

BOOKIT Application Documentation

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0.1 task table

task	student
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OUR PROGRAM	layal
CONCLUSION	together
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FUNCTIONAL REQUIREMENTS	reem
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Analysis CONCLUSION	together
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1 Lecture 1: BOOKIT Project Introduction

1.1 Abstract

Bookti helps you find hotels quickly, makes it easy to book hotels, compares available routes, and includes the ability to book transportation such as cars and taxis. Although the Booking.com app is one of the most popular apps in this area, some of the side effects users may encounter are not.

1.2 Introduction

Hotel reservations are an essential part of travel planning, allowing travelers to secure accommodations in advance. There are many apps and platforms that facilitate this process, making it easier to find, compare, and book hotels. Bookit is an important technical tool that contributes to facilitating the process of searching and booking hotels for travelers. The application provides users with the ability to explore a wide range of hotels through an easy-to-use interface, enabling them to choose hotels based on price and ratings, as well as subscribe to available services. The application aims to improve the travel experience and contribute to comfort and organization by enabling the user to manage their reservations easily. The Bookitapplication was created to meet

the basic need of travelers to find accommodation easily, as searching for hotels and booking through travel agencies or directly contacting hotels has become inefficient and complicated in light of technological development and increased reliance on smartphones. We conducted a survey on the necessity of having a Bookit application, and it turned out that 93 of people believe that having an application such as the Bookit application is important while traveling, and 87 of people prefer to book a hotel through the application. Instead of going directly to the hotel or calling it, 93 believe that the application reduces complications and stress during travel, and 60 believe that booking a hotel through the application is much more convenient than booking in the traditional way. Based on this survey, we created the Bookit app. Bookit app was created to fulfill the basic need of travelers to find accommodation easily. Because with technological development and increased reliance on smartphones, searching for hotels and booking through travel agencies or direct contact with hotels has become ineffective and complicated. Bookit helps in quickly searching for hotels, facilitating the booking process, comparing available options, in addition to the ability to book transportation such as cars and taxis. Although the Booking.com application is one of the most famous applications in this field, it is not without some negatives that users may face. ...

1.3 The Purpose of Bookit

The application aims to improve the travel experience and contribute to comfort and organization by allowing the user to manage their reservations.

1.4 Disadvantages and Advantages of Booking Apps

Advantages	Disadvantages
Easy to use interface	High fees and commissions for hotels
Multilingual application	Difference between announced price and final price
Frequent offers and discounts	Difficulty modifying reservations
Loyalty Program (Genius Loyalty Program)	Over-reliance on major hotels
Flexible payment	Delay in refund

1.5 Our Program

Features of the Bookit application include:

- Users can book transportation through the application
- Users can request room services and food services through the applicatio
- Bookit provides customer service through the application through live chat or voice call around the clock
- The user can see the locations of strategic hotels in terms of nearby events, hospitals, and restaurants
- The user can book a tour guide or guidebook for events, museums, and tourist attractions

1.6 Conclusion

In conclusion, Bookit is an important technological tool that greatly contributes to improving the travel experience for users by facilitating the process of searching and booking hotels. Thanks to its user-friendly interface, users can explore a wide range of available options, helping them make informed decisions that suit their needs. Despite some potential drawbacks of other booking apps, Bookit strives to provide a convenient and organized experience for users, making it an ideal choice for travelers looking for convenience and efficiency in booking accommodation.

2 Lecture 2: Analysis

2.1 Introduction

Functional and non-functional requirements of a hotel booking app play an important role in the design and development of the app

2.2 Functional Requirements

To develop a hotel room booking application, there are several functional requirements that must be taken into consideration, including:

- User registration: There must be a system for registering new users and logging in for existing users.
- Hotel search: The application must include a search interface that allows users to search for hotels by location, date, and number of guests.
- Room reservation: There must be a system for booking rooms, where users can select the desired room and make a reservation.
- Electronic payment: The application must include options for electronic payment, such as credit cards or online payment services.
- Booking management: Users must be able to manage their reservations, including modifying or canceling them.
- Hotel ratings: Users must be able to leave ratings and comments on hotels after their stay.
- Customer support: A means of contacting customer service must be provided in Case of any inquiries or problems.

