



UI/UX Design of Hotel Search and Booking Applications Using the Learn Experience Method

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Abstract. Applications or software are now a necessity for everyone, whether it is to help with work, connect with other people, or just for entertainment. There are many types of applications that can be found today that are used on computer/laptop or mobile devices that can be used anywhere. The display displayed in an application is one of the reasons why users are willing to use the application, the display created in a system is called a UI (User Interface). The UI is an important point in a system display because the UI aims to make it easier for users to run the system created. In addition, in a system there is a UX (User Experience) which serves to provide a pleasant experience when users use the application. On this occasion, the author makes a report on the creation of “UI/UX Application Search and Hotel Bookings in Garut”, because it is felt that UI/UX has an important role in a system design, UI/UX is made using the Figma application website which can be visited on figma.com.

Keywords: Application · UI/UX · Hotel Search and Booking · Figma

1 Introduction

Application is a software that exists on computers and smartphones that have several features that can be accessed by users. Traveling to various regions is one of the activities that many people do nowadays. But most people don't get hotels that are not suitable and inflexible in the area they are visiting, sometimes tourists have to find a place to stay away from tourist attractions [1].

The previous research related to this research is Yuni Rusmawati DJ's research (2019) entitled “The Effect of Room Prices and Hotel Facilities on Consumer Satisfaction at Shangrila Hotel Surabaya” which discusses research related to problems with room prices and facilities with the final results of The research is the price and facilities Hotel ity has a significant effect on consumers [2].

As a part of UX, UI gives more precisely visual appearance of a system's design. In addition, UI can also be referred as connectors between the system and the user. UI gives

of aesthetic touch from a product. The components in the UI include buttons, themes, layouts, animations, and other interactive visuals.

The UX design process uses a user approach. A good UX design product is to provide a pleasant experience for the users. In the process, a good UX will facilitate and provide comfort to the user in using the system. The components that are more highlighted in UX are design structures, product navigation, visual aspects of design and components related to system interaction with users [3].

The design goals of the UI and UX are different. UI emphasizes the visual beauty of the system, while UX is more concerned with user comfort. Therefore, the task of a UI/UX designer is to combine beauty and comfort.

From the above problems with the UI/UX design of the hotel search and booking application using the learn experience method to make it easier for local and international tourists to make it easier to search and book hotels, so users don't have to worry about searching and booking hotels according to their wishes [4].

To process the making of the Hotel application, the Learn experience method is used. Lean UX is a model that brings a tangible nature of a product in order to have rapid and collaborative success as well as cross-functional success by minimizing the emphasis on documentation and focusing on increasing understanding of the product experience designed.

2 Research Methodology

According to Widanaputra (2009: 16), hotel is a type of accommodation managed commercially by using part or all of the existing buildings to provide service facilities, lodging, food and beverages as well as other services provided for guests and the general public to stay [3].

According to Utama (2016), the user interface is the part of computers and software that can be seen, heard, touched, spoken to and understood directly by humans. Thus it can be said that the user interface is part of the computer and software that manages the appearance of the interface for users and facilitates pleasant interactions between users and the system [5].

According to Utama (2020), user experience is the perception or experience of a person and his response from the use of a product, system, or service. User experience assesses a person's level of satisfaction and comfort with a product, system and service. User experience covers all aspects of interaction with users, with the company, its services and products [6, 8].

3 Research Method

The method used in designing UI/UX was Lean User Experience that consisted of four planning and developing phases based on the user meets. The phases included Declare Assumption, Create a Minimum Viable Product (MVP), Run An Experience, Feedback And Research.

3.1 Declare Assumption

The initial stage in this method is to make a list of problems based on an explanation from the user to solve the problem. This list of assumptions is obtained from the opinions and problems experienced by the user. The things that must be considered at this stage are problem statements, assumptions worksheets, prioritizing assumptions, hypotheses, prototypes, collaborative design.

3.2 Create a Minimum Viable Product (MVP)

Create an MVP is a stage in making a prototype that can stimulate users to experience the application or system created. According to Nia (2018), there are 3 levels prototyping; low fidelity (low level accuracy), mid fidelity prototypes (medium accuracy), and high fidelity prototypes (high accuracy) [7].

3.3 Run an Experience

This stage is testing the prototype made. At this stage it is done with demons and previews by doing the application.

3.4 Feedback and Research

At this stage, the MVP stage will be tested and validated by the user. The purpose of this process is to enable users to use the system properly without experiencing difficulties in its use.

