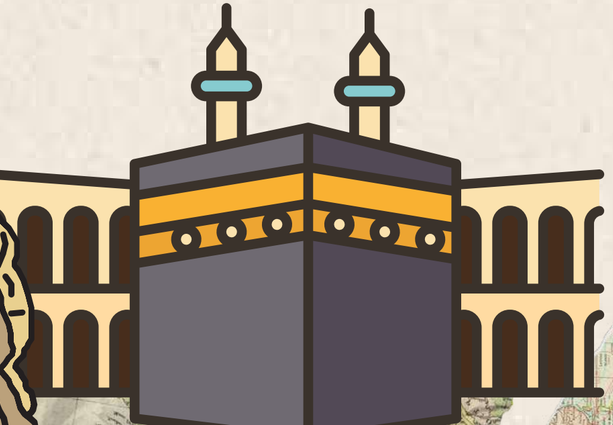
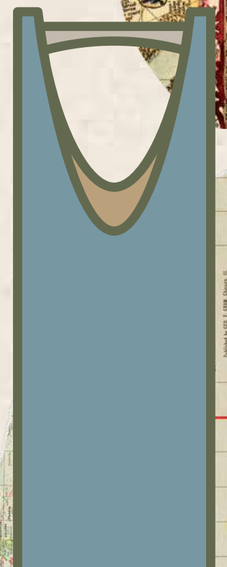
Software engineering project

على وين؟

in the Kingdom of Saudi Arabia

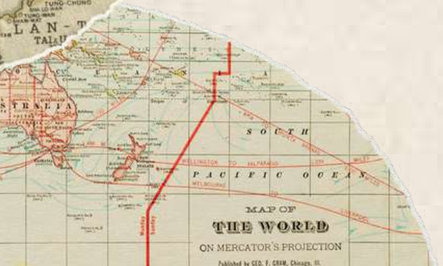




جامعة أم القرى
UMM AL-QURA UNIVERSITY

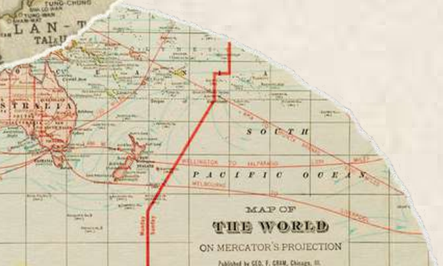
Chapter 1

TEA DISTRICT
BOHEA TEA DISTRICT
TEA DISTRICT
TEA DISTRICT
TEA DISTRICT
KIANG SEE
ANKOI TEA



The Application idea:

The application can provide services to tourists and all people such as providing information about famous landmarks, shopping places, cafes, and handicraft workshops, also providing information about recreational activities and nightlife in the area, as well as ticketing services for the events.



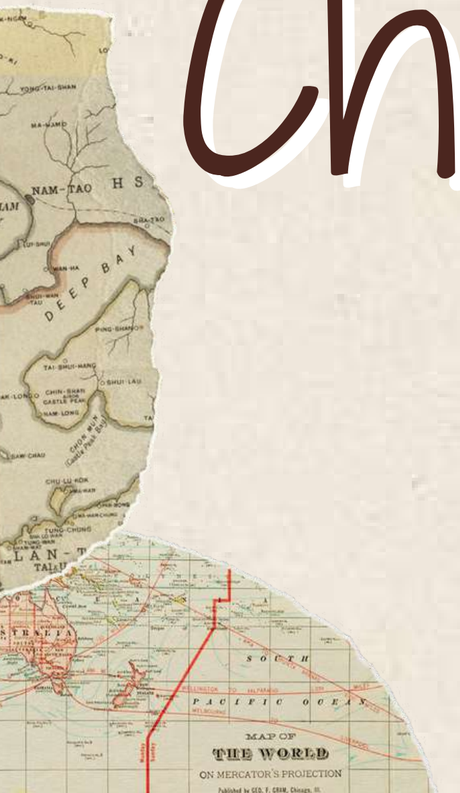
The Application Type:

Interactive transaction-based applications.

The user categorie:

Anyone of any age, from anywhere in the world.

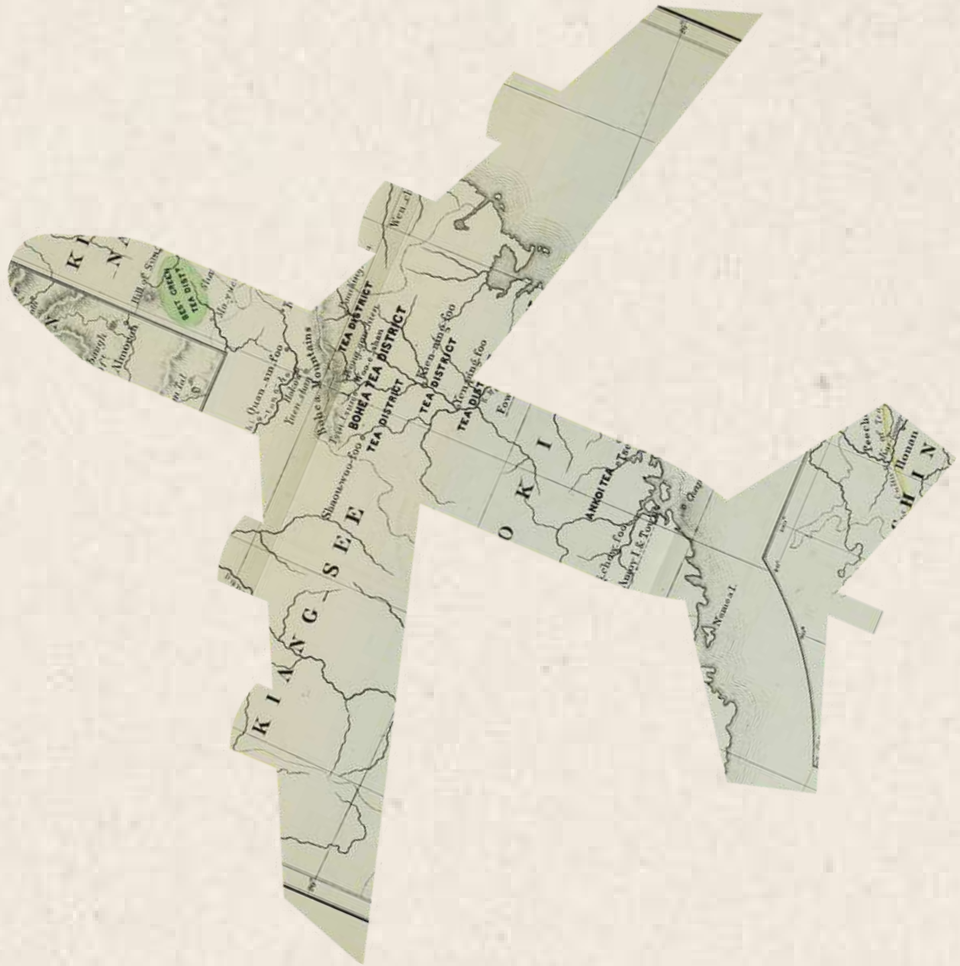
Chapter 2


NAM-TAO
DEEP BAY

PACIFIC OCEAN
MAP OF
THE WORLD
ON MERCATOR'S PROJECTION

TEA DISTRICT
BOHEA TEA DISTRICT
KIANGSEE

functional Requirements:



Requirements specification (services):

01. create account

02. Login

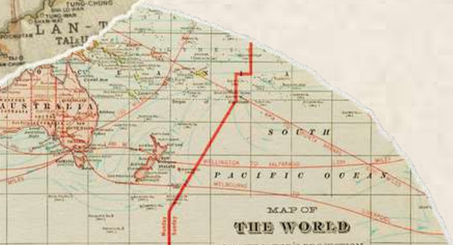
03. Add to favorite

04. Book a place

05. Pay for a ticket

06. Print the ticket

07. write a comment



1- create account ”user”:

the user shall be able to create an account

1- create account ”System”:

1.1 the system shall be able to display sign up form which contains a list of fields:(first name, last name, email, city, password, confirmation of the password, phone number).

1.2 the system shall be able to validate the entered data with these constraints: email, phone number, and password must be unique and there is no other record in the database that has the same values, the phone number should be 12 number starting with 966 ,and the password should be 8 characters (letters, numbers,_).

1- create account ”System”:

1.3 the system shall be able to display a pop-up window to the user with a message if the validation was successful and do the phone number verification. otherwise, it returns the user to the form and asks to fill the form again with the specified constraints.

1.4 after successful verification the account will be stored in the database.

2-Login”user”:

The user shall be able to login to his account.

2-Login”System”:

2.1 The system shall be able to display a login form to the user, which contains two fields: (email or phone number, and password).

2.2 The system shall be able to check against the input database.

If there is matching user information go to the Home page.

Otherwise, If they are incorrect they get an error message as seen below (sorry incorrect,try again or sign up).

3-Add to favorite”user”:

The user shall be able to add the place in his favorite.

3-Add to favorite”System”:

3.1 the system will allow the user to choose a place or event and click on the heart shape.

3.2 the system will add the place to the favorite.

3.3 all his favorite lists are stored.

4-Book a place”user”:

The user shall be able to book a place or event.

4-Book a place”System”:

4.1 The system shall provide a comprehensive booking process, allowing users to:
1-Select the desired date and time for their booking.
2-Choose specific seats and view an interactive seating chart if applicable.

4.2 The system shall dynamically update the total cost based on the selected quantity.

4.3 The system shall perform verification that the selected date and time are available, and ensuring that the chosen quantity of tickets is within the available inventory.

4-Book a place”System”:

4.4 The system shall display the booking details (booking ID, date, time) and any additional relevant information.

4.5 The system shall maintain a comprehensive booking history for each user within their profile. the system shall allow the users the ability to view and manage their past bookings.

4.6 The system shall seamlessly transition to the payment step.

5-Pay for a ticket ”user”:

The user must be able to pay by any method that suits him

5-Pay for a ticket ”System”:

5.1 the system will take the user to the payment page, and allows the user to choose the payment method.

5.2 The system shall allow the user to write all the information, and then click on Pay.

5.3 the reservation will be stored in the database.

5.4 the system shall allow the user to use the refunds if he cancel the reservation and the refunds will be stored in their wallet for future bookings.

6-Print the e-ticket ”user”:

The user must be able to print the ticket.

6-Print the e-ticket ”System”:

6.1 the system will allow the user to export the e-ticket or send it to his email.

6.2 the system will allow the user to send the e-ticket, there will be a print icon, and after the user click on it, the system will send the ticket to the his email.

6.3 the system will allow the user to export the e-ticket, there will be a export icon, and after the user click on it and select where he wants to send it, then the system will send the ticket.

7-write a comment ”user”:

The user must be able to write a comment.

7-write a comment ”System”:

7.1 the system will allow the user to write a comment after the user chooses the place that he wants to comment about. the system will display a Comment button.

7.2 the system will display a Comment button and will allow the user to click on Publish.

7.3 The comment will be stored .

non-functional Requirements:

1-reliability

large database to handle a large number of users above 900,000 users.

2-availability

the system should be available 24/7. And we will allocate more than one server. If one of them fails,the second will do the work for the site.

3-speed

the response time is high in less than a 5 second.

