Customers shall get a notified if they cant confirm the booking before finish the booking payment.

5. Non-Functional Requirements

5.1 NFR 1 < External Requirement - Accounting >

The user shall not get the refund if the customers cancel the booking after settling the payment.

5.2 NFR 2 < Product Requirement - Dependability >

The system must provide customers 24 hours online booking system.

5.3 NFR 2 < External Reuqirement - Accounting >

The customers shall get the charged if the customers exceed the Check-out time.

5.4 NFR 4 < Organizational Requirement - Operational >

User shall need to insert the User ID and Password for Log in before browsing the system.

5.5 NFR 5 < External Requirement - Safety/Security >

User shall can't see the password digit/code when doing the log in.

6. Schedule

Column1	Column2	Column3	Column4
Task	Start Date	End Date	Duration
Planning and discussion	13 April, 2021	15 April, 2021	2
Gather information	16 April, 2021	18 April, 2021	2
Designing the project architecture	23 April, 2021	8 May, 2021	15
Develop the database	13 May, 2021	27 May, 2021	14
Develop the UI	3 June, 2021	17 June, 2021	14
Implementation	17 June, 2021	24 June, 2021	7
Customer Acceptance	24 June, 2021	30 June, 2021	6

Table 2 : Project Schedule

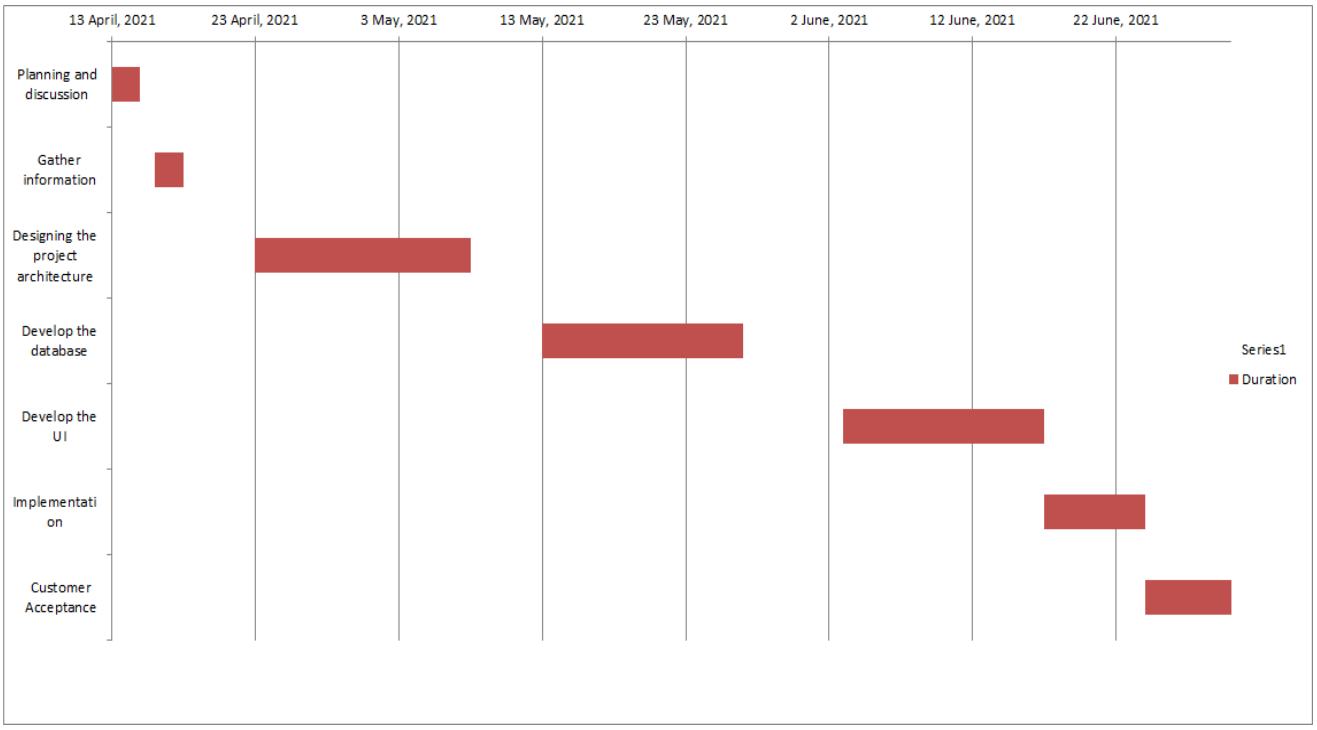

Figure 4 : Gantt Chart

7. References

[1] Agoda. Retrieved April 18, 2021, from https://www.agoda.com/en-gb/

[2] Hotels.com. Retrieved April 18, 2021 from https://www.hotels.com/

[3] Traveloka. Retrieved April 18,2021 from https://m.traveloka.com/en-my/

[4] Visual Paradigm. (n.d.). *What is use case diagram?*. Retrieved April 18, 2021, from https://bit.ly/3drwvnK