4 Discussion

In designing the design of UI/UX, there are several processes including

4.1 Declare Assumption

a. User Need Analysis

At this stage, planning is conducted by designing mobile application designs based on existing problems after analyzing user needs (Fig. 1).

b. Use Case Diagram

The stage of making Use Case diagrams is used to find out the functions in the system and present an actor in a usecase diagram system. The actor on the right is user and on the left is admin (Fig. 2).

| No | Users | Needs |
|----|----------|--|
| 1. | Admin | User Data Hotel Data Hotel Data Reservation Data Types of Order Transaction Data Booking Report Data |
| 2. | Customer | Types of Hotel Offered Hotel Details Transaction List of Method Payments Order Status Purchase History |

Fig. 1. User Need Data

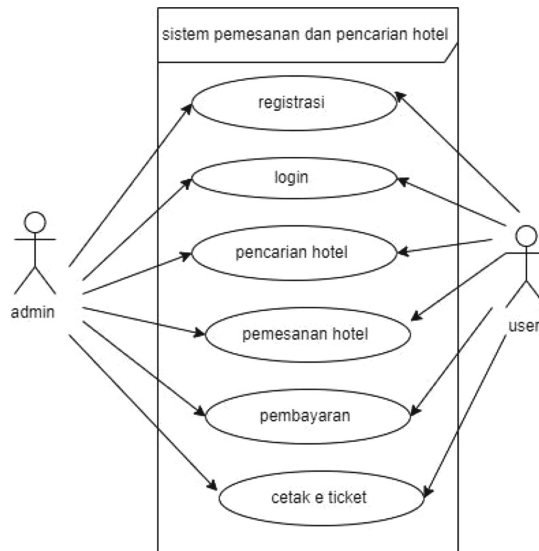


Fig. 2. Use Case Diagram

4.2 Create Minimum Viable Product (MVP)

Wireframe is a process before the creative process begins. Wireframes are created to provide an overview to the user and to the designer about the user’s needs. Wireframes are usually just a simple look with a black and white layout but it covers all of the contents. The homepage design was made to introduce and to make it easier for early

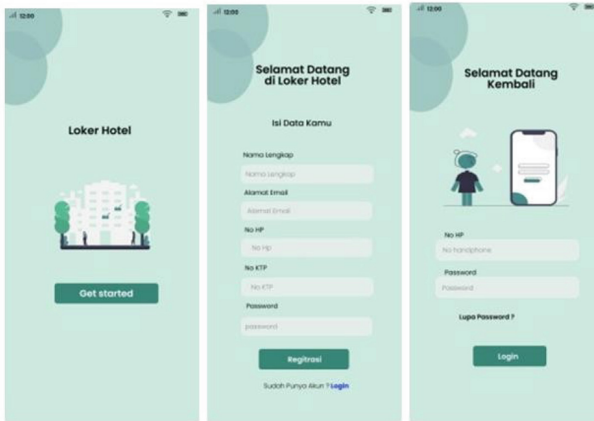


Fig. 3. Splash Screen, Registration Form, Login

users. It was made simple so that it could be understood by new users. The splash screen section was used for the new user to wait for the next page (Figs. 3 and 4).

User flow using the application starts by pressing the get started button, then the user will be directed with two options of registration and login. For old users can directly log in by entering their password and cellphone number, if the user forgets the password the user can recover the account with the cellphone number (Fig. 5).

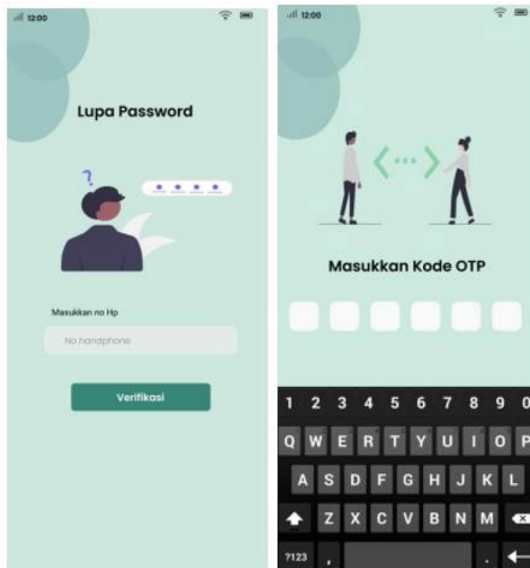


Fig. 4. Password, OTP Code

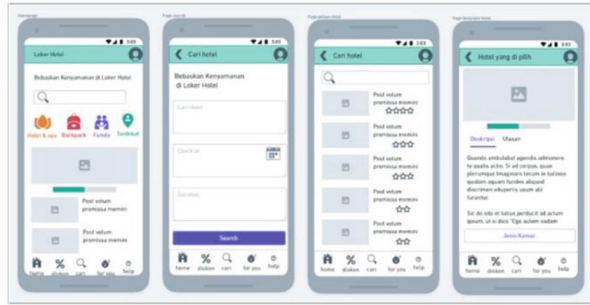


Fig. 5. Wireframe

The wireframe process in a design is considered important because in this process the initial flow of creating the appearance of a UI/UX is formed. The process of making wireframes starts from the start page of the splash screen to the logout page.