2.3 Non-Functional Requirements

Non-functional requirements for a hotel booking app include several important aspects to ensure the quality of the app and the user experience. Here are some of these requirements:

- **Performance:** The app should be fast in loading pages and responding to commands. It is preferable that data loads in less than two seconds.
- **Security:** Users' personal data, especially payment information, should be secured. Strong encryption protocols such as HTTPS are recommended.
- **Compatibility:** The app should work well on different devices and operating systems (such as iOS and Android).
- **Ease of use:** The user interface should be simple and easy to understand, with clear instructions to help users with the booking process.
- **Availability:** The app should be available for use at all times, with minimal downtime.
- **Maintainability:** The app should be easy to maintain and update to improve performance and add new features.

2.4 Conclusion

Functional requirements refer to the functions and features that the app must provide to meet the needs of users. These requirements include: Hotel search, room booking and reservation management. Non-functional requirements refer to general features that affect the user experience but are not directly related to functionality such as performance, security and convenience. These requirements help ensure that the app effectively meets the needs of users and provides a good user experience. If you have any additional questions or need more details.

3 Lecture 3: Design

3.1 Introduction

The user interface is the part of the hotel booking application that the user interacts with. The database is the system that stores all the information related to the hotels including rooms, prices, and user reservations. The database is designed in a way that ensures quick access to the data and ease of management. In general, a hotel booking application requires effective integration between the user interface and the database to provide a seamless experience for the users

3.2 A HOTEL BOOKING APP DESIGN CAN INCLUDE SEVERAL KEY ELEMENTS TO IMPROVE THE USER EXPERIENCE. HERE ARE SOME IDEAS:

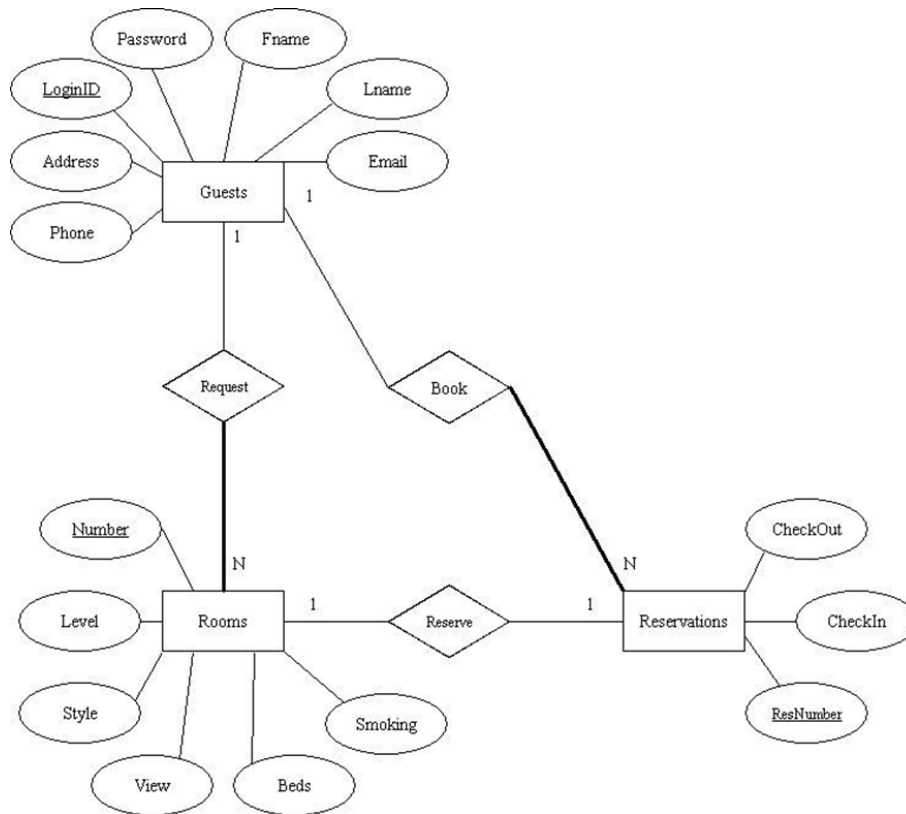


Figure 1: ERD for Bookit application

3.3 Entity:

Visitors (Guests)