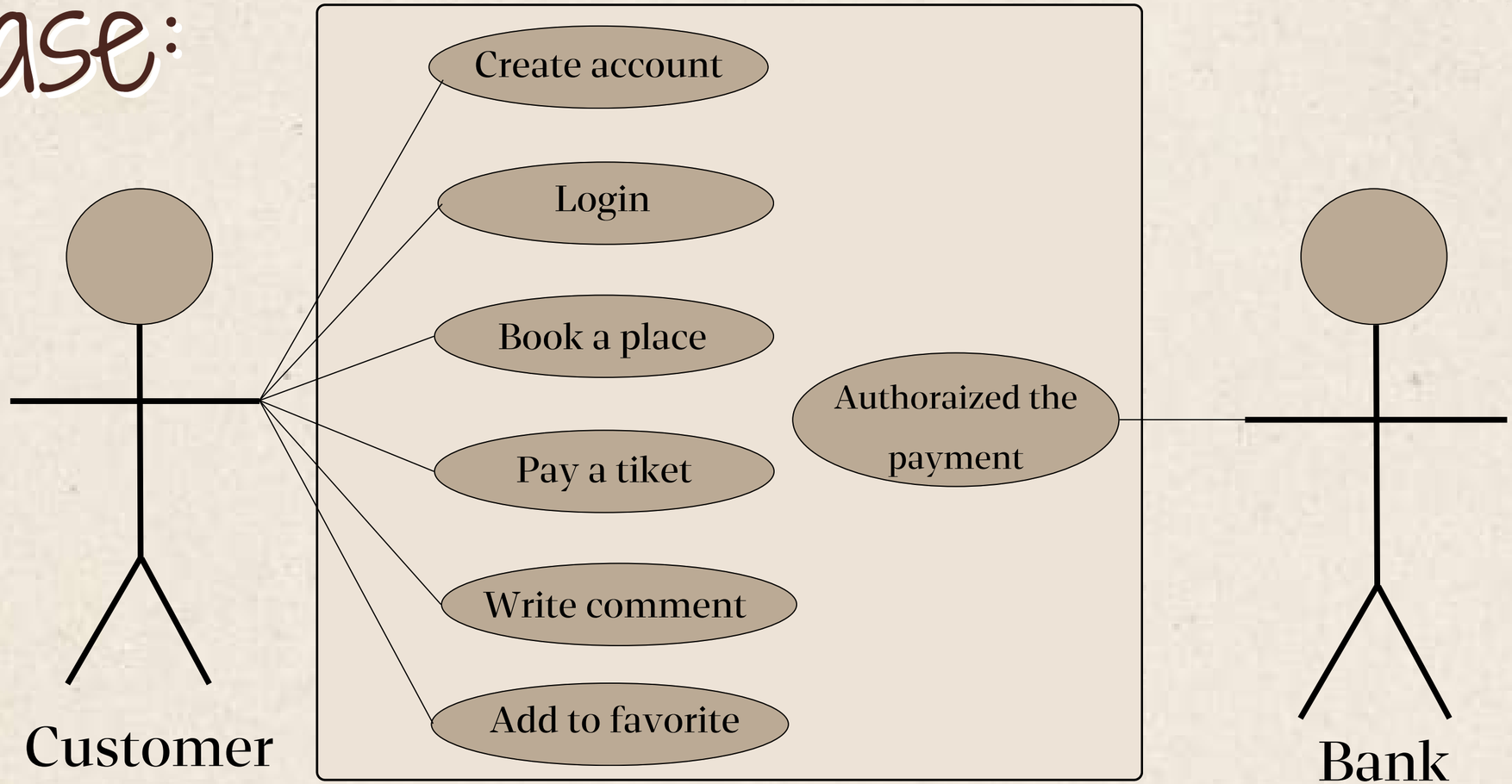
4-Secure

the user information will be secure and protected against attacks using encryption, secure socket layer.

5-usability

use a simple interface to be friendly to the user, by the average number of errors made by experienced users shall not exceed four errors per hour of system use.

Use case:


Create account
Login
Book a place
Pay a tiket
Write comment
Add to favorite
Authoraized the payment
Customer
Bank

create acount:

Actor	The User
Description	1- the system shall be able to display sign up form which contains a list of fields:(first name, last name, email, city, password, confirmation of the password, phone number). 2- the system shall be able to validate the entered data with these constraints: email, phone number, and password must be unique and there is no other record in the database that has the same values, the phone number should be 12 number starting with 966 ,and the password should be 8 characters (letters, numbers,_). 3- the system shall be able to display a pop-up window to the user with a message if the validation was successful and do the phone number verification. otherwise, it returns the user to the form and asks to fill the form again with the specified constraints. 4- after successful verification the account will be stored in the database.
Data	first name, last name, email, city, password, confirmation of the password, phone number
Stimulus	click button by user command
Response	-display a pop-up window to the user with a message if the validation was successful -move to the next step(login)

Login:

Actor	The User
Description	1- The system shall be able to display a login form to the user, which contains two fields: (email or phone number, and password). 2- The system shall be able to check against the input database. If there is matching user information go to the Home page. Otherwise, If they are incorrect they get an error message as seen below (sorry incorrect,try again or sign up).
Data	email or phone number and password
Stimulus	click button by user command
Response	the user will be navigated to the home page

Add to favorite:

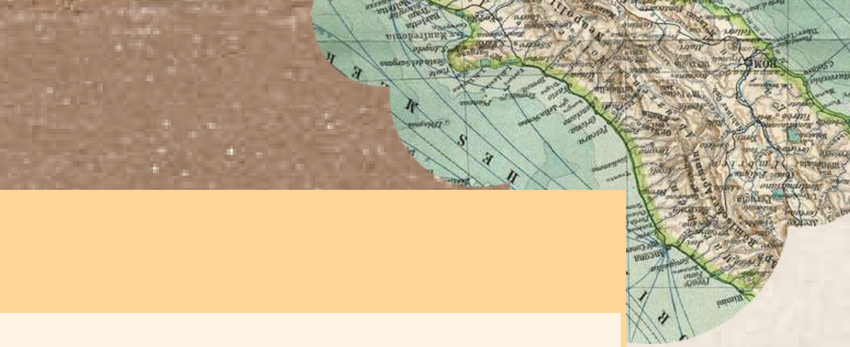
Actor	The User
Description	1- the system will allow the user to choose a place or event and click on the heart shape. 2- the system will add the place to the favorite. 3- all his favorite lists are stored.
Data	information about the favorite place
Stimulus	click butten by user command
Response	-the color of the heart will be red heart -the place will be saved

Book a place:

Actor	The User
Description	1- The system shall provide a comprehensive booking process, allowing users to: 1-Select the desired date and time for their booking. 2-Choose specific seats and view an interactive seating chart if applicable. 2- The system shall dynamically update the total cost based on the selected quantity. 3- The system shall perform verification that the selected date and time are available, and ensuring that the chosen quantity of tickets is within the available inventory 4- The system shall display the booking details (booking ID, date, time , price) and any additional relevant information. 5- The system shall maintain a comprehensive booking history for each user within their profile. the system shall allow the users the ability to view and manage their past bookings. 6- The system shall seamlessly transition to the payment step.
Data	Booking information
Stimulus	click button by user command
Response	View booking details

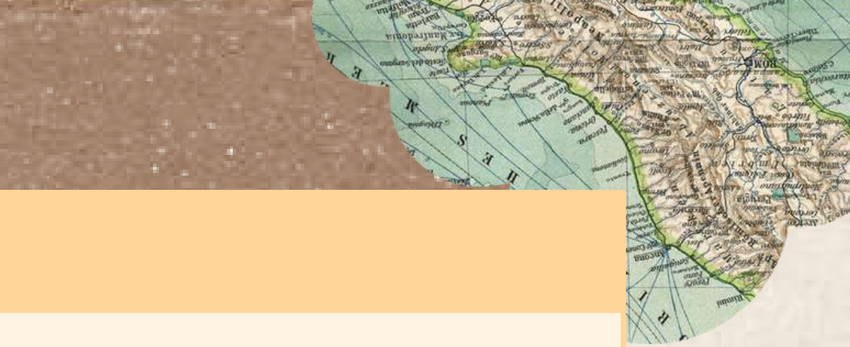
Pay for a ticket:

Actor	The User
Description	1- the system will take the user to the payment page, and allows the user to choose the payment method, price and date. 2- The system shall allow the user to write all the information, and then click on Pay. 3- the reservation will be stored in the database. 4- the system shall allow the user to use the refunds if he cancel the reservation and the refunds will be stored in their wallet for future bookings.
Data	Bank card data , mobile number,Price
Stimulus	click butten by user command
Response	if the payment method is not complete, an error message will display else, the reservation will be completed.



print the e-ticket:

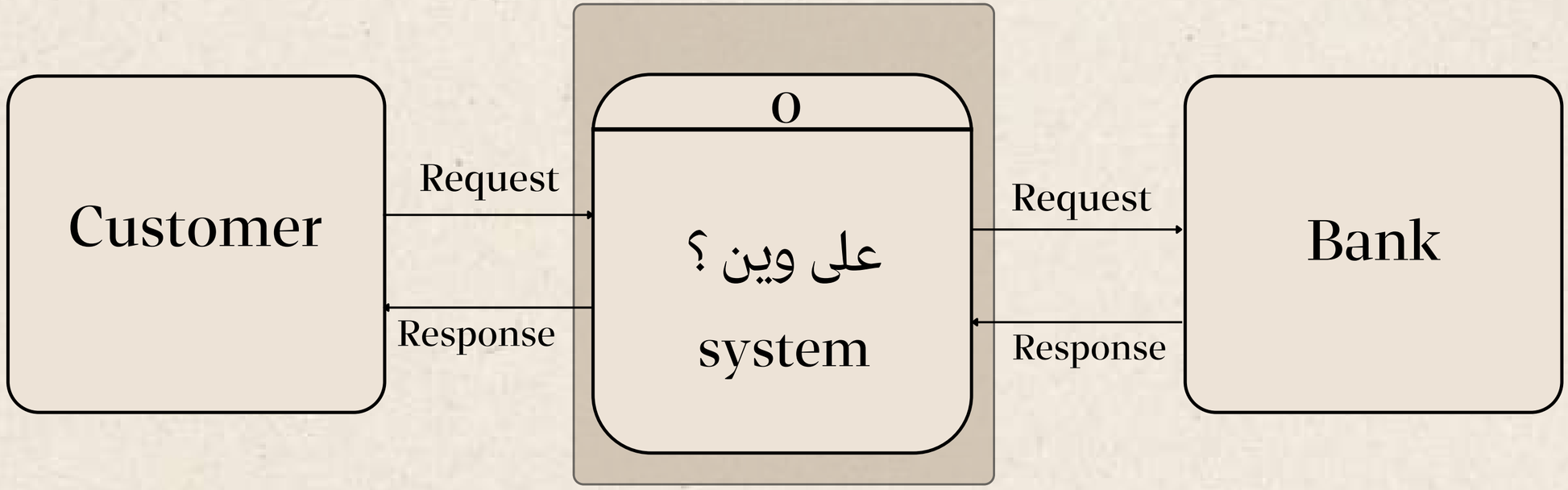
Actor	The User
Description	1- the system will allow the user to export the e-ticket as a PDF or print it. 2- the system will allow the user to print the e-ticket, there will be a print icon, and after the user click on it, then the system will send the ticket to the his email. 3- the system will allow the user to export the e-ticket, there will be a export icon, and after the user click on it and select where he wants to send it, then the system will send the ticket.
Data	Ticket info
Stimulus	click butten by user command
Response	according to the method chosen to print, the ticket will be printed or a copy will be sent to the email.



