

Globetrek

MAKE YOUR
TRIP
EFFORTLESS





Group members

Raghad Al-Zahrani - 442017353

Maani Al-hadrmi - 442007781

Bayan Al-Zahrani - 442006101

Noha Imam - 441017954



Phase 1

works	Noha	Maani	Bayan	Raghad
1-2	✓			
3-4		✓		
5-6				✓
7			✓	



title - descreption - aim



1- Introduction

- Project Title : Globe Trek

- Project Description:

Our application provides most of the services the user needs for travel and entertainment. Firstly, it allows the user to create an account or log in and modify his data from his profile. The possibility of booking a room in any available hotel and showing hotel ratings so that he can make a choice, in addition to booking airline tickets with ease.

Not only that, but there are more tourism services available, such as informing the user of the presence of events and celebrations taking place during this period in this country. Finally, the weather service so that one can prepare for today's weather

- Project Aim:

- **Developing an entertainment tourism application to simplify trip planning.**
- **Facilitating the travel experience and making it more enjoyable and smooth.**
- **Saving time and effort.**
- **Discover events and activities of countries.**
- **Providing comfort for travelers.**



target users - context



2- Specification of your target users and their context

- Target users:

globe trek has been provided for entertainment, the application targets people over the age of 15, and a wide range of users interested in travel and tourism.

- Context:

- The application uses mobile and will be available if the device is connected to wi-fi.

Description of users problem

3- Description of user's problems

- **Difficulty in understanding the requirements:** Users may find it difficult to understand what is required, which could be caused by a lack of images or icons, or an inappropriate interface.
- **Difficulty in searching for information:** Users may find it difficult to find the information they need about tourist destinations, activities, hotels, and their ratings, activities in the city, weather conditions, and currency exchange. This could be due to the abundance of information available, its lack of clarity, or an inappropriate user interface.

3- Description of user's problems

- **Difficulty in comparing options:** It may be difficult for users to compare the different options available to them, such as the prices of flights, hotels, or activities, due to the abundance of options or unclear presentation methods.
- **Difficulty in booking:** It may be difficult for users to book flights, hotels, or activities. This could be due to the number of steps required, the lack of clarity of instructions, or the requirements being written at the end of the page or in an inappropriate font.

3- Description of user's problems

- **Difficulty in communicating with travel providers:** Users may find it difficult to communicate with travel providers, such as hotels, airlines, or tour operators. This could be due to language differences or the lack of appropriate communication channels.

Description of the solution

4- Description of the solution

- **Creating a user-friendly and clear user interface:** This can help users easily find the information they need, compare different options, and communicate with service providers.
- **Making the steps short and clear:** This can help users book the flights, hotels, or activities they want quickly and easily.

4- Description of the solution

- **Providing tools and features that help users search for information and compare options, such as filters, examples, or suggestions that the system provides based on the user's previous behavior:** This can help users quickly and easily find the information they need and make informed decisions.
- **Providing tools and features that help users communicate with service providers:** This can help users easily get the information they need.



*usability goals and user
experience goals*

5- Usability Goals

- **Effectiveness:** provides a good experience for users by providing accurate information and integrating services seamlessly. Each interface provides the required information and options, making it easier for users to find what they need.
- **Accessibility:** Ensuring that the interfaces are accessible to users with disabilities is crucial, ensures that users with diverse abilities can access, interact with, and benefit from digital products and services

5- Usability Goals

- **Utility:** provide utility to users by offering the necessary tools and functionalities to accomplish their tasks effectively. Each interface is carefully crafted to present relevant information and options, The layout and organization of elements are optimized to facilitate smooth navigation and efficient interaction
- **Efficiency:** The interfaces must be highly efficient, by reducing user effort and minimizing cognitive load. They feature streamlined workflows and intuitive interactions, allowing users to perform tasks.

5- Usability Goals

- **Learnability:** Interfaces prioritize learnability, ensuring that users can quickly understand how to navigate and interact with the application without extensive training or guidance, by using well-known design principles.

5- User Experience Goals

- **Seamless Integration:** The application should seamlessly integrate the different services it offers, providing a unified and cohesive experience for users.
- **Satisfying:** The interfaces are designed to create a satisfying user experience, making interactions with the application enjoyable and rewarding. Attention is given to visual aesthetics.



conceptual model



6-conceptual model

- metaphor & analogies:

Explore, weather, currency

- Concept:

hotels page, trips, flights page, Activities page,
Weather page favorite page, Notes page,
Sharing page, Support, Reservations page,
Profile page, users, cities, home page

6-conceptual model

- Relationship

1-home page contains explore, Currency conversion, plans, account, weather icon

2-Weather determined from a specific city

3-User has an account

4-Account contains reservations and profile information

5-User check of the reservation

6-Book a hotel or flight appear in reservations

7-Activities appear by specific city

6-conceptual model

- **Mapping :**

1-Shows a list of reservations made by the user, including hotels, flights, and activities.

2-Users are people who interested, such as travelers or those who want to book a hotel

3-Support are the employees who provide customer -user- service in the application

4-Shows a list of reservations made by the user, including hotels, flights, and activities.

5-Refers to individuals who have registered accounts in the app and are using its features and services

6-Contains user-specific information, such as name, contact details, and favorits

6-conceptual model

- Data :

1-user can enter typed data for hotels, activities, flight, city, value of a country's currency, weather, profile information

2-user can select data for weather, hotels, city, weather, activity, flight

6-conceptual model

- Functions:

1-Search: user can searching about hotels, activities, flight

2.View weather: user can view the Weather in current city or other city

3-Favorite: user can favorite activities and hotel or city Plans

4-Taking notes: user can write a notes

5- Sharing plan: user can Share plans

6- Update: user can update profile information

6-conceptual model

- **Function Relationship:**

1-User can explore by searching and then viewing results (order: sequential)

2-User selects the city then displaying weather (order: sequential)

3-User can retrieve to the favorite page if puts a favorite mark(order: sequential)

4-No results appear on the reservations page unless the user has already made a reservation(order: sequential)



interaction and interface

7-Interaction Types

Our application uses instructing as a type of interaction for functionalities and conversing for human support. Users are able to provide commands by selecting options to receive personalized and relevant information regarding their travel destinations, as well as communicate with human agents if they need assistance.

Our software benefits from instruction since it enables users to easily access the information they want without involving them in conversations or exploring large amount of data.

In support, conversing allows users to receive personalized and empathetic solutions from human agents instead of following predefined steps or menus. It can also increase the user satisfaction and loyalty by providing friendly and human-like responses.

7-Interface Types

Icons: users can easily understand and access these functions by clicking on the corresponding icons.

Menus: organize and categorize functions, making it convenient for users to find and select the specific services or information they need.

GUI: make it visually appealing and intuitive, allowing users to explore destinations and services with ease.

Multimedia: showcase visuals of tourist destinations, virtual tours, and hotels, enhancing the user's understanding and engagement.

7-Interface Types

Mobile and Touch Interface: our app is cater to users on smartphones and tablets. These interfaces are designed to be responsive, ensuring that users can access information and make bookings while on the go, which is crucial for travelers.

Smart Interface: offer personalized recommendations based on user preferences and location, making travel planning more convenient and tailored to individual needs.