- A collection of qualities or attributes (Attributes) that the entity possesses include:
- The Login ID (Login ID).
- The passcode (password) Fname is the first name.
- Last name, Lname
- electronic mail (e-mail)
- The address (Address)
- Phone (number on file)

Rooms:

- Among the attributes of the entity are:
- The number (the room number).
- Level (ground, floor)
- Design (style of room).
- View—the view from the room
- Smoking (whether or not it was intended)
- Beds (Beds)

Making reservations :

- The creature possesses the following traits:
- The booking number, or ResNumber
- Date of Entry (Check-In)
- Check-out (the day of departure)

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3.4 Relationships :

request :

- A request-based interaction exists between visitors and rooms. The visitor may make multiple room requests (N), but only one (1) person may order a room

A book (reservation):

- A reservation is the product of the relationship between guests and reservations. One (1) guest is associated with each reservation, although the guest may make several reservations (N).

Detention or reserve:

- There exists a detention link between rooms and reservations. Although a reservation can be made for more than one room (N), each reservation can only manage one (1) room

3.5 Database Design

The database stores hotel information, user data, and booking records. The database tables include:

Table	Description
HOTELS TABLE, incl.	Hotel din ,place ,The snowflake ,Number of rooms
IntracellularTable	FOREIGN KEY to the HOTELS TABLE ,The quality of the room, value ,The position of the room
table of contents	CHECK-IN DATE ,FOREIGN KEY to the ROOMS TABLE , CHECK-OUT BUILDING ,The name of the user
CustomerTable	The name of the user ,Create an email ,PHONE NUMBER

3.6 When designing user interfaces for a motel reserving app, you may don't forget the following interfaces:

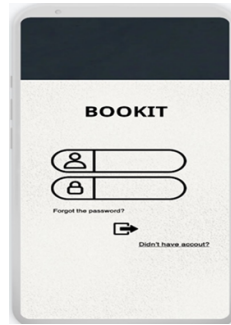


Figure 2: Figur2: Login/Registration interface:

Fields for user input: There are two information entry

- A space for a username or email address.
- A password entry field is located in the second field.
- A button to log in and a button to check in as a new consumer.

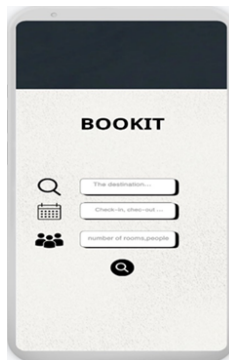


Figure 3: Figure3: Hotel search interface:

- The Destination: The user can enter the city or destination in this field while making a reservation
- Check-in, check-out: The dates for check-in and check-out from the hotel are selected in this field.
- Number of rooms, people: Enter the number of rooms and persons needed for the reservation in this field.
- A button to search for available hotels.

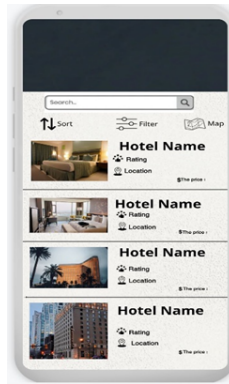


Figure 4: Figure4: Search results interface:

The interface shows:

- Hotel name: The name of each hotel appears at the top of each list.
- Rating: There is often a star or point rating system to show the satisfaction of previous guests with the hotel.
- Location: Displays the geographical location of the hotel, such as city or neighborhood.
- Price: The price of staying at the hotel is shown, usually for one night.
- Hotel photos: Photos of the hotel or rooms may appear to help you make your decision.