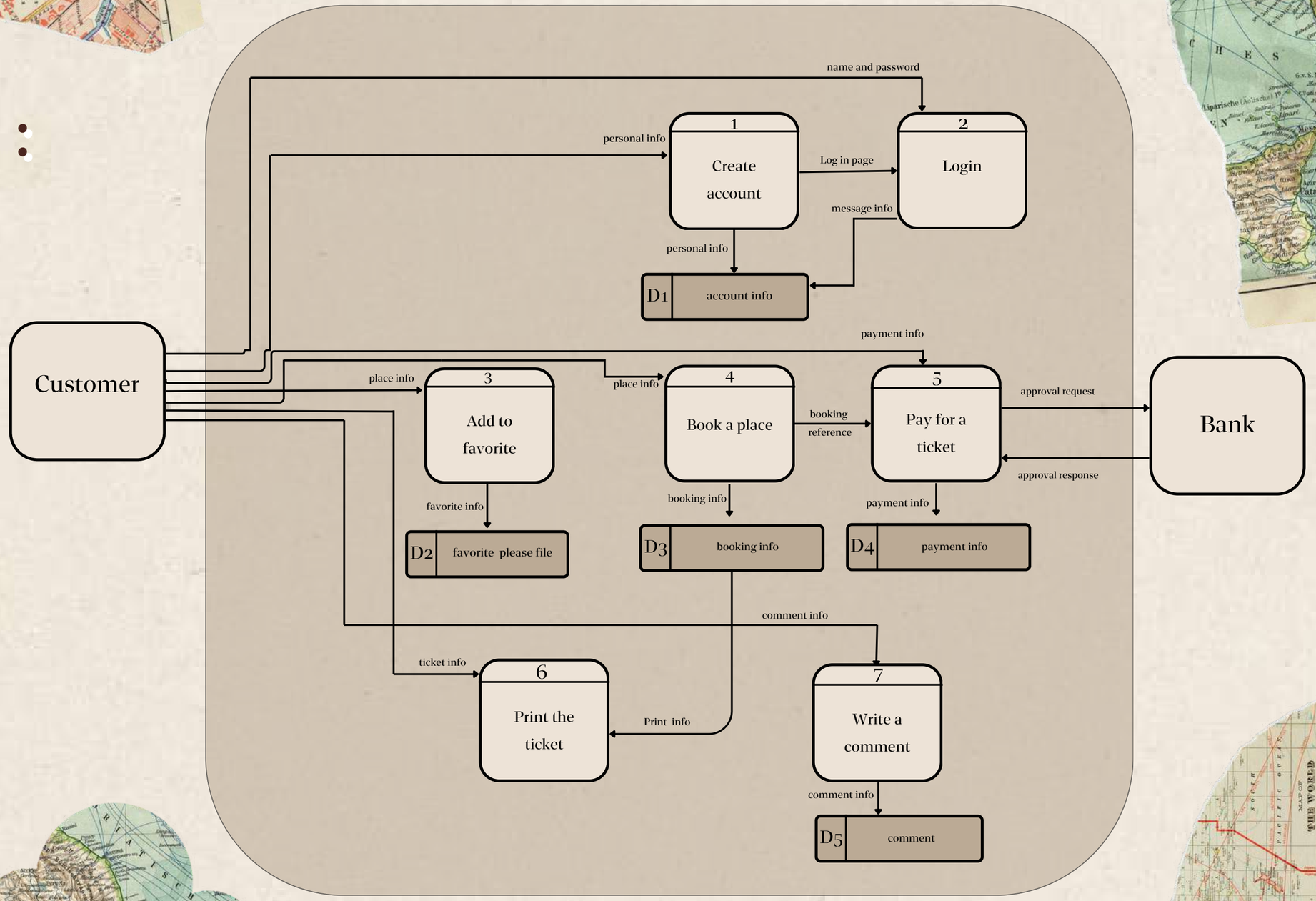
write a comment:

Actor	The User
Description	1- the system will allow the user to write a comment after the user chooses the place that he wants to comment about. the system will display a Comment button. 2- the system will display a Comment button and will allow the user to click on Publish. 3 -The comment will be stored .
Data	Informaion about the place in the text box under the place
Stimulus	click butten by user command
Response	Post the comments

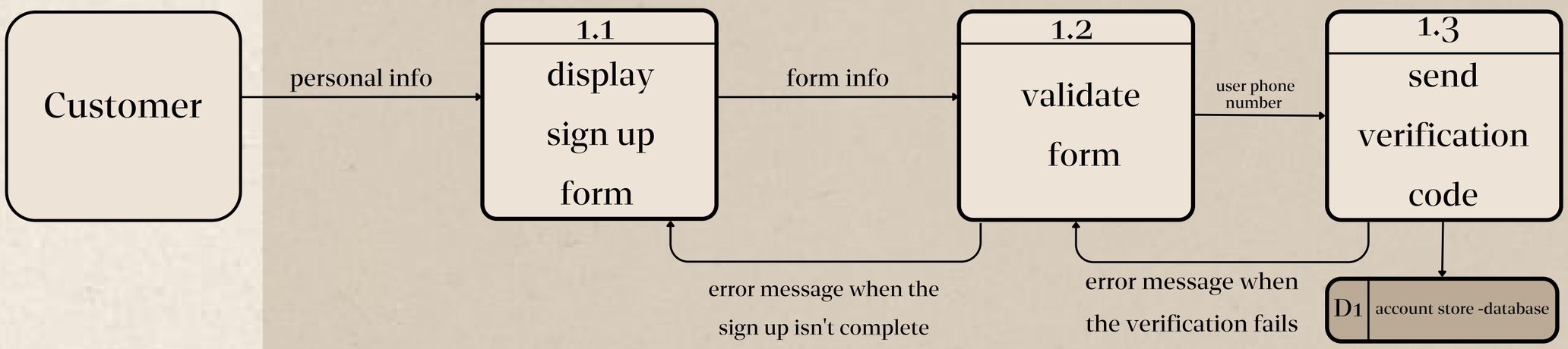
context level (level 0):



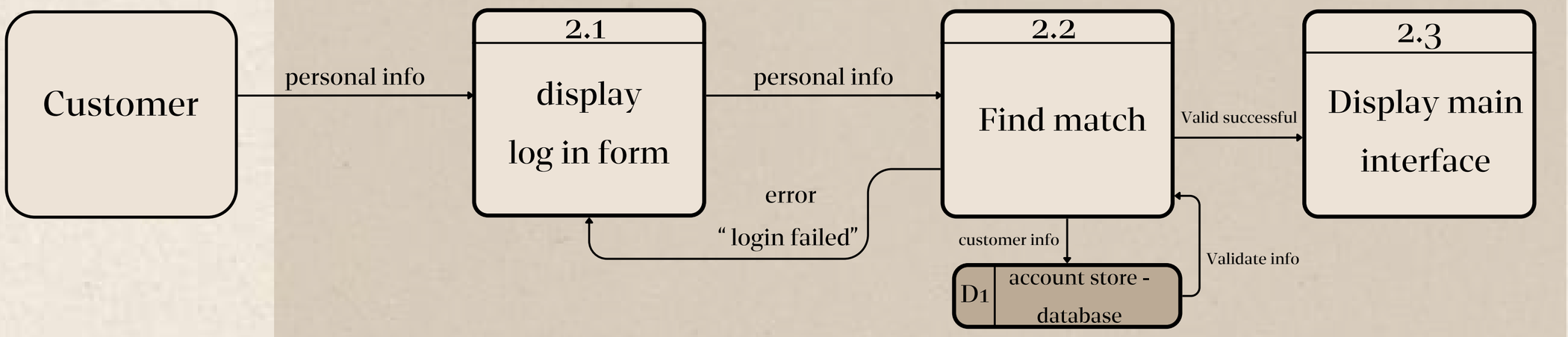
level 1 :


name and password
personal info
1
Create account
Log in page
2
Login
message info
personal info
D1
account info
payment info
Customer
place info
3
Add to favorite
place info
4
Book a place
booking reference
5
Pay for a ticket
approval request
approval response
Bank
favorite info
booking info
payment info
D2
favorite please file
D3
booking info
D4
payment info
comment info
ticket info
6
Print the ticket
Print info
7
Write a comment
comment info
D5
comment

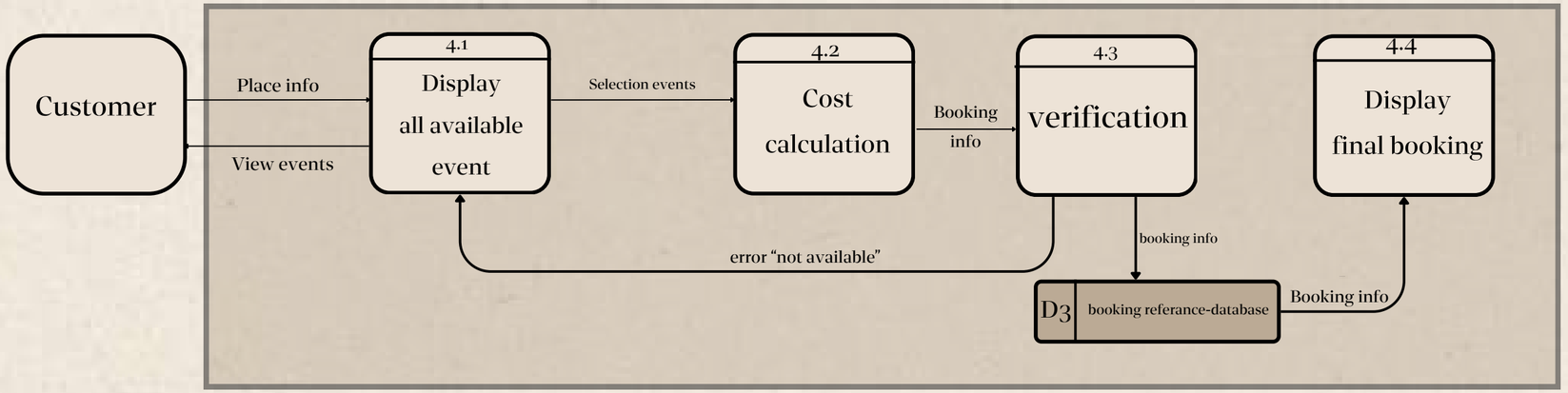
child level "sign up":