Phase 2

works	Noha	Maani	Bayan	Raghad
Establishing Requirements				✓
PRE Design			✓	
Prototype		✓	✓	
Usability Testing	✓			



Establishing Requirements

part 1



Establishing Requirements

Questions	after question	reason
ما الخدمات الاضافيه التي تود أن تجدها في التطبيق (What additional services would you like to find in the application?)	ما الخدمات التي تود أن تجدها في خدمة حجز الفنادق? What services would you like to find in the hotel reservation (?service)	Make the question more precise and specific
في التطبيقات الحالية، ما هو الوقت التقريري الذي يستغرقه المستخدمون عموماً لإتمام عملية حجز الرحلة (In current applications, what is the approximate time that users generally take to complete the flight booking process?)	كم الوقت الذي تستغرقه بالمتوسط لإكمال عملية حجز الرحلة في التطبيقات الحالية? How much () time does it take you, on average, to complete the flight booking process in (?existing apps)	Make the question directed directly to the user and his personal experience

Establishing Requirements

User characteristics

1- كم عمرك؟

(How old are you)

2- ما هو أعلى مستوى تعليمي وصلت له (?level of education you have reached

(current work)

3- ما مدى خبرتك في استخدام التقنيه (?you have in using technology

User Questions

1- هل قمت بتجربة تطبيقات تخدم المسافرين سابقاً؟

(Have you tried applications that serve travelers previously)

2= أي من الخدمات التالية تهمك أكثر لاستخدامها في التطبيق؟

Which of the following services would you most like to use in the (application)

3- ما هي الجوانب التي تجد أنها مزعجة أو غير ملائمة في التطبيقات المشابهة؟ (?of similar applications do you find annoying or inconvenient

4- ما هي العوامل الإيجابية التي قد تؤثر في قرارك باستخدام هذا التطبيق عوضاً عن التطبيقات الأخرى التي توفر خدمات مماثلة؟

What factors might influence your decision to use this app over other apps that (provide similar services)

Establishing Requirements

User Questions

5- مدى أهمية وجود إمكانية الوصول إلى حجوزات وموقعك الحالي من خلال حسابك في التطبيق؟

(How important is it to have access to your reservations and current location through
(your account in the app)

6- ما الخدمات التي تود أن تجدها في خدمة حجز الفنادق؟

(?What services would you like to find in the hotel reservation service)

7- ما مدى أهمية وجود تقييمات الفنادق قبل اتخاذ قرار حجز؟

(How important is it to have hotel reviews before making a booking decision)

8- هل ستكون مهتماً بتلقي إشعارات أو تنبيهات بشأن العروض والخصومات أو التحديثات المتعلقة بالخدمات في التطبيق؟

Would you be interested in receiving notifications or alerts about offers, discounts)
(or updates related to services in the app

9- كم الوقت الذي تستغرقه بال المتوسط لإكمال عملية حجز الرحلة في التطبيقات الحالية؟ (How

much time does it take you, on average, to complete the flight booking process in
(?existing apps

How) كم عدد الأخطاء أو عدم الدقة التي واجهتها أثناء عملية تحويل العملات في التطبيقات الحالية ؟ many errors or inaccuracies have you encountered during the 1currency conversion
process in existing applications?)

Establishing Requirements

User Questions

11- كم عدد الخدمات التي تعتقد انها يجب ان تتوفر في تطبيق لخدمة المسافرين؟ (How many services do you think should be available in an application to serve travelers)

12- هل سبق وان واجهت خطأ في تطبيق معين يعرض الطقس ؟ (Have you ever encountered an error in a specific application that displays the weather)

13- ما مدى استعدادك للتخطيط لأنشطتك او رحلاتك عن طريق التطبيق؟
(How prepared are you to plan your activities or trips through the application)

14- ما مدى أهمية وجود واجهة تطبيق سهلة الاستخدام وبديهية بالنسبة لك؟ (How important is it to you to have an easy-to-use and intuitive app interface)

15- هل هناك أي خدمة أو ميزة محددة تعتقد أنها مفقودة في التطبيق وتود أن تراها مضافة؟

Is there any specific service or feature that you think is missing in the app
(and would like to see added)

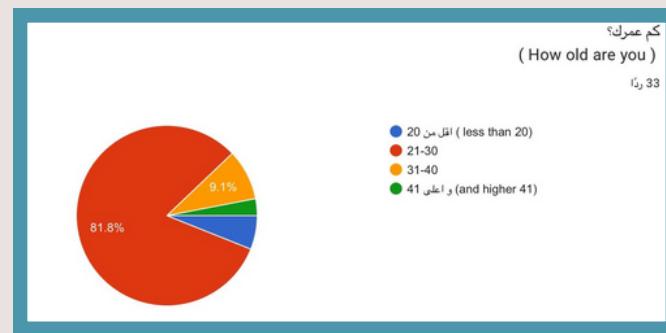
16- إذا كانت اجابتك نعم فم بتوسيع الخدمة (If your answer is yes, explain the service)

Questionnaire link

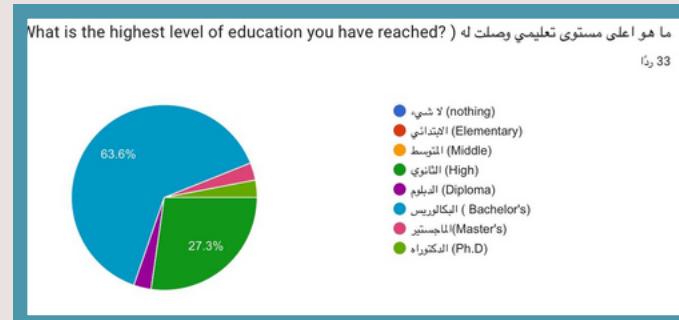
https://docs.google.com/forms/d/e/1FAIpQLSfCnVI-HfsEtux6FFeTGR_05dOPzaD6Uk4OBBJVQLsxXK_hQ/viewform

Establishing Requirements

Ages less than 20 years old had a percentage of 6.1%, while ages 21-30 years had a percentage of 81.8%, ages between 31-40 years had a percentage of 9.1%, and ages 41 years and above had a percentage of 3%.

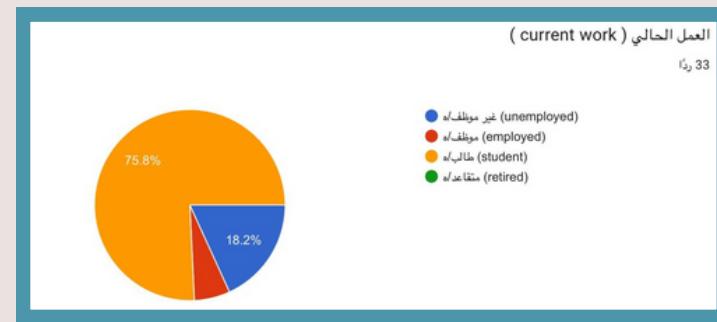


We notice here that the majority of people had the highest level of education they had achieved was a "bachelor's degree", with a percentage of 63.6%. The "high school" was considered the "second-highest" percentage, with a percentage of 27.3%. The percentage of "doctorates", "masters", and "diplomas" was the same, which is 3%.

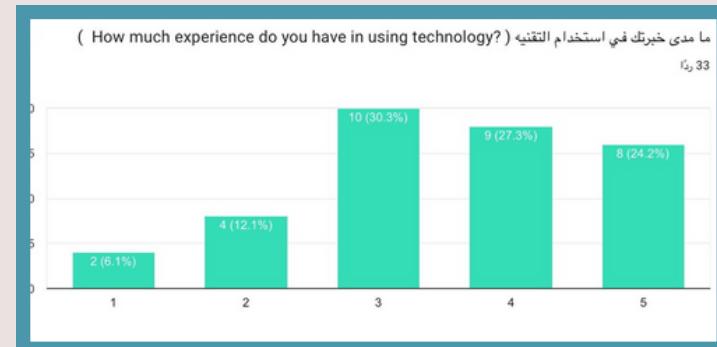


Establishing Requirements

As for current work, the majority's answer was the "student's" option, with a percentage of 75.8%, followed by the percentage of "non-employees" with a percentage of 18.2%, and finally "employees" with a percentage of 1.6%.

