

**كلية العلوم الحاسوبية والمعلوماتية**

**College of Computer and Information Sciences**

Hotel Booking Application

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*A project report submitted in partial fulfillment of the requirements   
for B.Sc. degree in Software Engineering.*

*Amman - Jordan*

*2024/202**5*

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ABSTRACT

A hotel booking app is an important part of modern hotel life, it ensures good work and efficiency of the hotel and provides the option to book a room online. Analyze and improve the modern booking application. Our goal is to provide application analysis. In relation to hotels, reservations, online reservations, and online reservation systems. To create UML diagrams that show how this application works.

SCENARIO

The hotel booking app provides online room booking service through a mobile app called Hotel-Rest. The application provides easy and convenient ways to book rooms. You as a system designer are asked to design the following scenario that explains all the details that a hotel booking application needs to cover. Guests can book a room using the hotel app.

After the application receives the request, the administrator needs to collect the guest's information and enter the booking request into the system. If ordering through the app, the guest must register in the app and then provide the requested flight information. Once the reservation request is received in the system, the system checks the details of the reservation requests and finds the matching available room. Once a matching room is identified by the system, the guest is notified through app alerts. If the guest accepts the room offered, they must accept the reservation by responding in the app. There are workers working in the rooms and reservations. After booking the room, the guest needs to submit payment in three possible ways (manually by cash, by credit, or online through the application). The last step for guests is to rate the hotel.

Chapter One: Introduction

* 1. Problem Statement and Project Scope

The system has been facing problems due to its paper-based appointment

system. With the increase in the number of patients visiting, it has

become diﬃcult to manage the appointment system manually. Recording

of appointments and creating registers by pen and paper has become a

Problem Statement: The current hotel booking process is rife with inefficiency and frustration for both customers and hotel staff. Customers often face challenges finding available rooms, navigating complex booking platforms, and ensuring secure payment transactions. Hotel staff are having difficulty managing room availability, updating prices and availability in real-time, and providing timely customer support. These issues lead to customer dissatisfaction, potential loss of hotel revenue due to overbooking, and increased operating costs.

Project Scope: The scope of our project is to develop an easy-to-use and efficient hotel booking application. This application will enable customers to easily search for available rooms, view detailed information about each room, make reservations securely, and obtain instant confirmation. The application will provide hotel staff with a comprehensive control panel to manage room availability, update prices and availability in real-time, track booking, and communicate with customers effectively. By simplifying the booking process and enhancing the overall user experience, our app aims to improve customer satisfaction, increase hotel revenues, and improve operational efficiency.