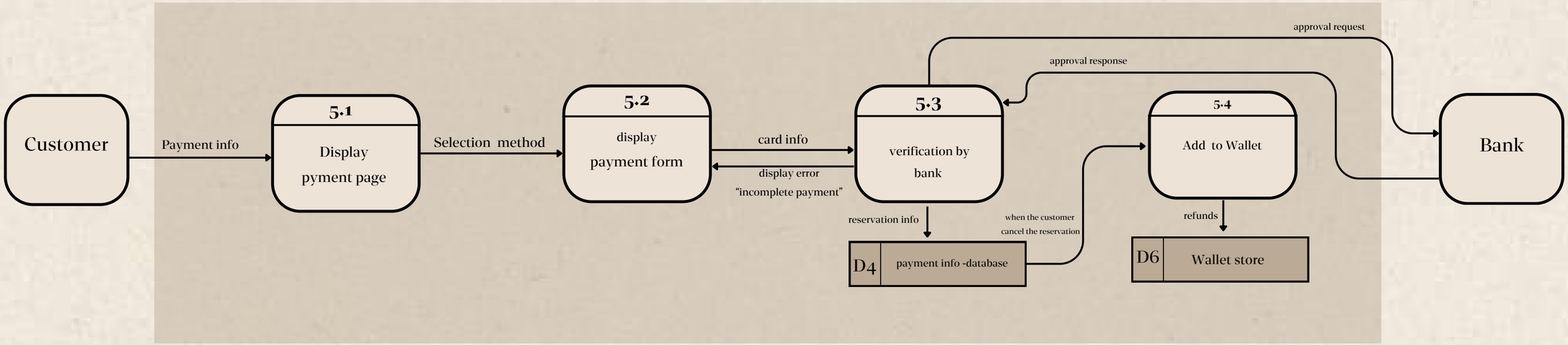
child level "login":



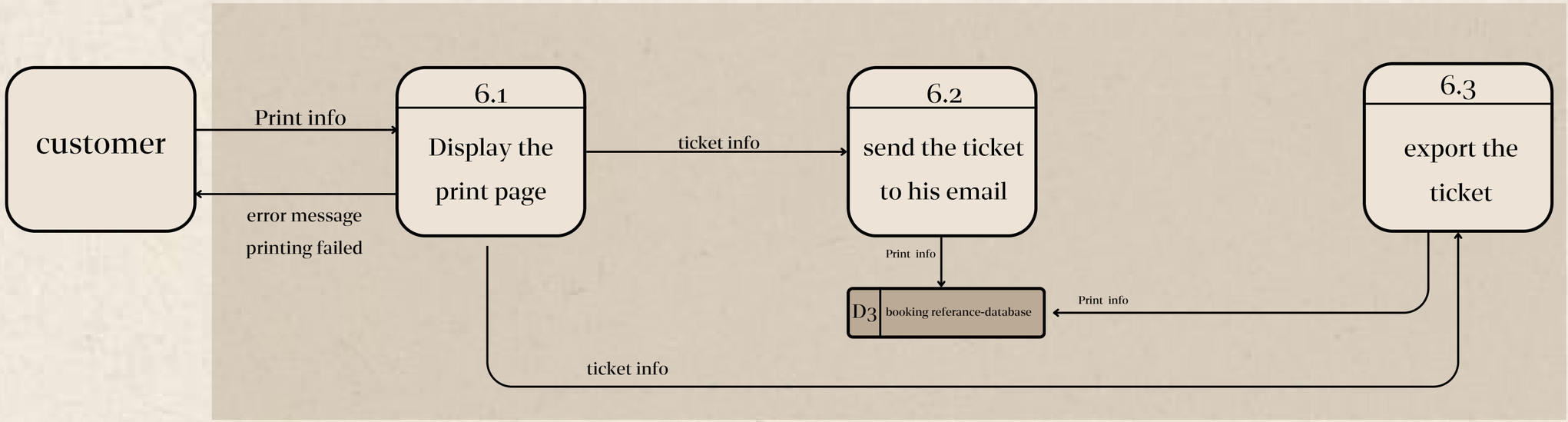
child level "Book a place":



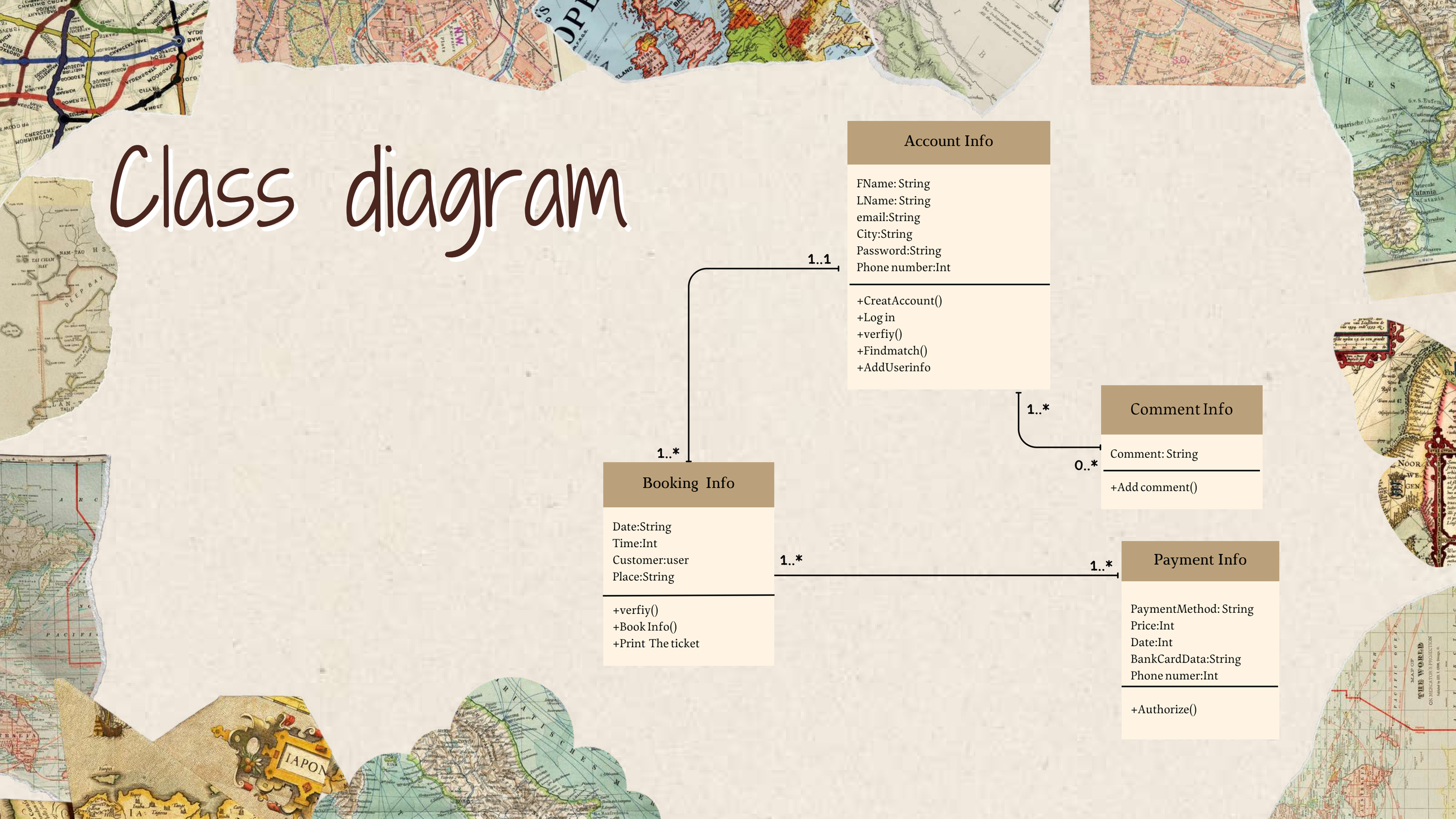
child level "pay for a ticket":



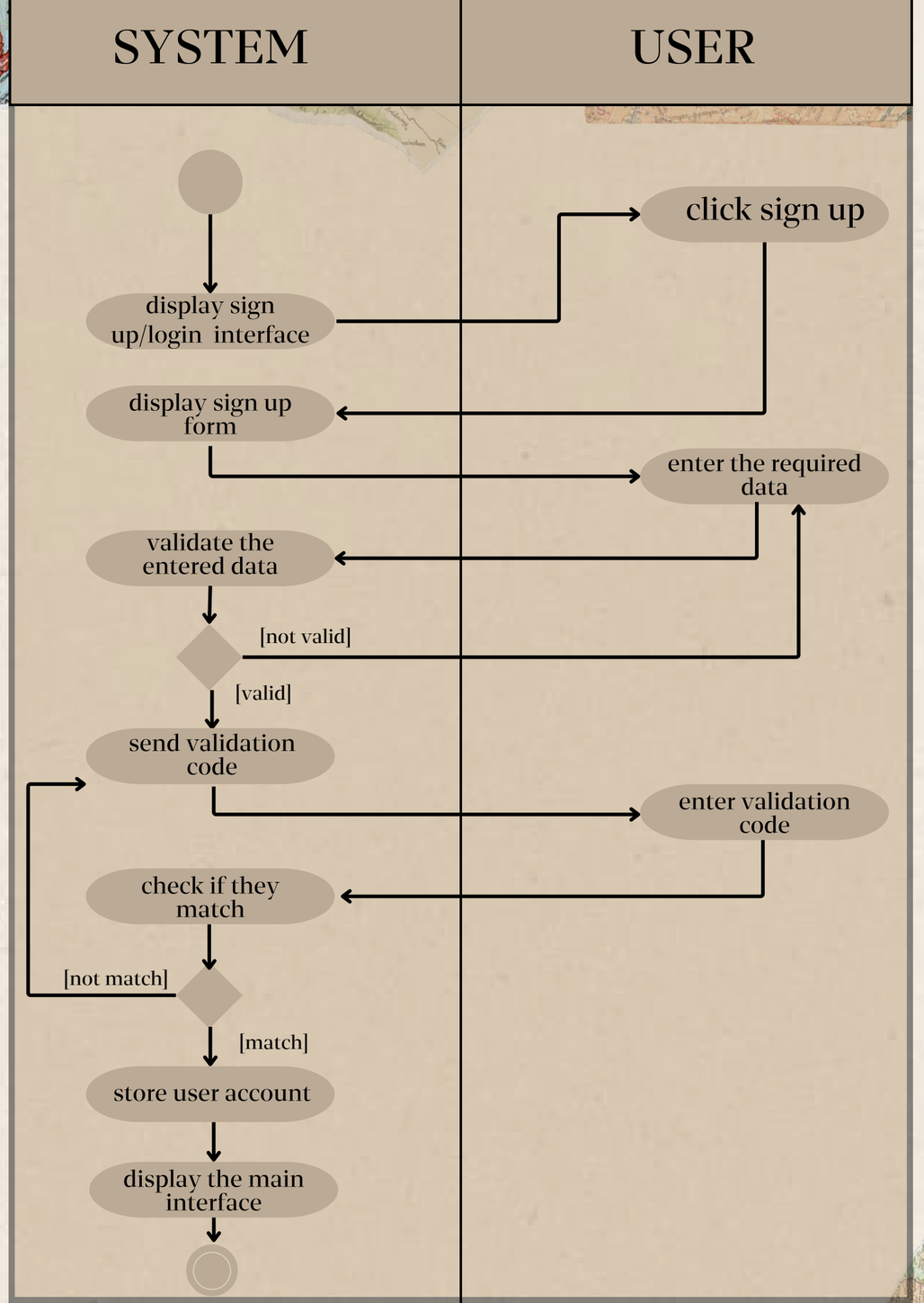
child level "Print the e-ticket":