4.3 Run an Experience

Based on the results of the design process, the researcher applied a simple theme so that it could make it easier for users to use the system created. The color chosen is green because green is the primary color and is calm color for the balance between harmony and psychology. Green is also associated with the beauty of nature and the environment. The type of font chosen is Poppins because this type of font gives a simple impression, some various sizes adapted to display needs, ranging from regular, medium, bold, and ticks.

a. Homepage

See Fig. 6.

b. Homepage – Search Result

Users can choose what they need easily or search specifically in the search section with display that has been created. The homepage section displays four categories of hotels that have different advantages and functions. The recommendation section shows the closest hotel with the right price, the promo section shows hotels that are on discount (Fig. 7).

c. Search Result - Description

In the search results page, hotels will appear related to the keywords written by the user. The hotels that appear on this page have their respective categories and also provide basic information about hotels such as prices, hotel stars, as well as facilities such as WI-FI, parking and breakfast, as well as set the distance from the hotel to our current distance (Fig. 8).



Fig. 6. Homepage

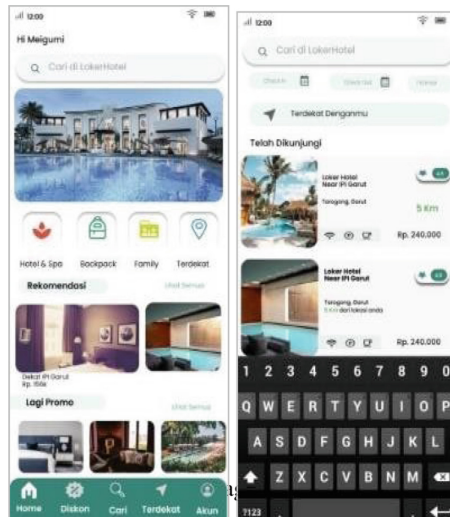


Fig. 7. Homepage, Search Page

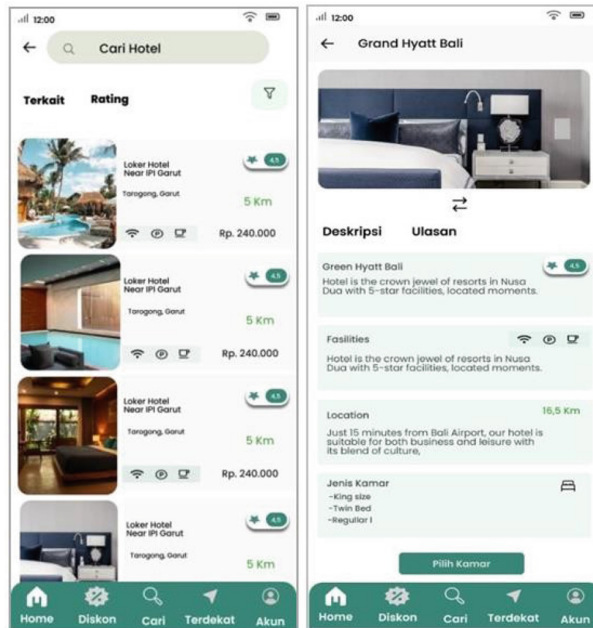


Fig. 8. Search and Description Design

d. Description – Types of Room

The review page appears when the user presses the review button located to the right of the hotels they have visited (Fig. 9).

On room page option, there is a description and user review page to see and choose the type of room you need. In this section there are several choices of room types that you can choose according to your needs.

e. Family – Hotel & Spa

This section makes it easier for users to search according to the family category. Hotels in this category have facilities that have family standards, including spacious rooms, more than one mattress, and playing facilities such as a pool or playground (Fig. 10).

The hotel & spa category is the same as the previous hotel. Both have standard facilities. However, different facilities are obtained in the hotel category that has Spa facilities.

f. Backpack – Diskon

In this backpack category, the hotels offered are quite cheap and with facilities that match the price offered. This category is intended for users who are traveling long distances (Fig. 11).