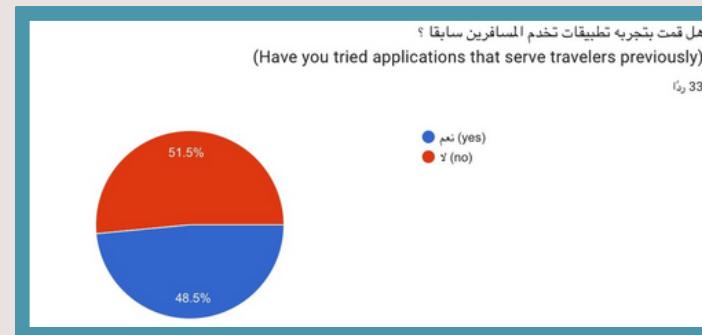


The extent of their experience in using the technology was answered on a scale between 1-5. Most people answered number 3, with a percentage of 30.3%. This was followed by number 4, chosen by 27.3% of the respondents. Number 5 was the next highest response, selected by 24.2% of participants. Number 2 had a percentage of 12.1%, and the lowest response was number 1, chosen by 6.1% of the participants.

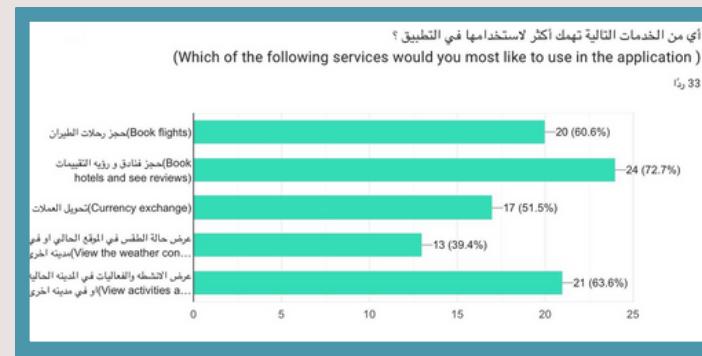


Establishing Requirements

As for the question: Have you tried applications that serve travelers previously, the answer was “yes” with a percentage of 48.5%, but “no” with a percentage of 51.5%

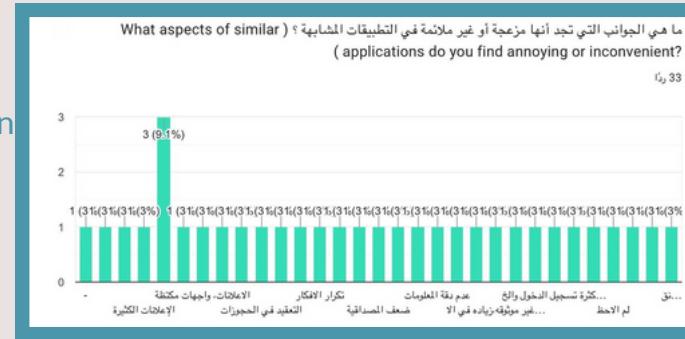


Question: Which of the following services are you most likely to use in the application? The majority of users chose the service of “booking hotels and viewing reviews”, with a rate of 72.7%. This was followed by the “flight reservation service”, chosen by 60.6% of users. The service of “displaying activities and events” was selected by 63.6% of respondents. “Currency conversion” was of interest to 51.5% of users, while “displaying the weather” was chosen by 39.4% of participants. It should be noted that users can choose more than one service.



Establishing Requirements

As for the question: What are the annoying aspects of similar applications? The question was an open question and the answers varied, but the answer with “ads” was frequent, and there were other answers such as “crowded interfaces” and “inaccurate information”.

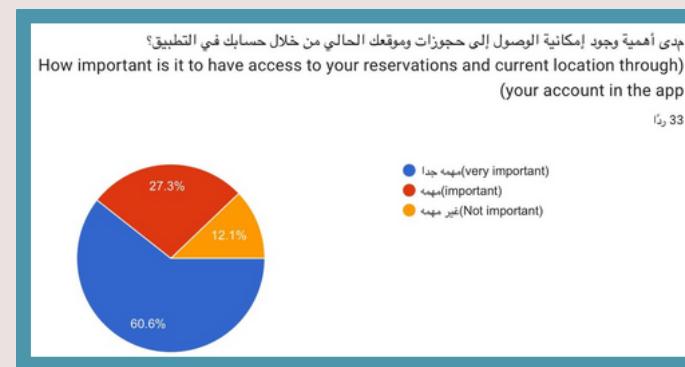


As for the positive aspects that influence the user's decision to use the application or not, most users agreed on the “ease of use” with a percentage of 90.9%. This was followed by the availability of “accurate information” with a percentage of 63.6%. Additionally, “positive user reviews” were seen as important, with a percentage of 54.5%. Lastly, the presence of “various options” was valued by users, with a percentage of 48.5%.

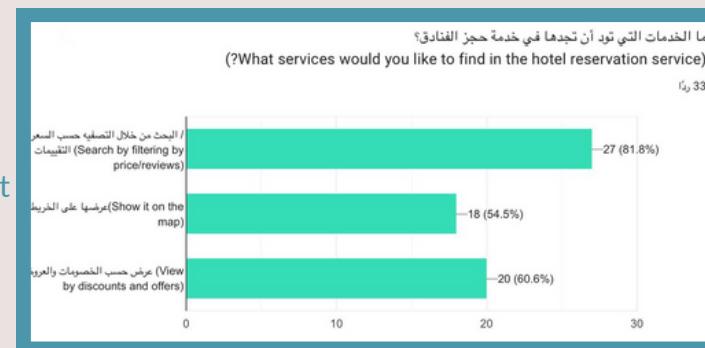


Establishing Requirements

As for the question of the extent of the importance of having access to reservations and the current location, the answers of most users were "very important" with a percentage of 60.6%, followed by "important" with a percentage of 27.3%, followed by "not important" with a percentage of 12.1%.

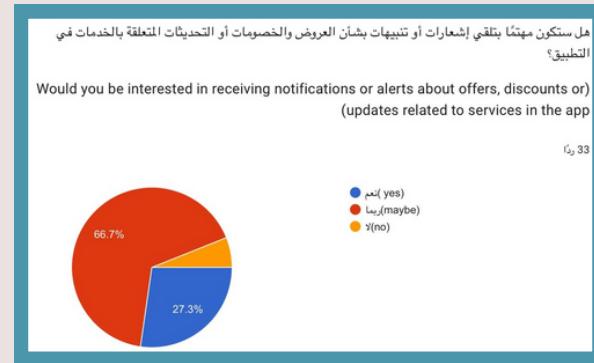


As for the question: "What services would you like to have when booking a hotel?" the answer to "Search by filtering for price/reviews" had the highest percentage, at 81.8%, followed by "Display according to discounts," with a percentage of 60.6%, and then "Display it on the map," with a percentage of 54.5%.

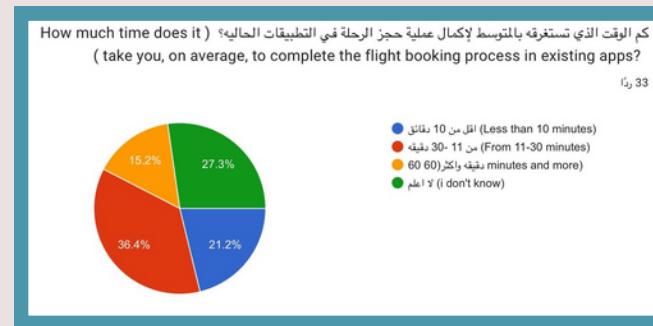


Establishing Requirements

As for users' interest in receiving notifications from our application the majority's answer was "Maybe" by 66.7% followed by "Yes" by 27.3%, then "No" by 6.1%.