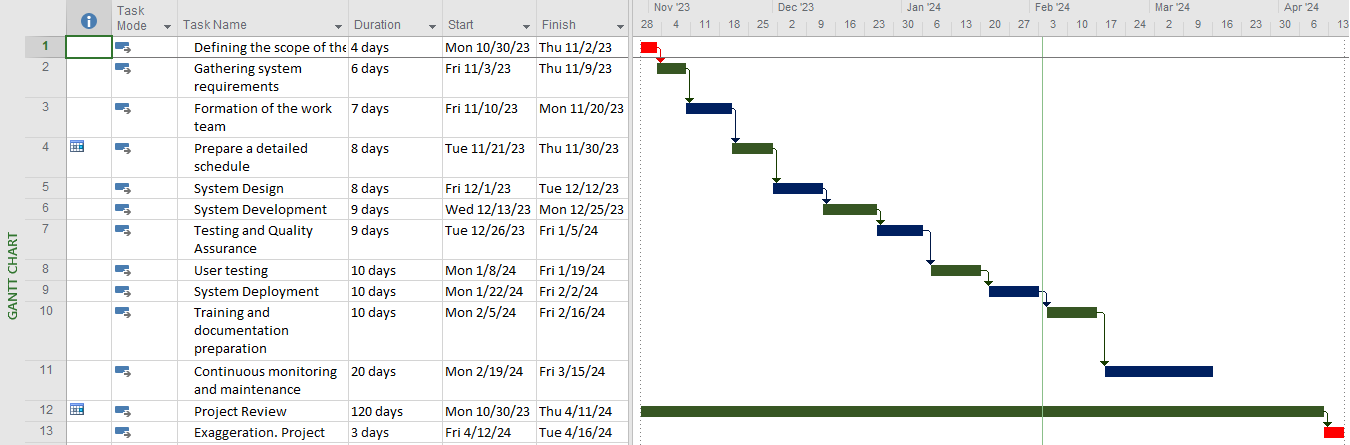
* 1. Project Plan and Schedule

Figure (1): Gantt Chart

|  |  |  |
| --- | --- | --- |
| Activity | Predecessor | Duration (days) |
| Defining the scope of the project |  | 4 |
| Gathering system requirements | 1 | 6 |
| Formation of the work team | 2 | 7 |
| Prepare a detailed schedule | 3 | 8 |
| System Design | 4 | 8 |
| System Development | 5 | 9 |
| Testing and Quality Assurance | 5 | 9 |
| User testing | 6,7 | 10 |
| System Deployment | 8,9 | 10 |
| Training and documentation preparation | 10 | 10 |
| Continuous monitoring and maintenance | 11 | 20 |
| Project Review | 12 | 120 |
| Exaggeration Project | 13 | 6 |

1.2.1 Activity, Predecessor, Duration (days)

Table (1): Project activities, its predecessor, and its duration

1.2.2 Critical Path

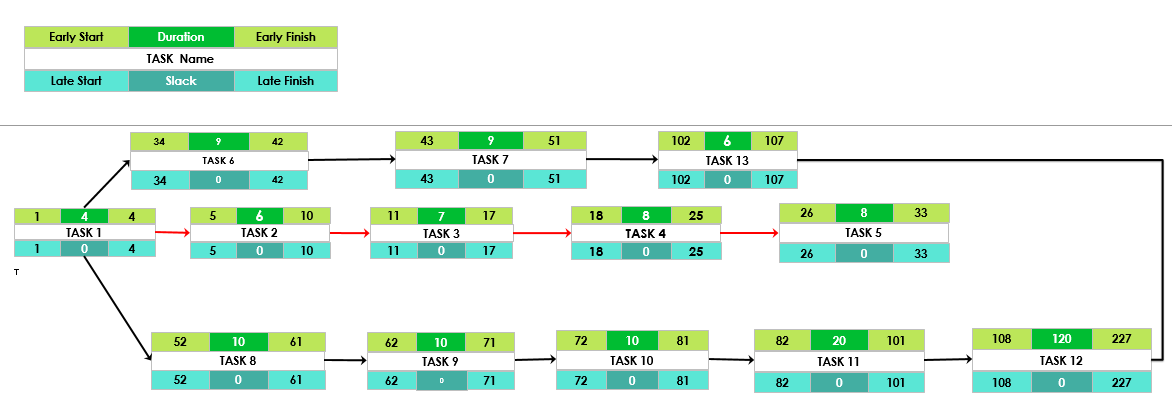


Figure (2): Critical Path

1.2.3 Work Breakdown Structure (WBS)

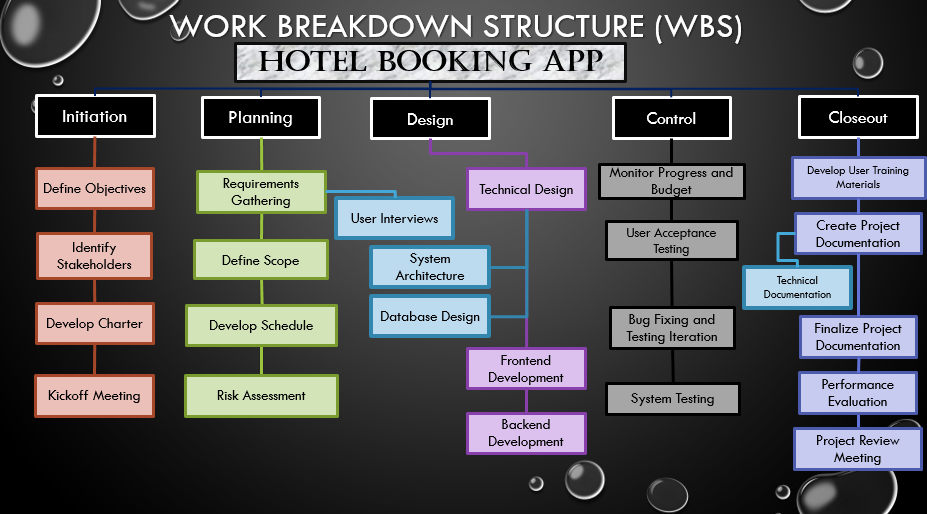


Figure (3): WBS

Chapter Three: System Design

3. System Design

It is a process that includes system design for a hotel booking application and many important aspects that contribute to achieving the application objectives and providing a comfortable and secure user experience. *Here are some important points in systemic design:*

1. Database Design: We need to design a database that allows hotel information, booking, and users to be stored and retrieved effectively.