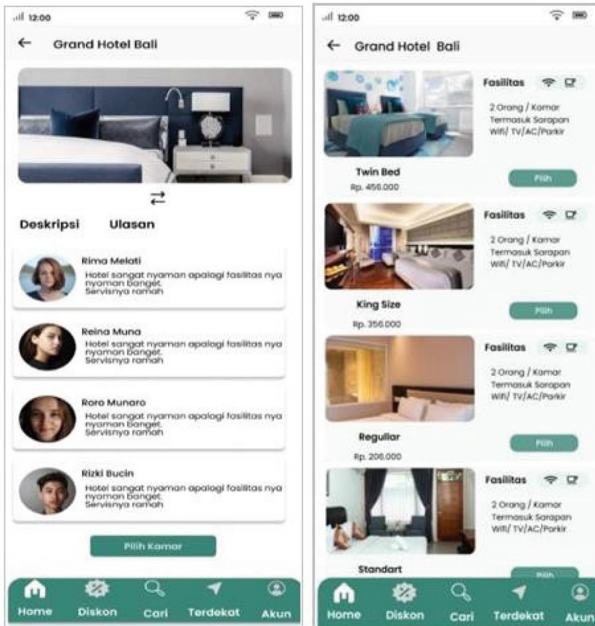


Fig. 9. Review and Types of Rooms

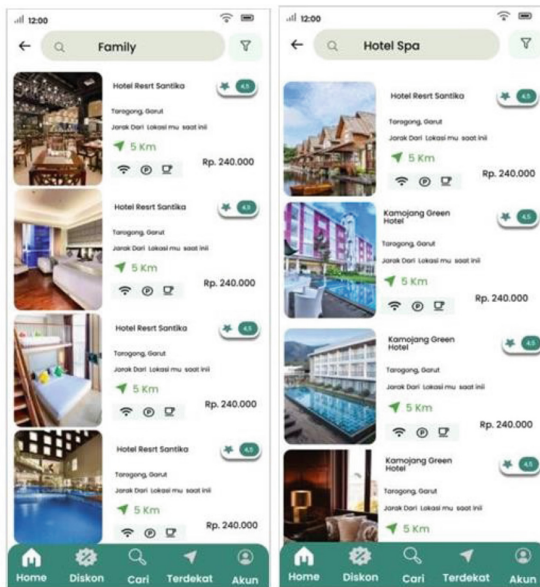


Fig. 10. Category

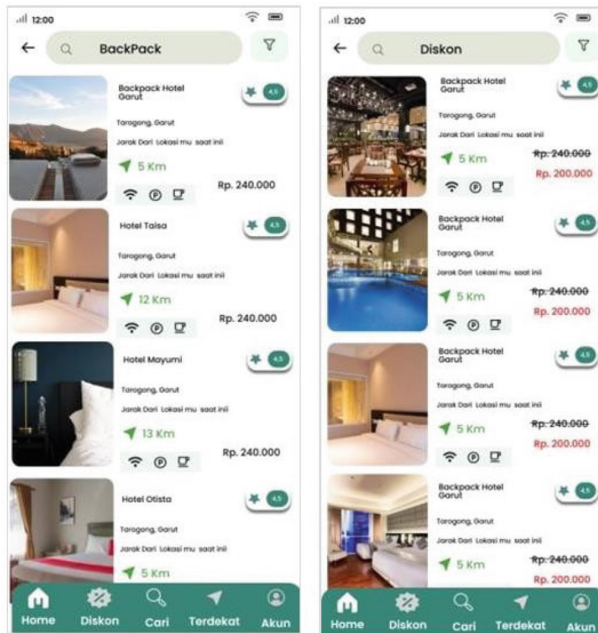


Fig. 11. Backpack - Diskon Category

g. Account

This page displays the user's personal data in the hotel account. To edit the profile, you can go directly to the picture section of this page. This feature displays data that has been entered by the user starting from email, handphone number, and Password. The provisions and suggestions section are intended for information to users about the provisions and suggestions in the application made (Fig. 12).

h. Order Process – See the Order

The booking page ensure that the order in this page includes user's full name, hand-phone number, and special orders. The order now button will go to the next level of ordering which is displayed in the picture after it (Fig. 13).

The view page section serves to preview orders before finally ordering. On this page, customer orders are displayed.

i. Payment Process – e-Money

At the payment stage the user can see the price and details including the payment method. The user can choose using e-money, transfer or pay on the spot (Fig. 14).

j. Transfer Payment and Get Ticket

In payment transfer display, users can use the bank listed on the display. The get ticket page appears when the payment process is complete if the process has not been successful, ticket automation is not available (Fig. 15).