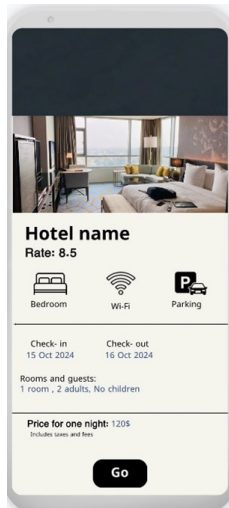


Figure 5: Figure5: Hotel information interface:

This interface display

- Hotel name: The name of the hotel you are looking for is displayed at the top of the screen.
- Hotel Rating: The hotel's overall rating, such as 8.5 out of 10, is located next to the name of the establishment.
- Cost: The room's daily rate, for instance, is displayed.
- Hotel photos: A collection of images often includes the hotel's various rooms and amenities.
- Amenities and services: A summary of the hotel's amenities, including a swimming pool, parking, breakfast, and Wi-Fi.
- Description: A succinct sentence outlining the hotel's features, location, and services.
- Room options: A list of the several kinds of rooms that can be reserved, along with information about the size, number of beds, and views of each.
- Site map: A brief map that illustrates the hotel's location in relation to nearby tourist destinations and public transportation.
- Remarks: A segment featuring remarks and viewpoints from prior attendees.

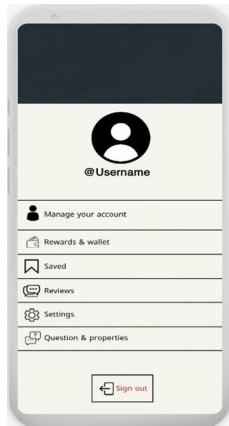


Figure 6: Figure6: Profile interface

This interface shows:

- Sign out: This button lets you exit the current session. •
- Manage your account: Here, you can update your personal information or change your password, among other account-related modifications.
- prizes and Wallet: You may monitor your financial portfolio and view the prizes you have accrued in this section.
- Archives: Using this option, you can view content that you have already saved.
- Evaluations: In this section, you can examine the assessments you have given or received.
- Settings: All of the app's settings, including those related to privacy and notifications, are located in this area.
- Questions and features: Learn about the various features of the here and get answers to frequently asked questions.

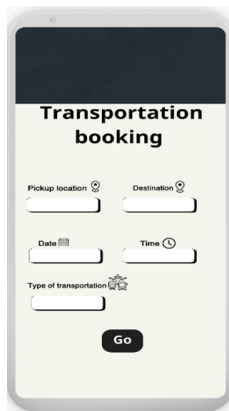


Figure 7: Figure7: Transportation

This interface displays:

- Pickup location: You can input the location from which you would like to be picked up in this field. This could be your home address, work address, or any other address.
- Destination: This is where you enter the desired location.
- Date: The date you wish to navigate can be chosen.
- Time: Enter the time you would want to be contacted.
- Mode of transportation: This choice lets you select the mode of transportation that best suits your needs, be it a bus, taxi, or any other kind of transportation that's available.
- "Go" button: This button allows you to confirm the reservation and initiate the transfer after you have entered all the necessary data..

3.7 Designing a resort room reservation app calls for numerous steps, such as designing the interface, creating the database, and writing codes. Here are the targeted steps:

Interface design:

- The interface have to be easy and clean to apply. You can use tools like Figma or Adobe XD to design the interface.
- The primary interface consists of a search bar, a listing of inns, room details, and a booking interface.
- It should incorporate clean buttons like "Book Now" and "View Details".

Database:

- You can use a database like MySQL or Firebase to shop lodge, room, and reservation records.
- It ought to consist of the subsequent tables:
- Hotels table: Contains the inn ID, call, location, and class.
- Rooms desk: Contains the room ID, inn ID, type, and charge.
- Reservations table: Contains the reservation ID, room ID, client call, and reservation date.

Codes used:

- You can use programming languages like Java or Kotlin for Android apps and Swift for iOS apps.

3.8 Example of Simple Java Code for Room Booking

```
public class Booking {
    private String customerName;
    private String roomType;
    private Date bookingDate;

    public Booking(String customerName, String roomType, Date bookingDate) {
        this.customerName = customerName;
        this.roomType = roomType;
        this.bookingDate = bookingDate;
    }

    public void confirmBooking() {
        // Code to confirm booking
    }
}
```

3.9 Conclusion

In conclusion, preparing a hotel application is a complex process that requires special attention to detail. By using a well-designed and flexible database, we can ensure a comfortable and efficient experience for users. Developers should focus on improving the app's functionality and aesthetics, making it easier for users to search for information and make easy arrangements with the primary goal of traveling needs and help them make informed decisions about where to live

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