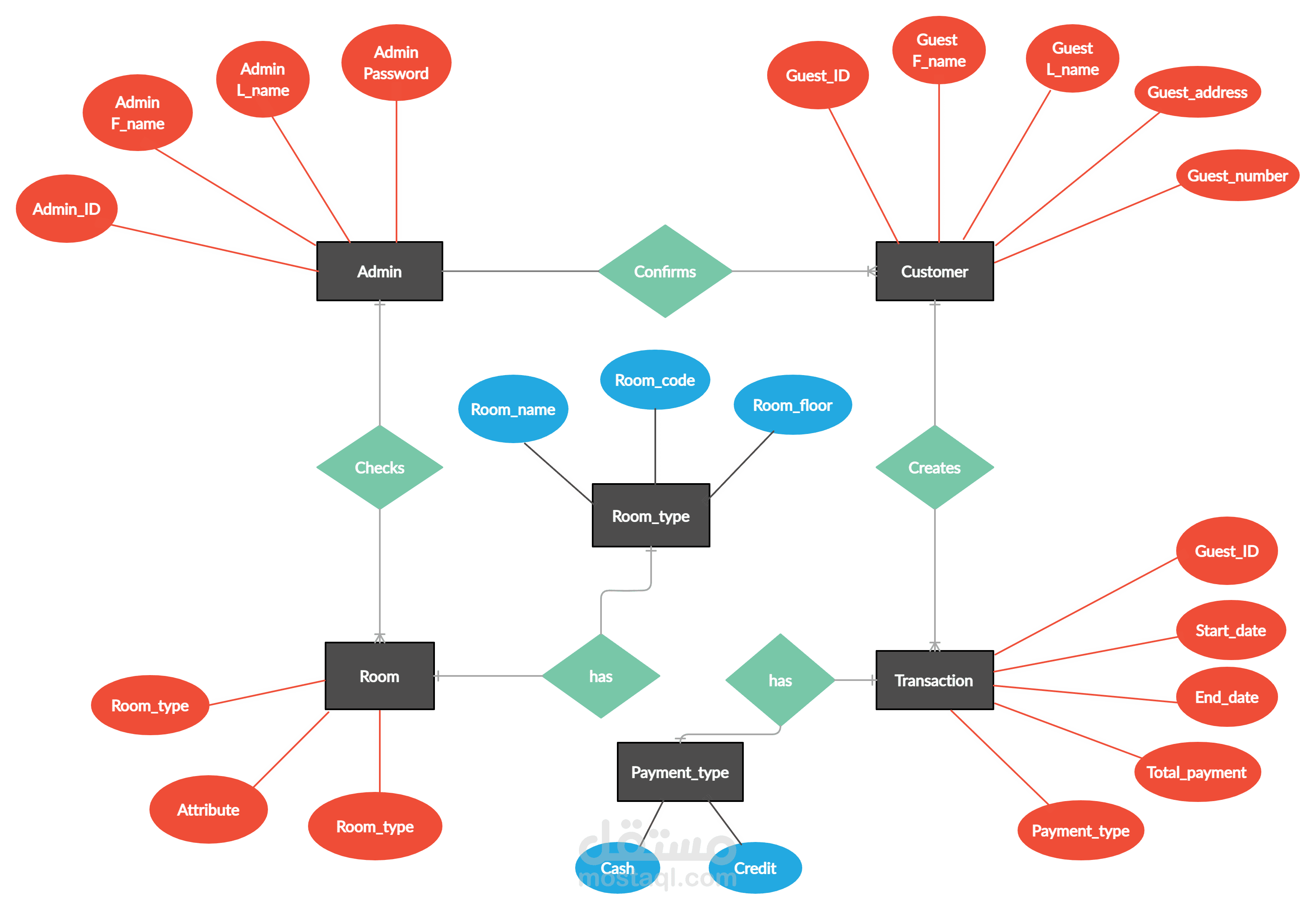
2. User interface design: An easy-to-use user interface must be designed that enables users to search for and book hotels easily.

3. Design Security and Privacy: We need to design a robust security system that properly protects users' data and sensitive transactions.

4. Performance Design: A system must be designed that allows the expected workloads to be handled efficiently and smoothly.