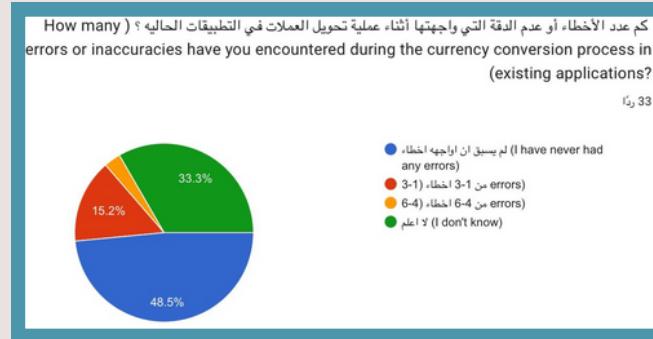


As for the time it takes users to complete the flight booking process in similar applications the answers were in similar proportions: "from 11-30 minutes" with a percentage of 36.4%, "less than 10 minutes" with a percentage of 27.3%, and "60 minutes and more" with a percentage of 15.2%. Finally, users who "do not know" "They were at a rate of 27.3%

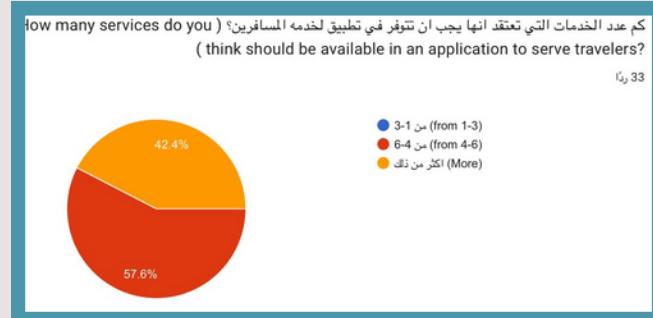


Establishing Requirements

Here is a quantitative question about the inaccuracy and errors that users encountered in the process of converting currencies in current applications: The majority's answer was "I did not encounter any errors" with a percentage of 48.5%, then "I don't know" with a percentage of 33.3%, then "1-3 errors" with a percentage of 15.2%, and finally "4-6 errors" at a rate of 3.3%.

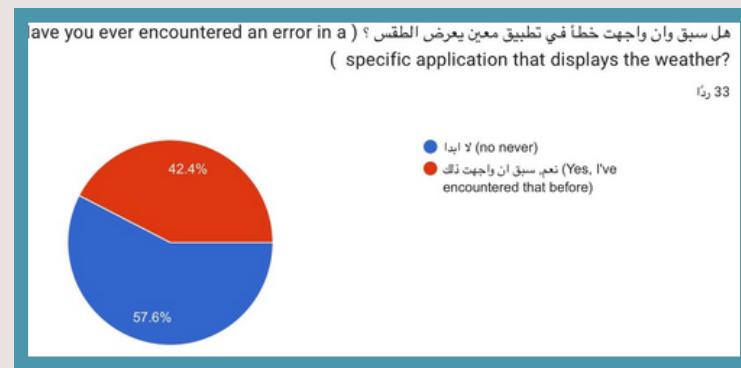


Here we have a quantitative question about the number of services that must be available in an application to serve travelers. The answers were 42.4% saying "4-6" and 57.6% saying "more 6"



Establishing Requirements

A percentage of 57.7% of respondents did not encounter any errors in the weather display in other applications, while a percentage of 42.4% had previously encountered this.



Prepared users to plan their activities and trips was good, as most answers ranged from 3-5

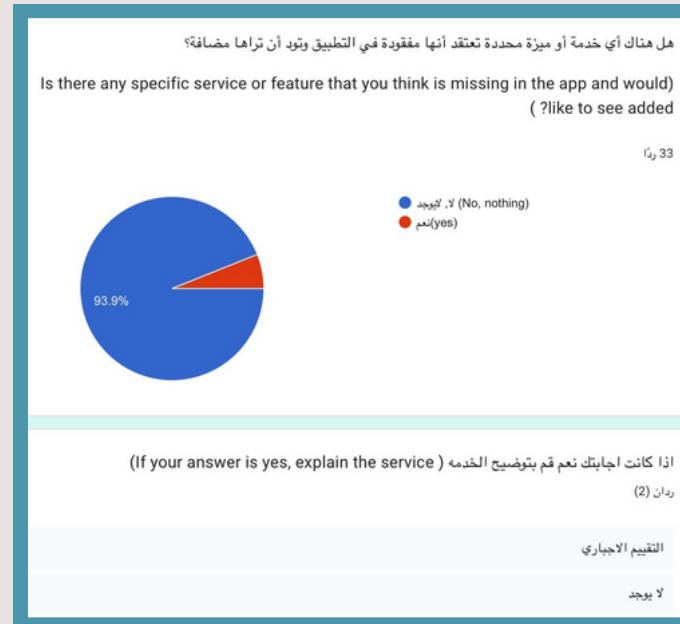


Establishing Requirements

As for the importance of having easy and intuitive application interfaces, the vast majority's answer was "very important" with a percentage of 90.9% and "important" with a percentage of 9.1%



Finally, here is an open question for the respondents about the presence of any suggestions for developing the application, and the large percentage was "no" with a percentage of 93.3 and "yes" with a percentage of 6.1. We asked those who answered yes to write the suggestion.



Establishing Requirements

As for the importance of having hotel reviews before making a booking decision, most of the answers were “very important” with a percentage of 87.9 and “important” with a percentage of 12.1



Establishing Requirements

- **Age and Education:** The majority of participants in the study were between the ages of 21-30 and held bachelor's degrees.
- **Participant Profile:** Most participants identified themselves as students and had moderate experience using technology.
- **Previous App Usage:** Around half of the participants had previously used travel-related applications.
- **Preferred Services:** The most favored services in an application were booking hotels and viewing reviews, followed by flight reservations and displaying activities and events.
- **Factors Influencing User Decision:** Ease of use, accurate information, and positive user reviews were important factors influencing users' decision to use an application.
- **Importance of Access:** The majority considered access to reservations and current location as very important.
- **Flight Booking Time:** The time taken to complete the flight booking process varied, with a significant portion of users taking between 11-30 minutes.
- **Hotel Search Preferences:** Users had different preferences regarding hotel search filters.
- **Notifications:** Users had varied preferences regarding receiving notifications from the application.

Establishing Requirements

Some ideas to improve our application in the future

- 1- Continuously gather user feedback for improvements
- 2- Additional advantages of searching for hotels, such as filtering by price, highest rating, and closest
- 3- Increase the services to more than 6 in the application as a whole
- 4- Strong attention to interface design and ease

Requirements

- 1- Simple interfaces
- 2- Accuracy of information provided
- 3- make the application send notification to users when there are offers and discounts



PRE Design part 2



PRE Design

Cognitive Processes	Meaning for Target Users	Design Implications
Perception	<ol style="list-style-type: none">1. users can easily understandable labels for menu items and buttons2. comfortable and compatible colors so that the information is clearly communicated	<ol style="list-style-type: none">1. organizing content effectively with clear headings and categories2. clickable buttons are prominent3. labels have contrasting colors compared to the background
Attention	<ol style="list-style-type: none">1. grab users' attention to important things2. to keep the users engaged3. makes it easy for users to find relevant travel information quickly	<ol style="list-style-type: none">1. error messages are bright and notable2. interfaces are clean and uncluttered
Memory	<ol style="list-style-type: none">1. reduce cognitive load and frustration2. simple and easy tasks	<ol style="list-style-type: none">1. organize tasks logically2. consistency for similar functions



prototype

part 3

Prototype

Tool Description:

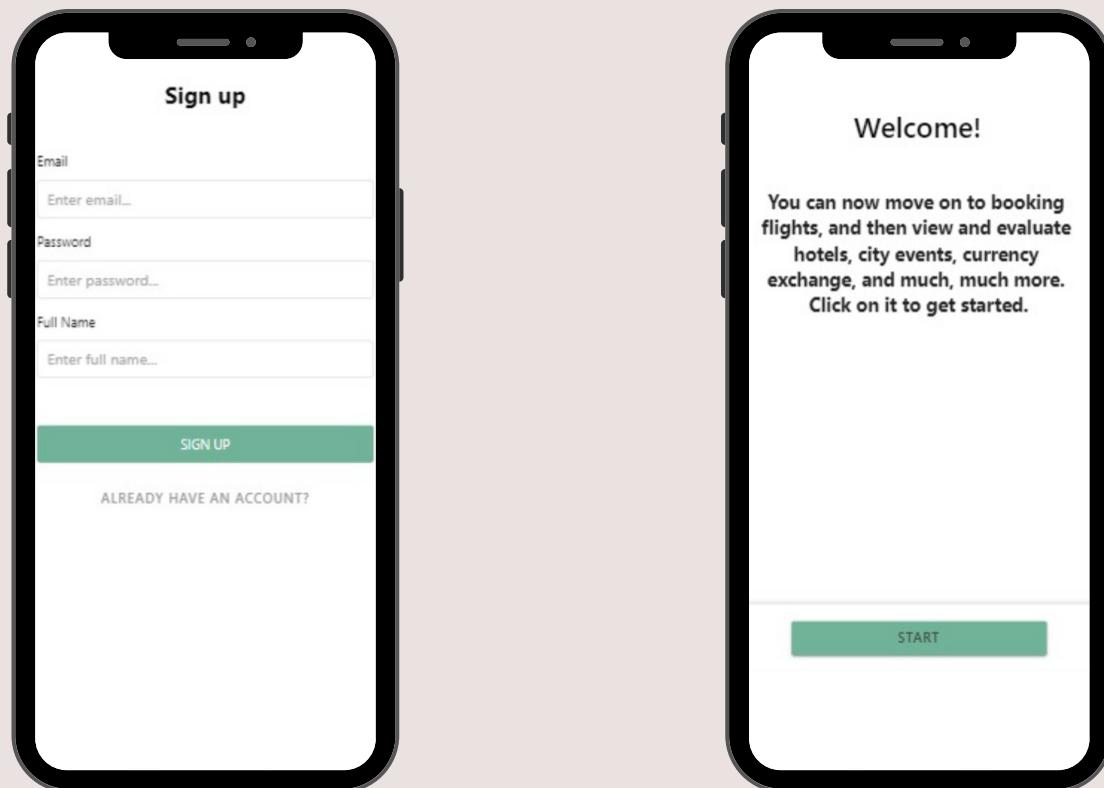
Adalo is an interface design application that runs in your browser and provides you with all the tools you need for the prototyping stage of your project. It brings together all the tools you need to design and develop custom mobile and web applications without the need for any programming, and the processes using it are completed quickly and easily.

Design principles: Visibility

Justification:

Textboxes include placeholder text to guide users in providing the expected information.

Every textbox is designated with a label to instruct the user on the required information.



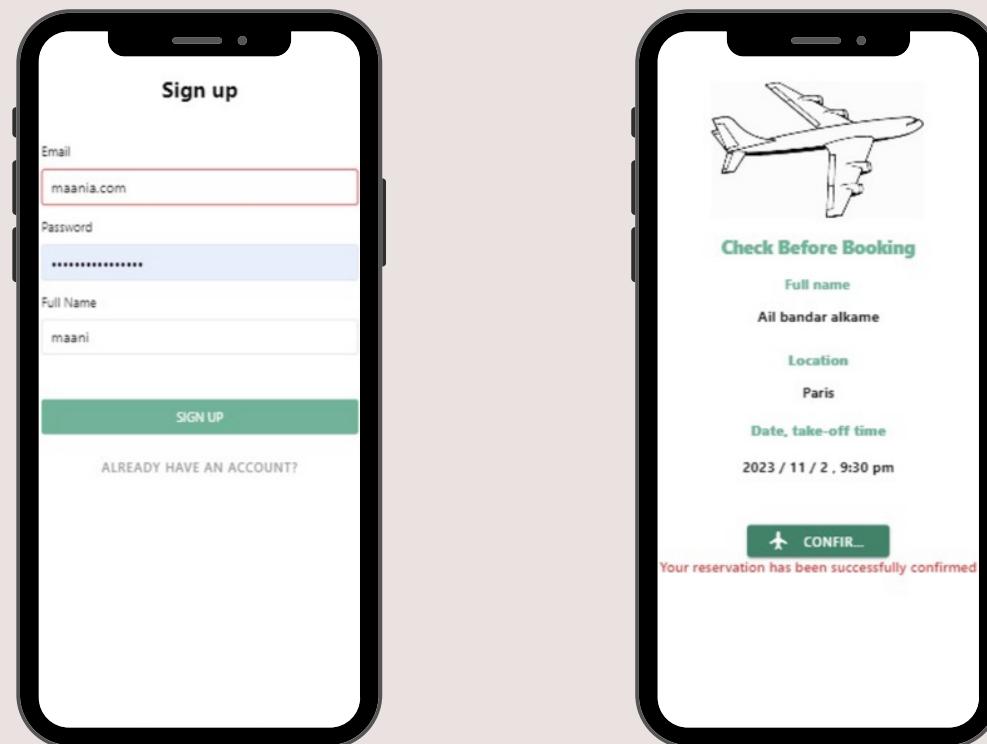


Design principles: Feedback

Justification:

An error will be displayed if the user entered incorrect data.

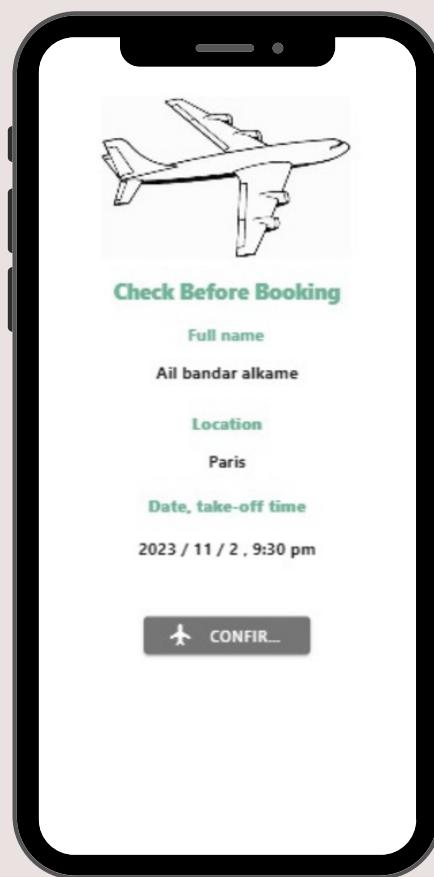
Additionally, when a flight is successfully booked, a confirmation message will appear on the screen.



Design principles: Constraints

Justification:

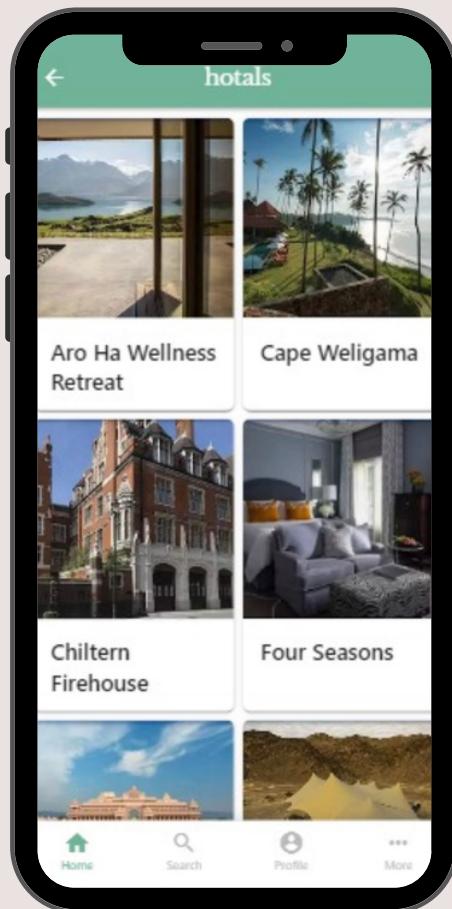
When a flight is fully booked, the option to select it will be disabled and displayed in gray, indicating that it is not available for booking.