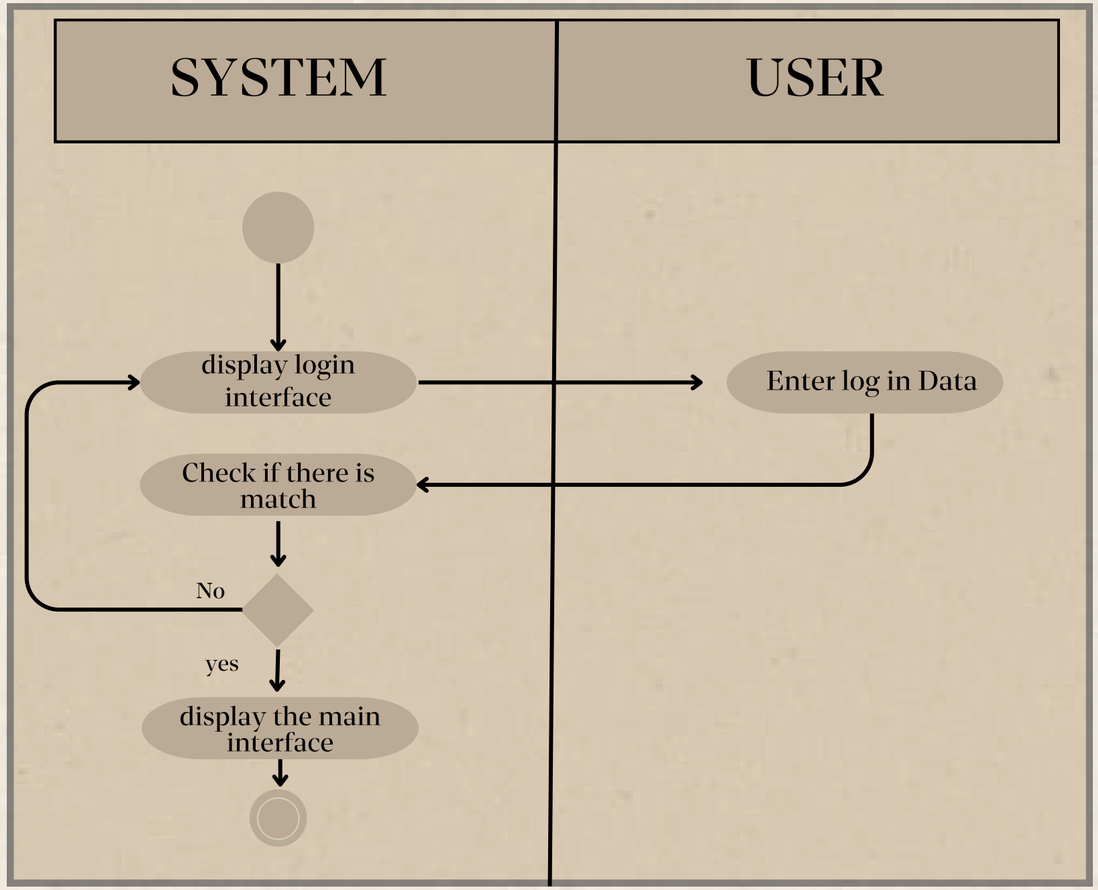
Class diagram



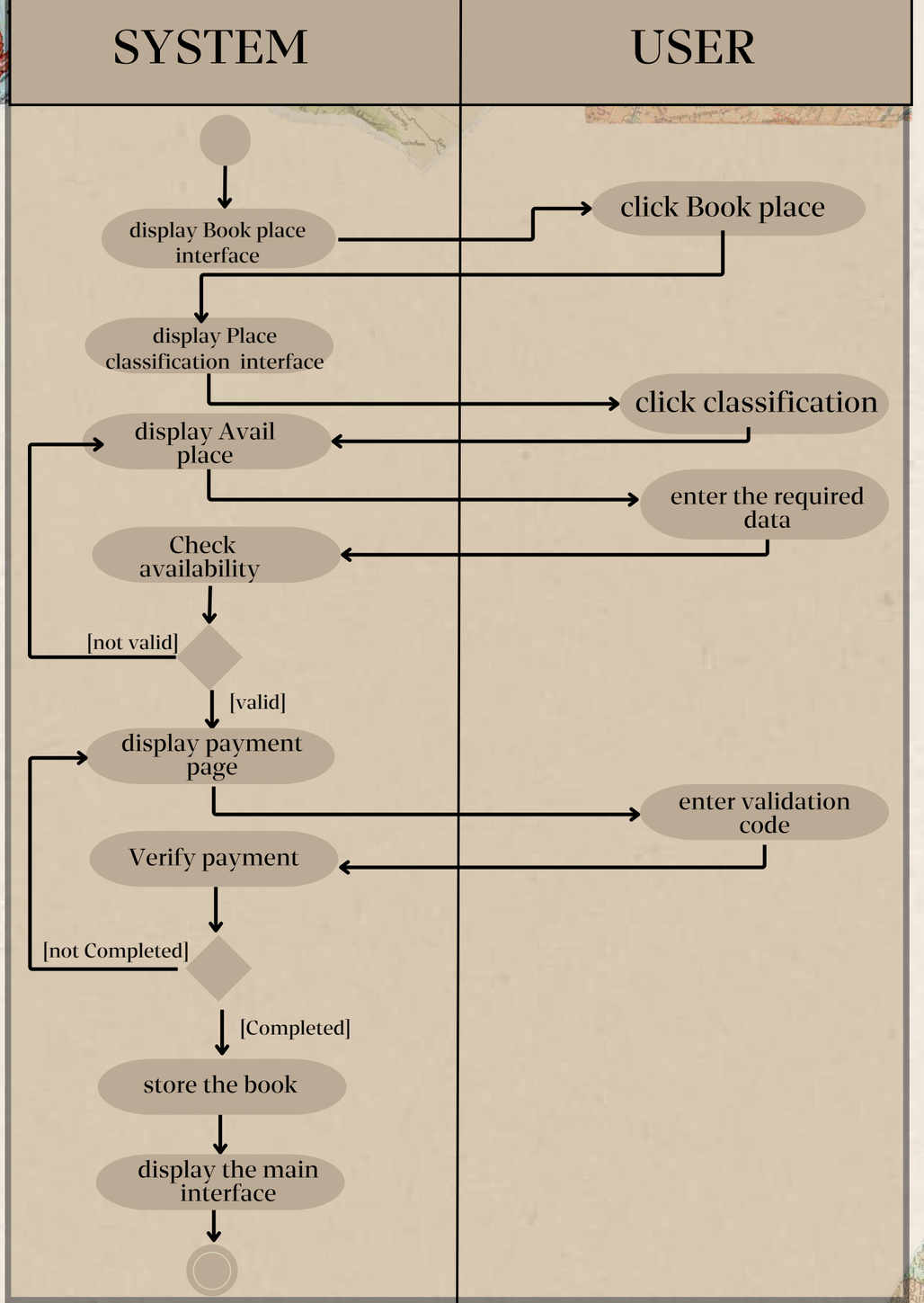
activity diagram "Create account":



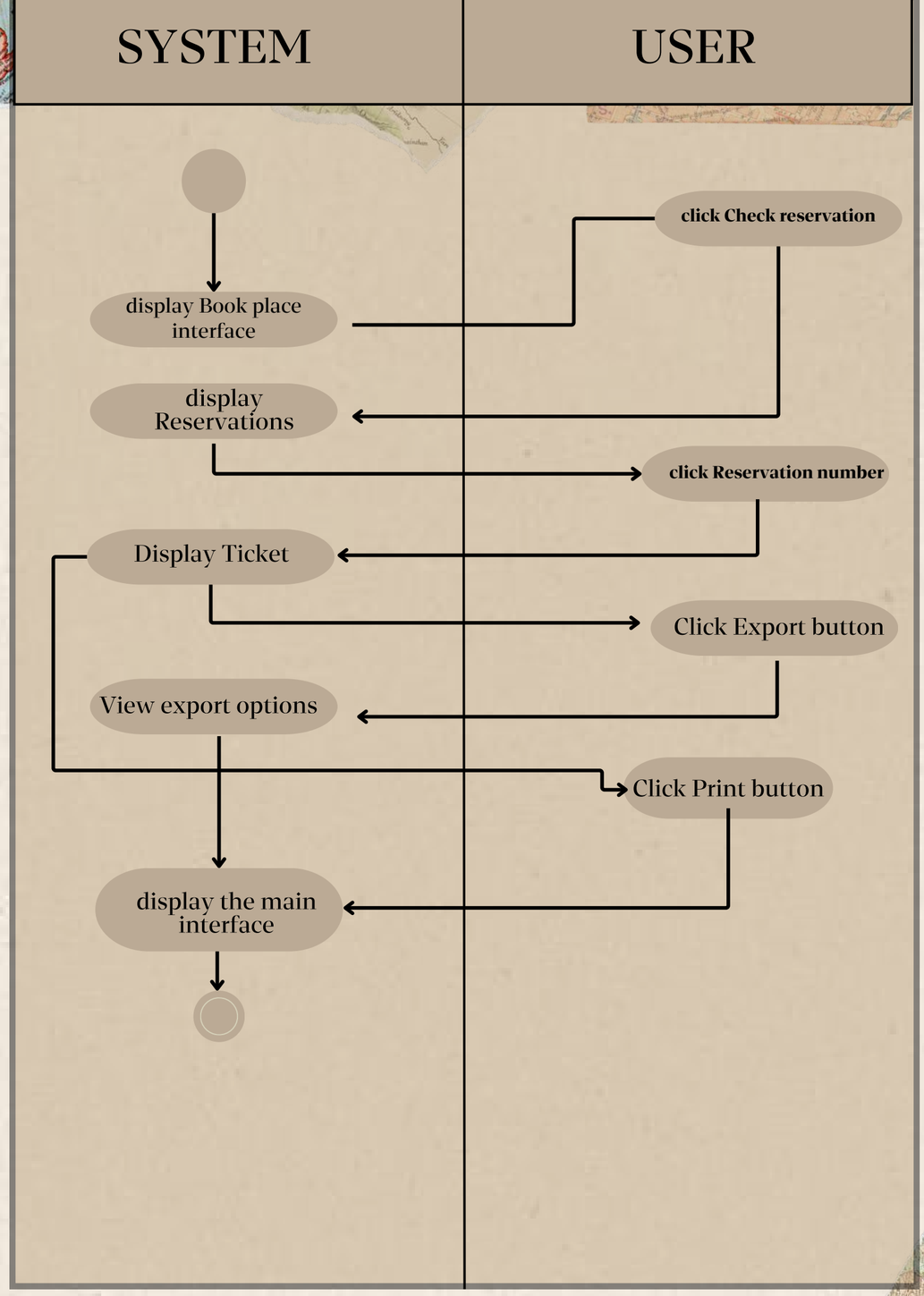
activity diagram "Login":