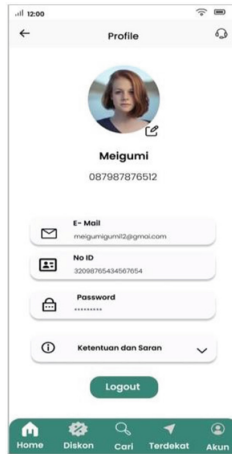


Fig. 12. Account

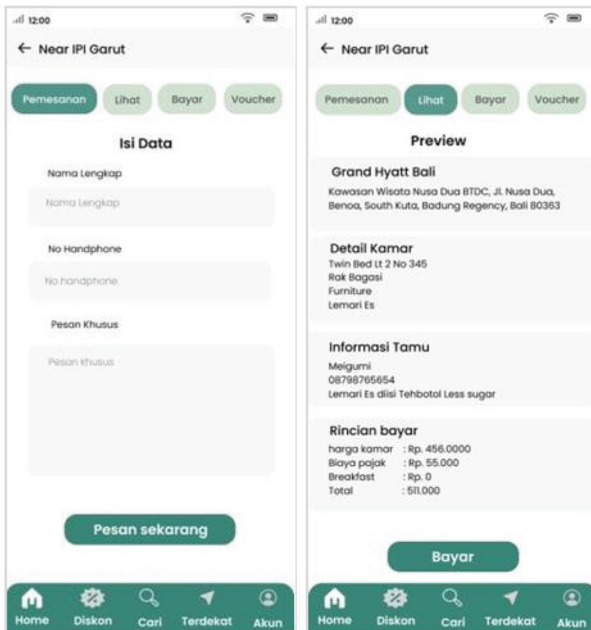


Fig. 13. Payment Process

The above process is the last process of a series of orders showing the payment process that can be done by consumers. Consumers can pay using e-money, bank transfer or on the previous page, the user can pay when they arrive at the hotel.

A series of hotel booking processes from start to finish, starting with the initial display of the login form, and entering the homepage section which is the navigation

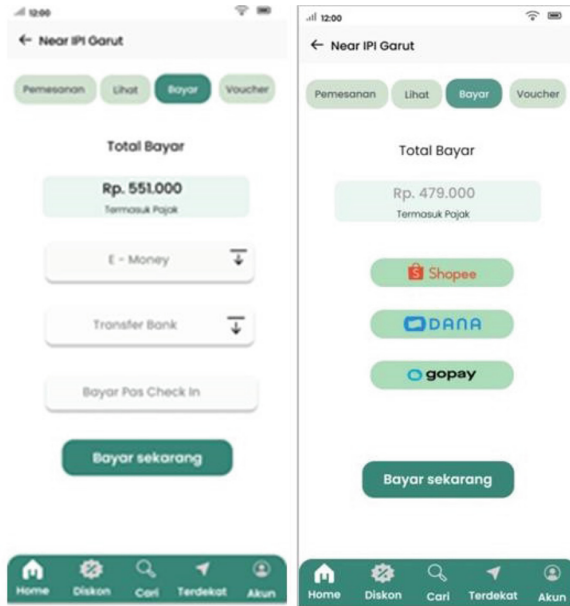


Fig. 14. Payment Process

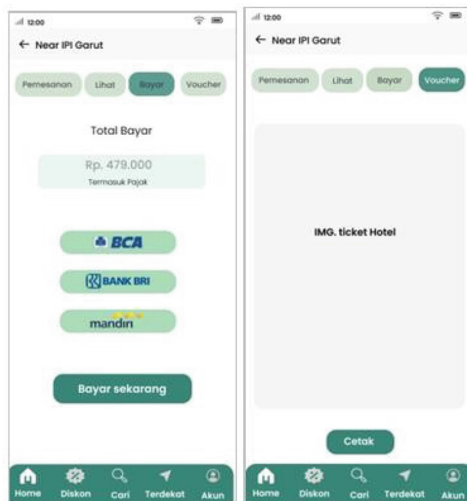


Fig. 15. Payment Process

of all processes. The booking process is made in several steps to ensure that the user performs repeated checks on the orders made.

5 Conclusion

This study is concerned on designing the UI/UX design of a hotel search and booking application. The design is made using the figma application with the attached display. In practice, the researcher gains knowledge about the process of how to create a UI/UX design for the hotel booking application.

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