User experience goals: Satisfying

Justification:

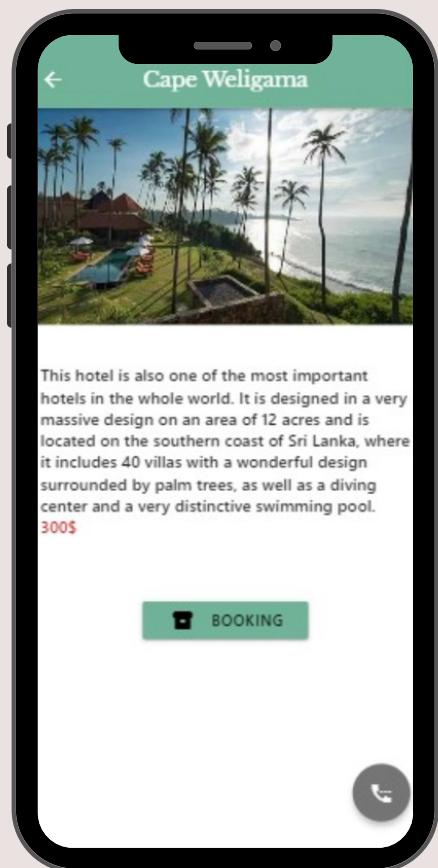
The app features a user-friendly interface that is effortlessly navigable, easy to understand and has straightforward interactions.



User experience goals: Helpful

Justification:

The app includes a customer support feature that enables users to engage with a live human agent if they require assistance.



User experience goals: Enhancing sociability & Engaging

Justification:

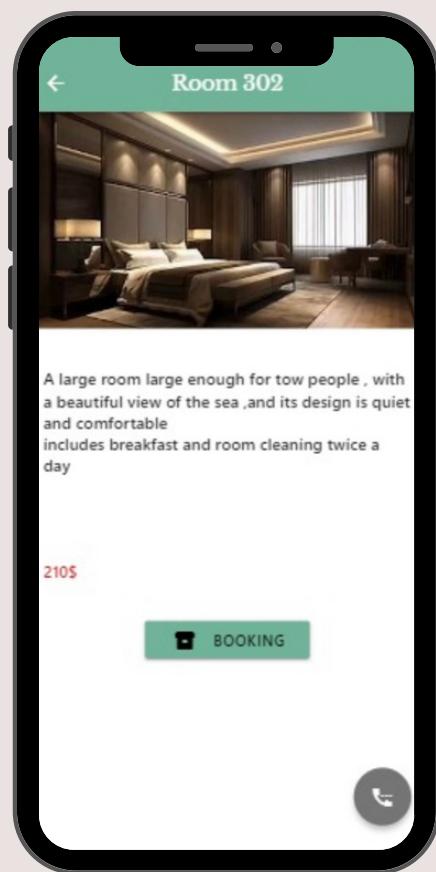
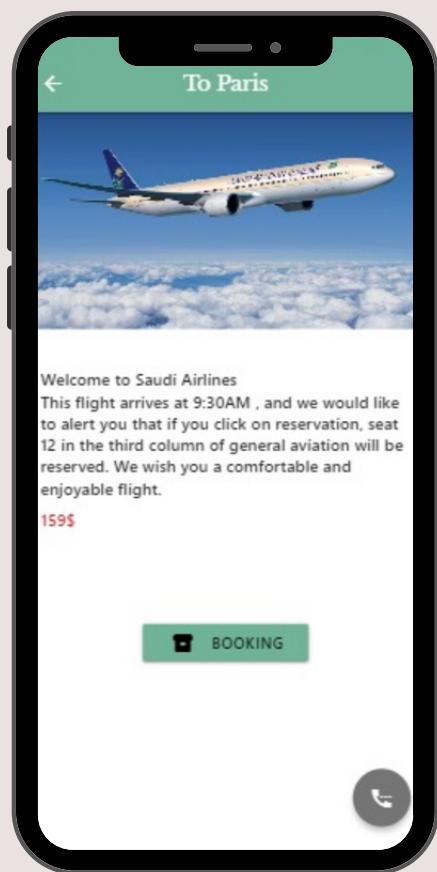
Users have the option to share their experiences by submitting reviews for the hotels they have stayed at.



Usability goals: Utility

Justification:

The app equips users with essential functionalities for their travels, such as the ability to book flights and hotel rooms.

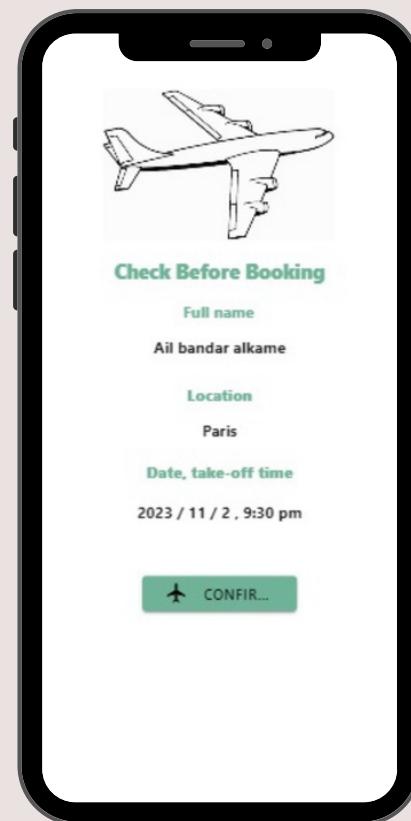
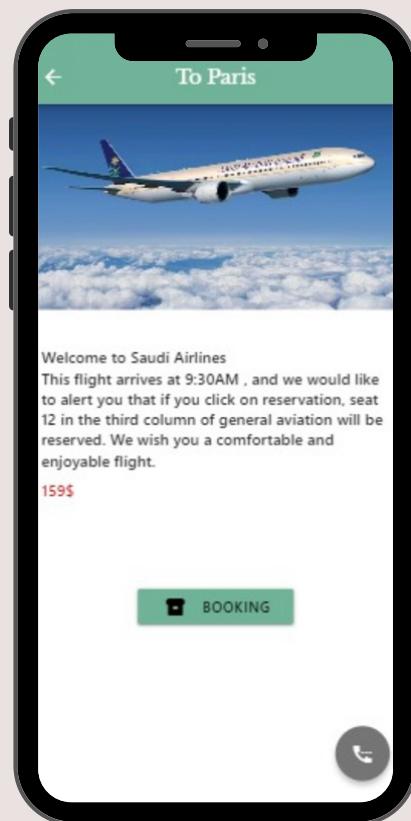




Usability goals: Efficiency

Justification:

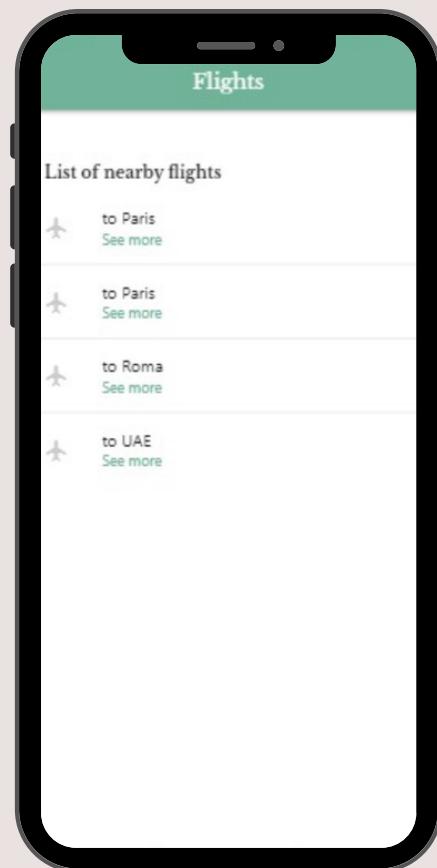
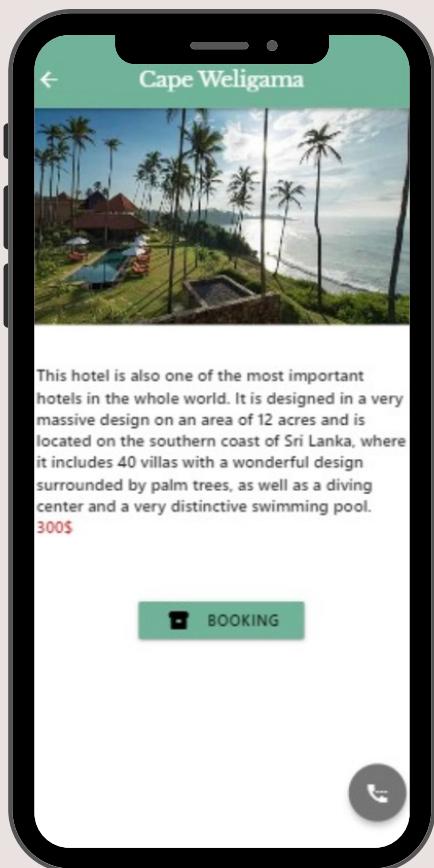
The app is highly efficient, it reduces user effort, is easy to understand, and reduces cognitive load by simplifying the steps to complete tasks