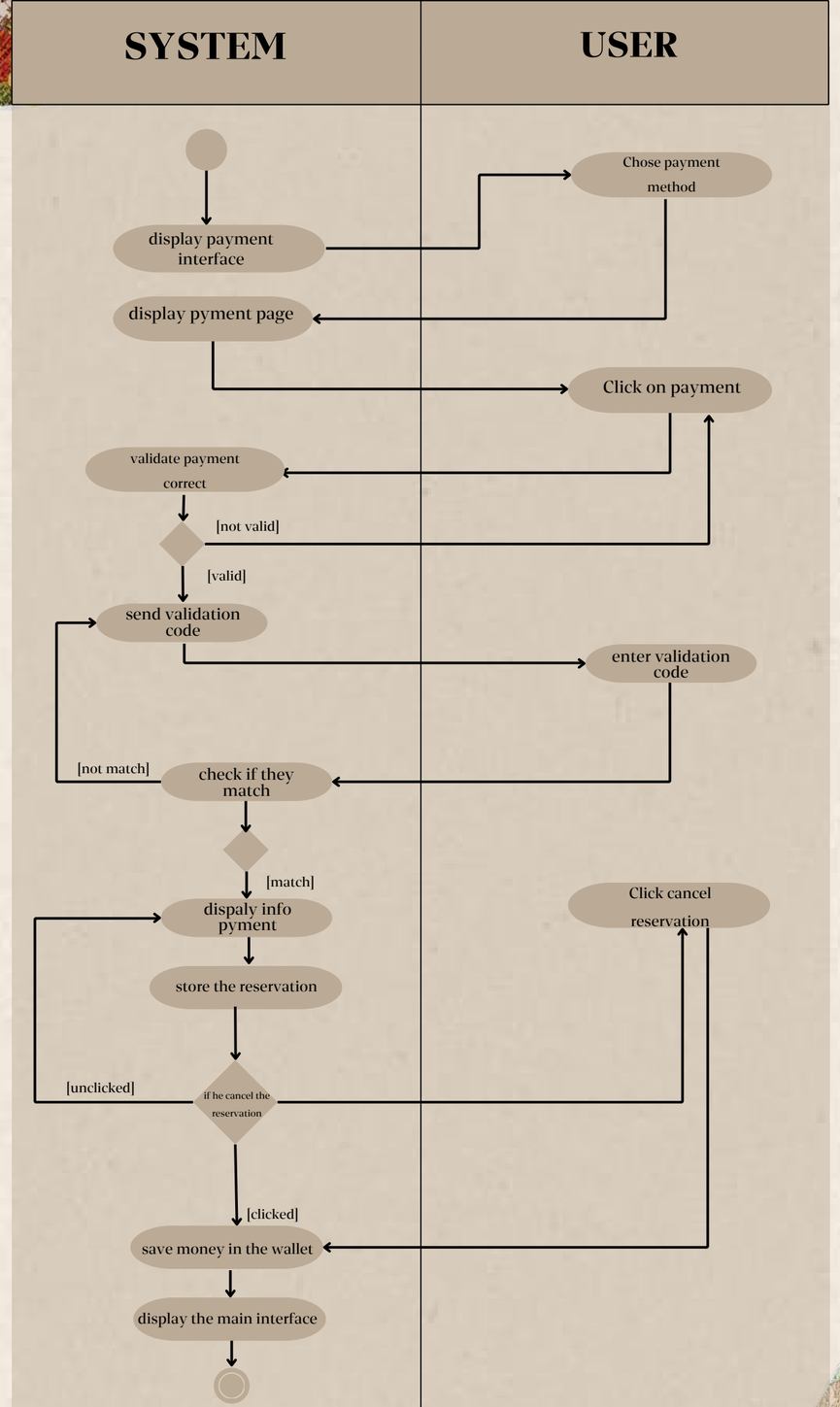
activity diagram "Book a place 1":

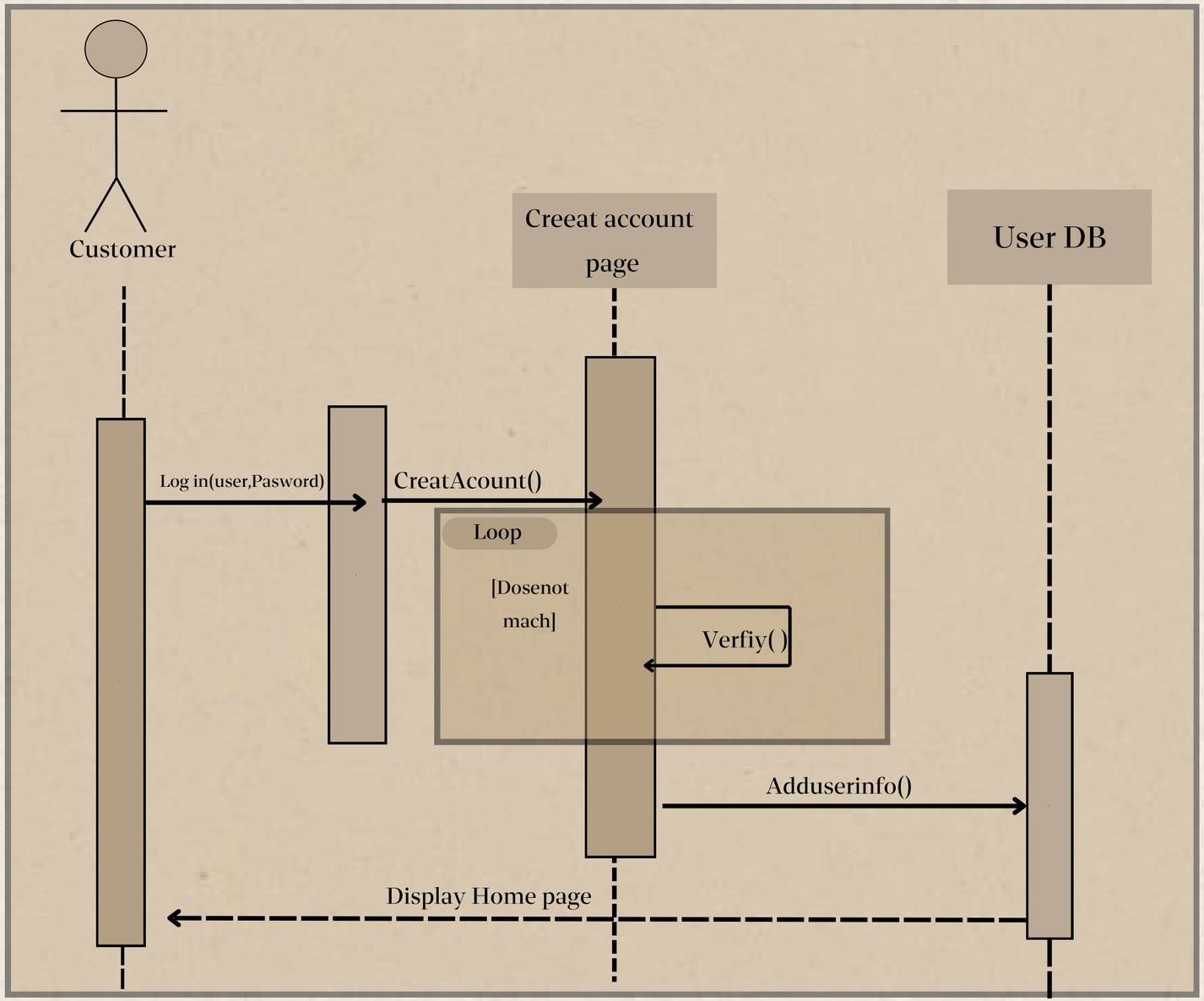


activity diagram "Book a place 2":