5. Test Design: A comprehensive testing strategy must be designed to ensure

3.1 ER-Diagram



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Figure (4): ER Diagram of Appointment system

3.2 User Interface (prototype)

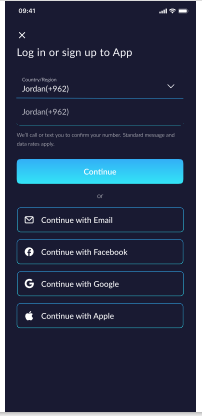


Figure 5: Start Figure 6: Login

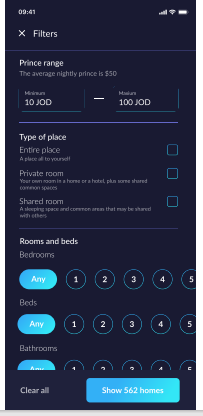
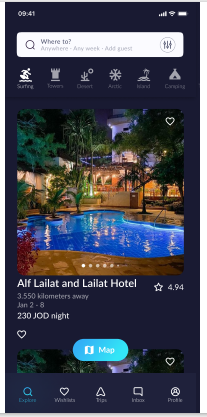


Figure 7: Explore Figure 8: Filters

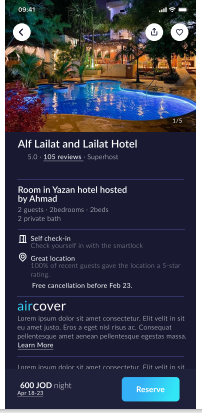
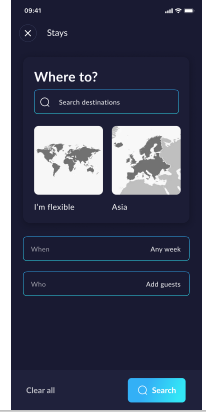


Figure 9: Where to Figure 10: Place

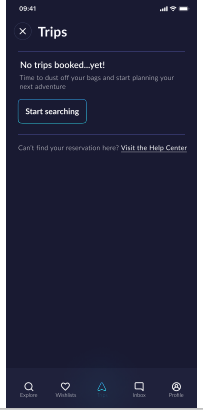
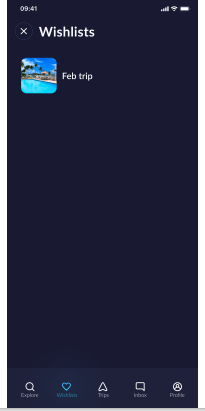


Figure 11: Wish Lists Figure 12: Trips

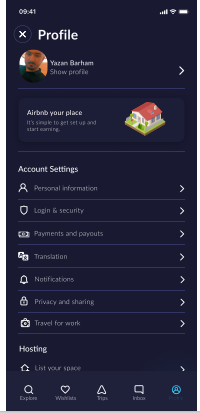




Figure 13: In Box Figure 14: Profile

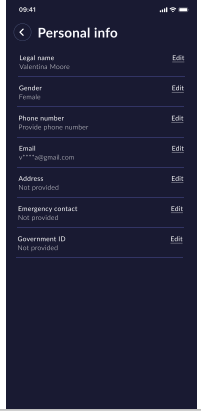
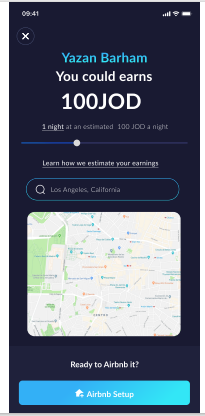


Figure 15: In Box Figure 16: Personal Info

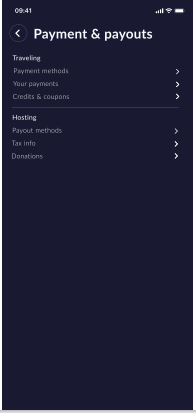
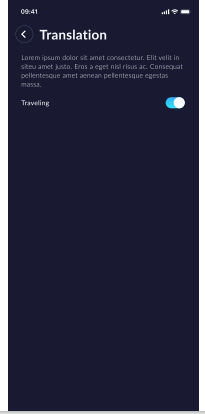


Figure 17: Payment & Payouts Figure 18: Translation

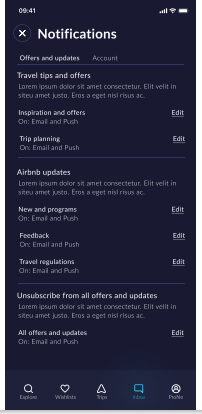
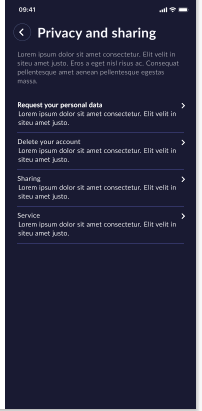


Figure 19: Notifications Figure 20: Privacy and Sharing