Usability goals: Learnability

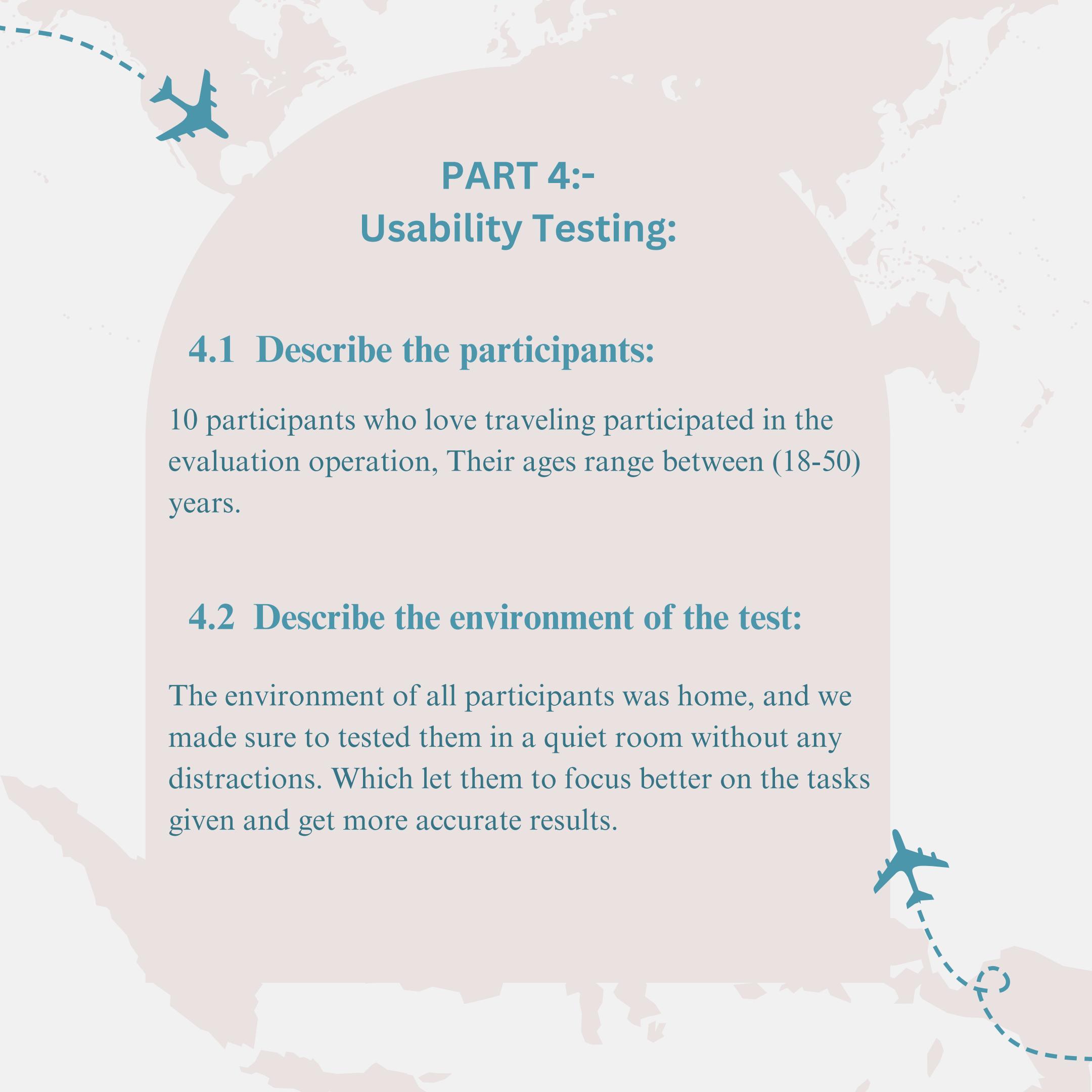
Justification:

The app incorporates metaphors or icons to assist users in learning how to use it effectively
It is designed to be easy and clear





Usability testing part 4



PART 4:-

Usability Testing:

4.1 Describe the participants:

10 participants who love traveling participated in the evaluation operation, Their ages range between (18-50) years.

4.2 Describe the environment of the test:

The environment of all participants was home, and we made sure to tested them in a quiet room without any distractions. Which let them to focus better on the tasks given and get more accurate results.

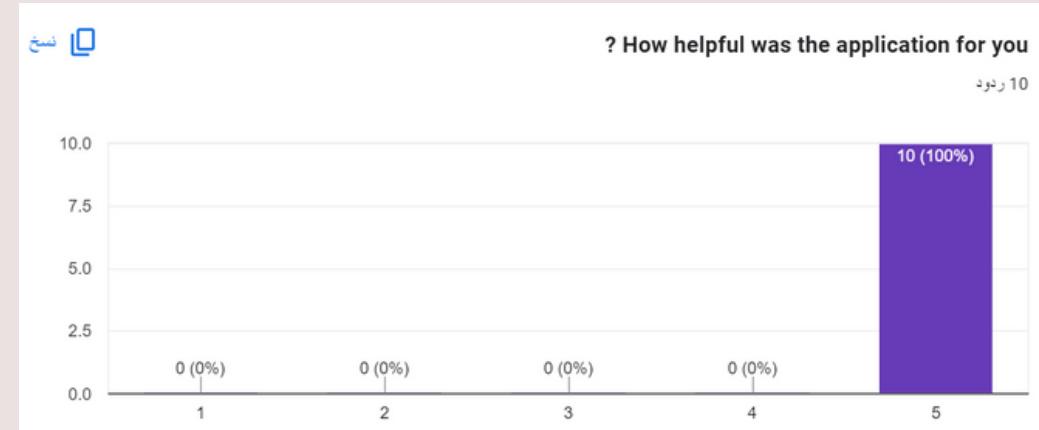
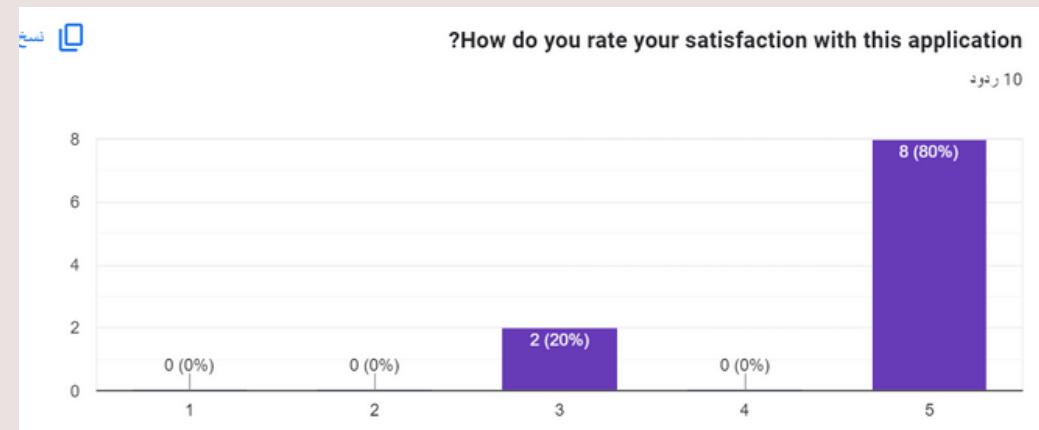
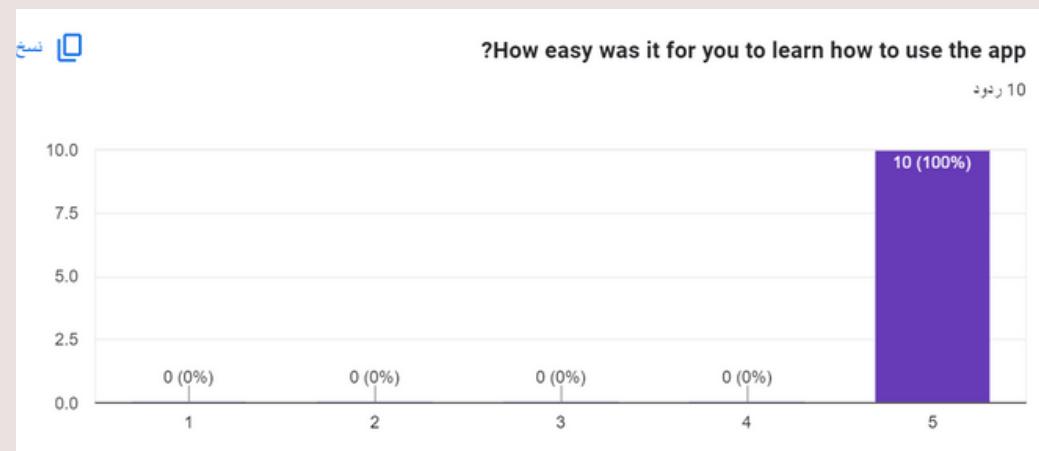
4- Usability Testing

4.3 List of tasks used for the evaluation of the prototype:

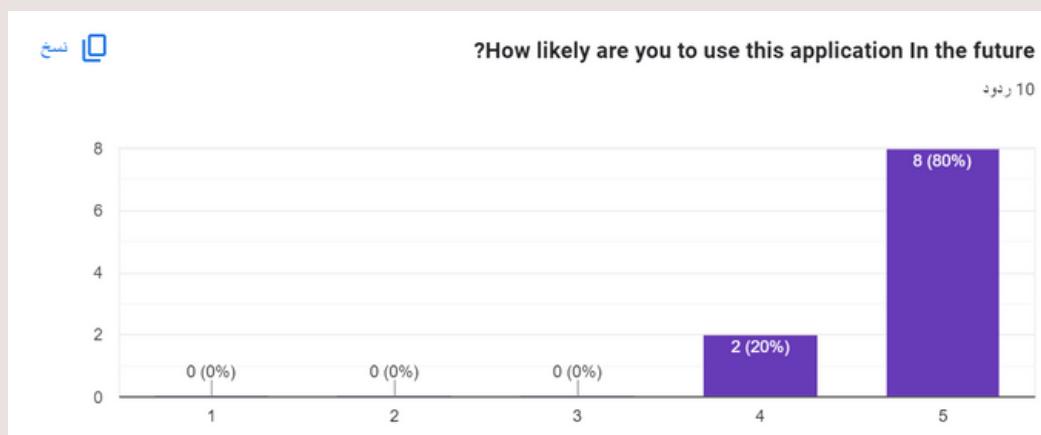
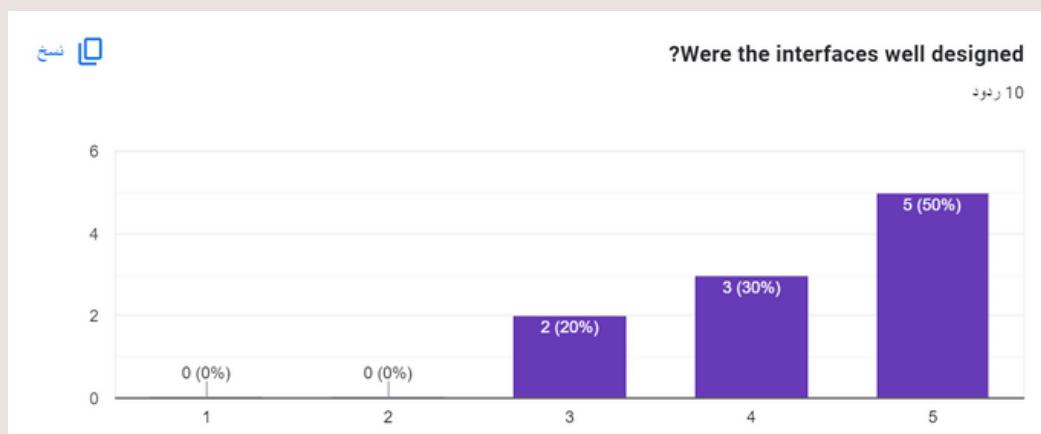
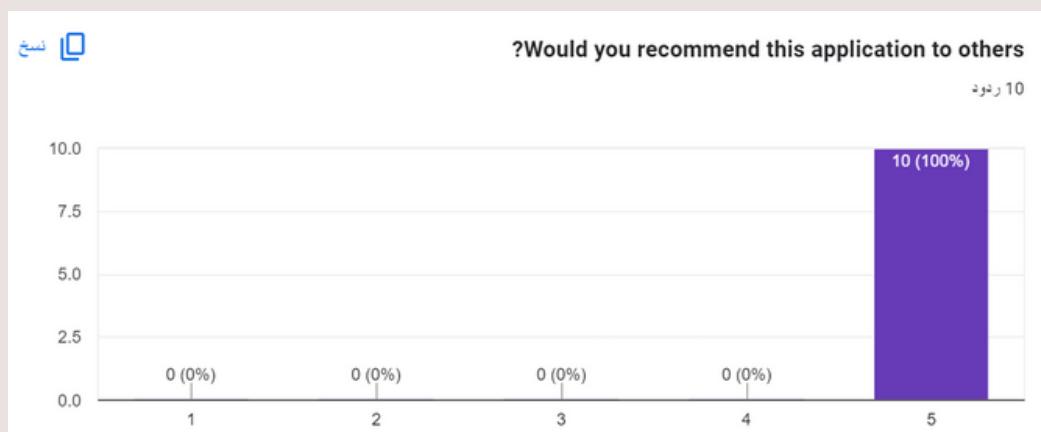
1. Signup / Login.
2. View hotel reviews/comment.
3. Book a hotel.
4. Currencies converter.
5. View flight reservation.
6. Book a flight.

4.4 Evaluation of the prototype:

We used the questionnaire



4.4 Evaluation of the prototype:



4- Usability Testing

4.5 Analyze and interpret the result:

Task 1: Signup / Login

10 out of 10

Task 2: View hotel reviews/comment.

6 out of 10

Task 3: Book a hotel

10 out of 10

Task 4: Currencies converter.

10 out of 10

Task 5: View flight reservation.

10 out of 10

Task 6: Book a flight

10 out of 10

4- Usability Testing

Final Conclusion :

Based on participant feedback, it was observed that most participants successfully completed the tasks without major difficulties. The average time taken for tasks such as Signup/Login, and book flight ranged from 50 seconds to 3 minutes. However, the task of View hotel reviews took longer, ranging from 5 minutes to 11 minutes. This was mainly due to participants spending time searching for the display icon and some experiencing system issues that prevented task completion.

Furthermore, Our application contains a wider range of travel services in the prototype compared to older applications. the participants also highlighted that the flight booking process was notably faster and more straightforward compared to the old application. Finally, the participants didn't face any problems or errors when currencies converter, which was an improvement compared to their experiences with older applications.

References:-

- <https://docs.google.com/forms>
- <https://www.adalo.com>
-



GLOBE TREK