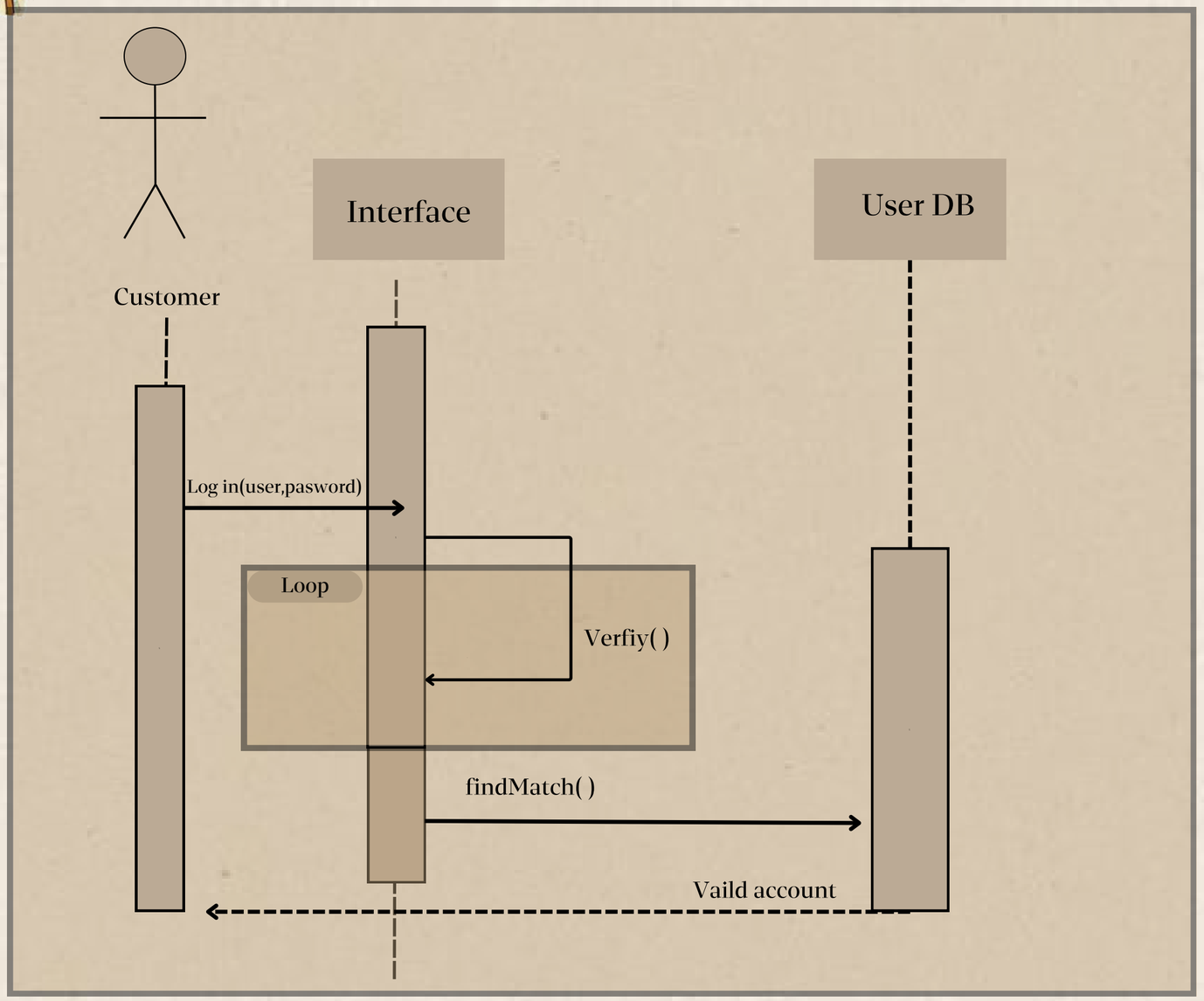


activity diagram Payment

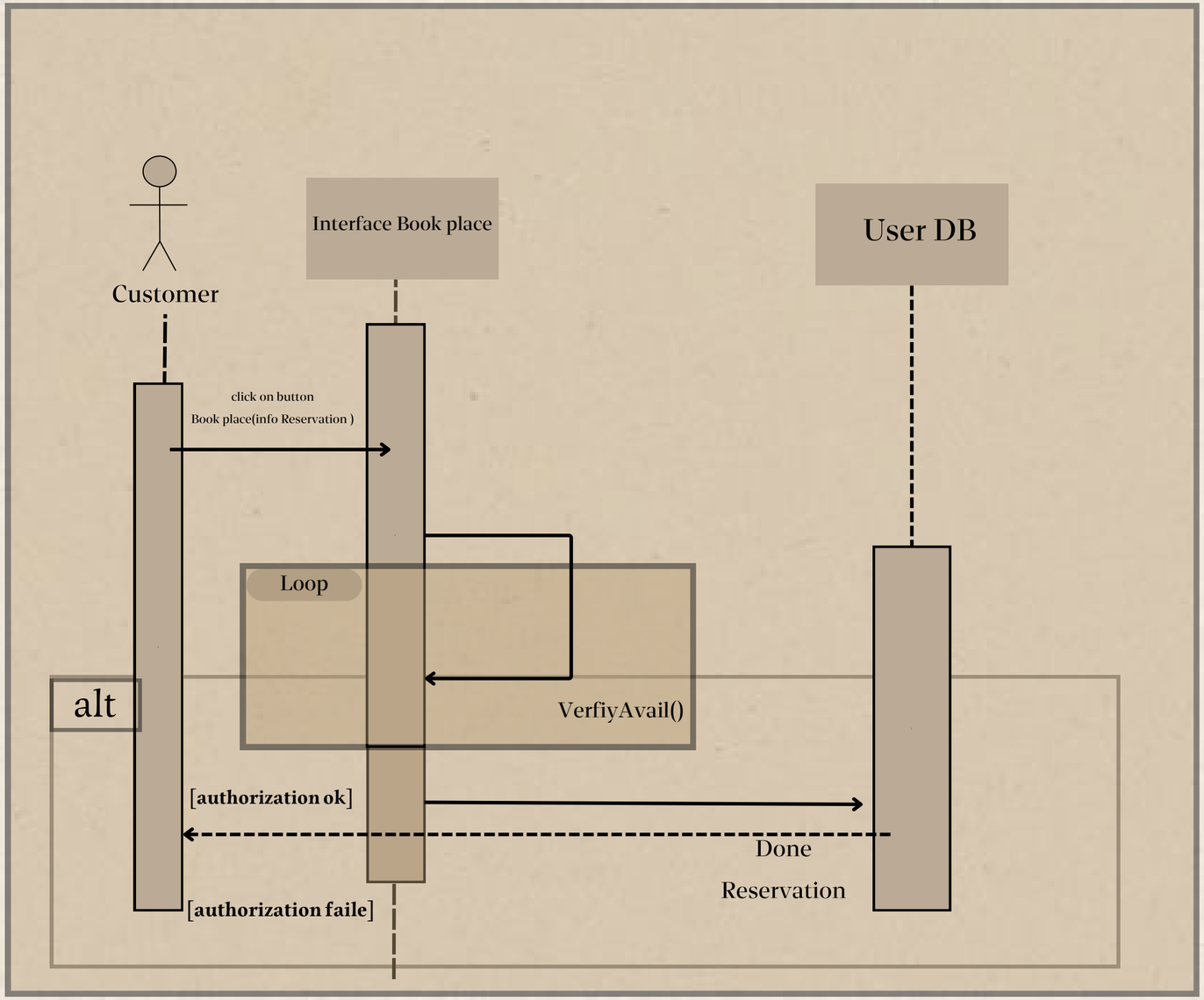




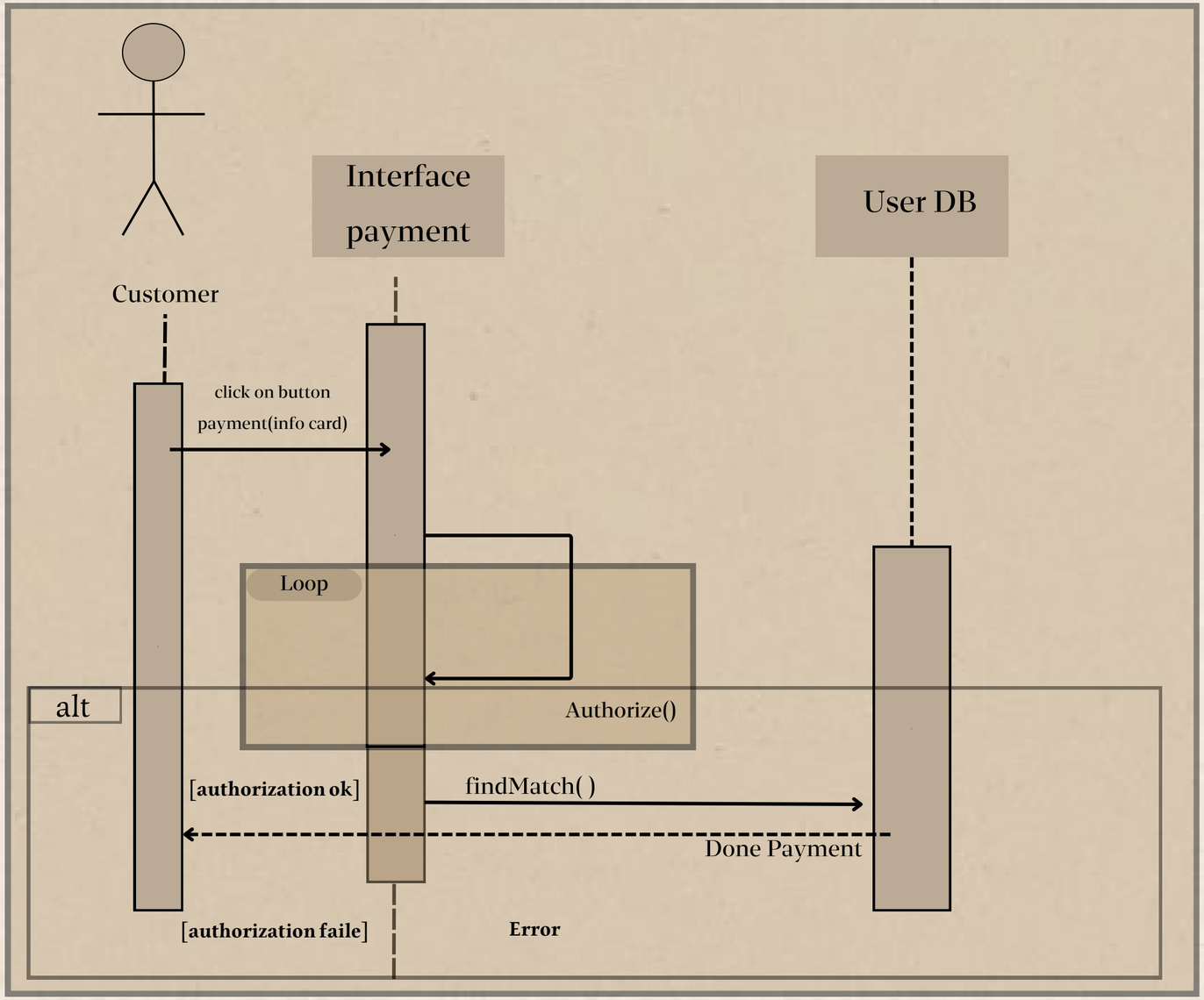
Sequanse creat account



Sequanse log in



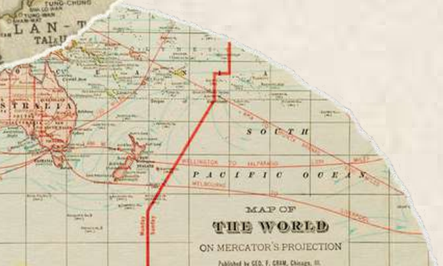
Sequanse Book place



Sequanse Payment

Chapter3

NAM-TAO
DEEP BAY


PACIFIC OCEAN
MAP OF
THE WORLD
ON MERCATOR'S PROJECTION

TEA DISTRICT
BOHEA TEA DISTRICT
KIANGSEE

HIMALAYAS

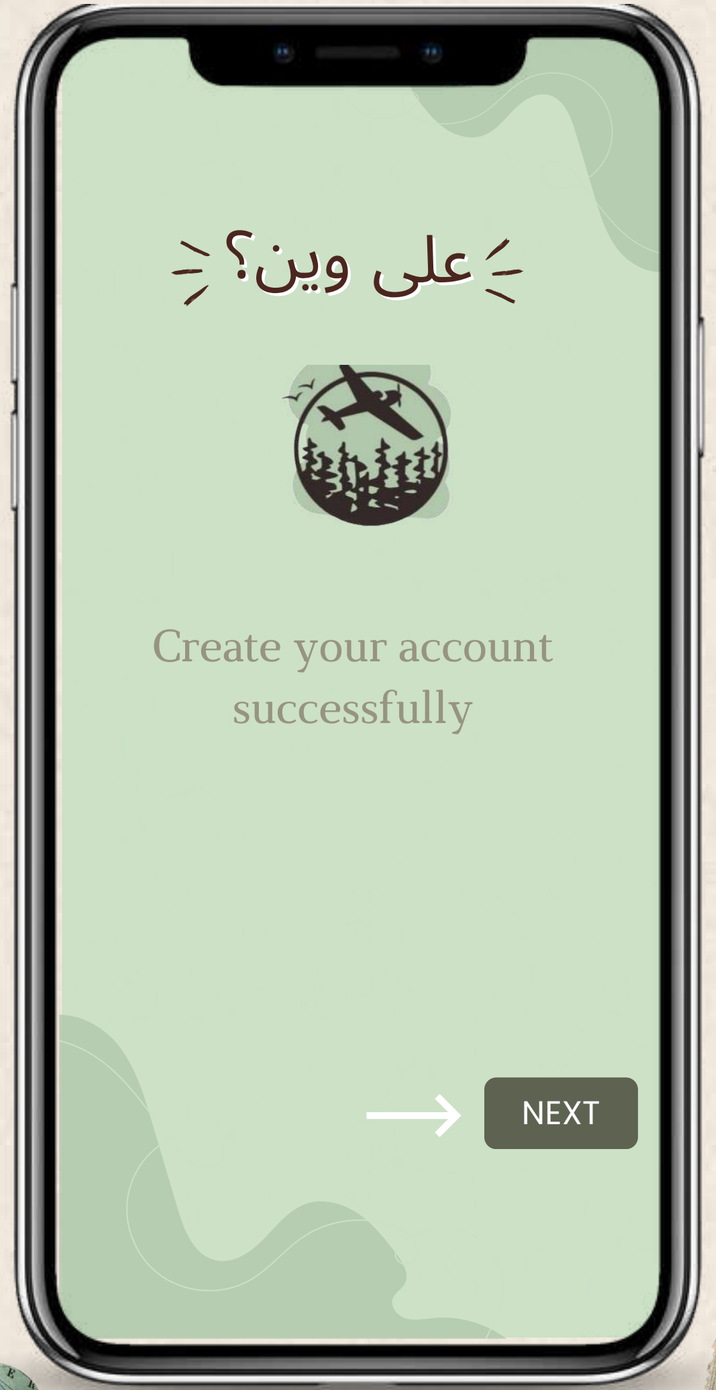
JAPAN

Prototype:

Prototype:

على وين؟
FIRST NAME
LAST NAME
EMAIL
PHONE NUMBER
PASSWORD
CONFIRM PASSWORD
SIGN UP
Phone number must be start with (+966)
Password must be 8 characters containing
(letters, numbers, _)

Prototype:



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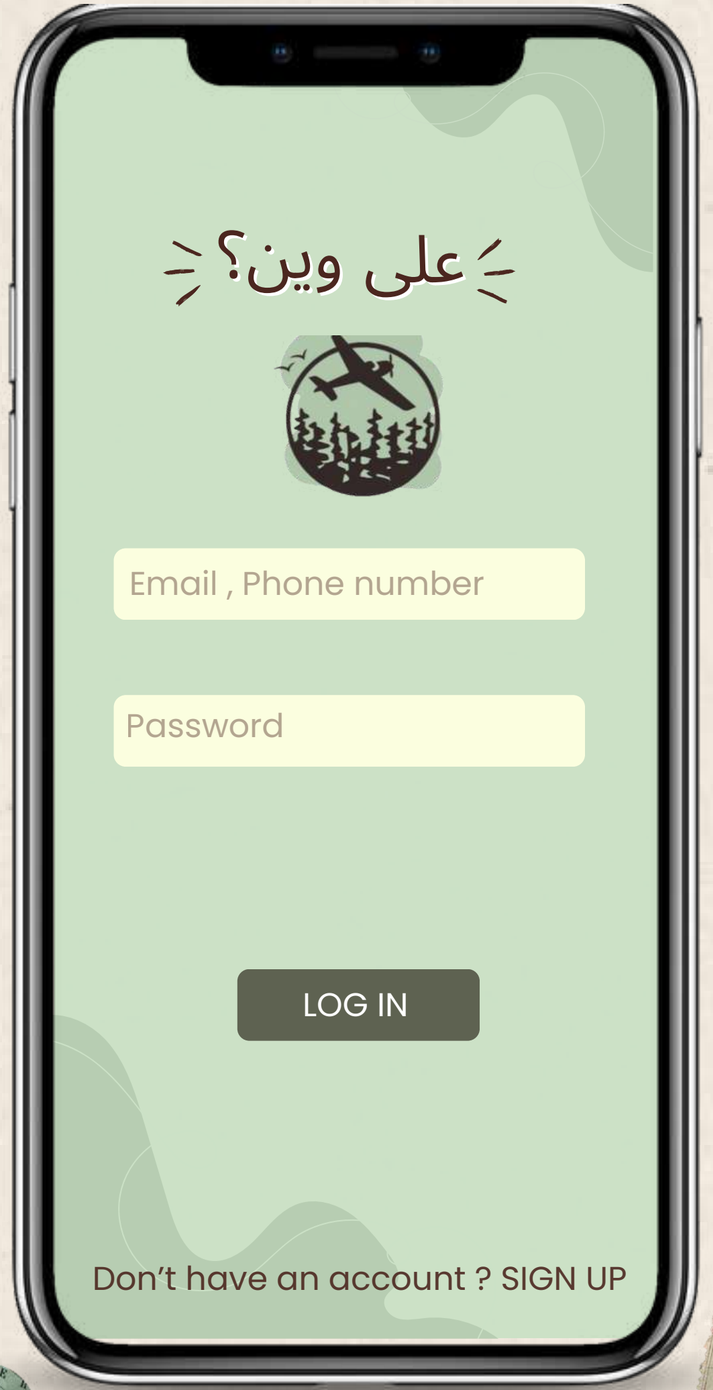
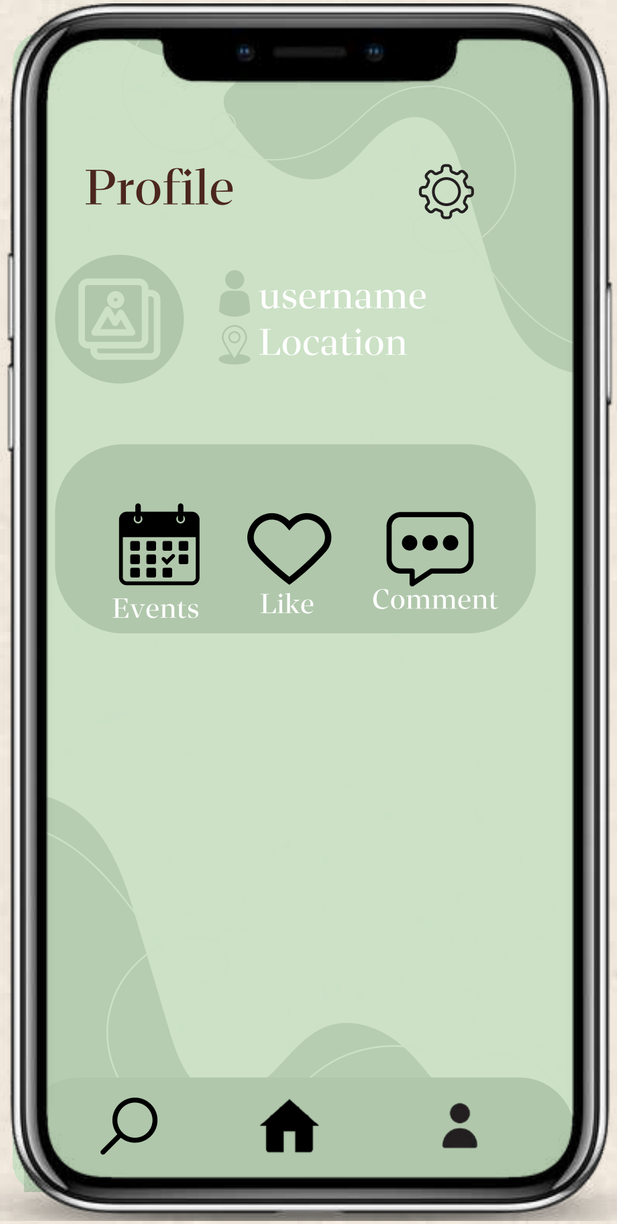

على وين؟
Email , Phone number
Password
LOG IN
Don’t have an account ? SIGN UP

Prototype:

Prototype:

Prototype:



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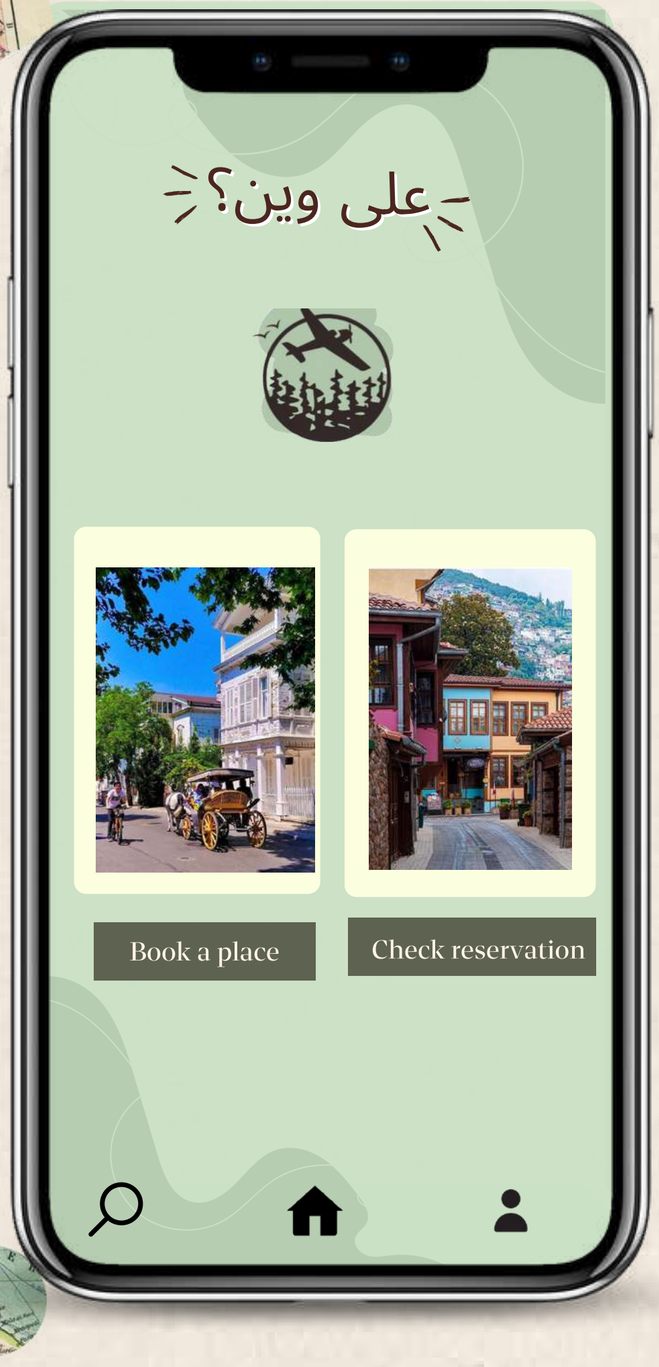
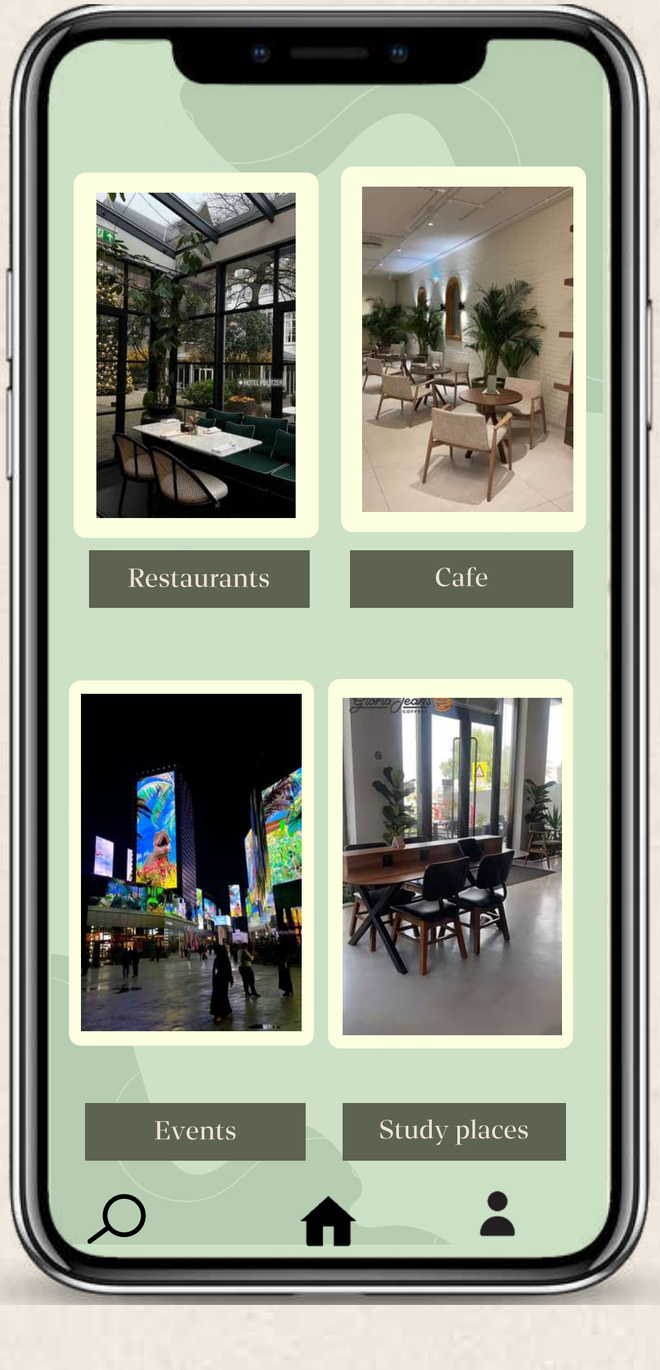
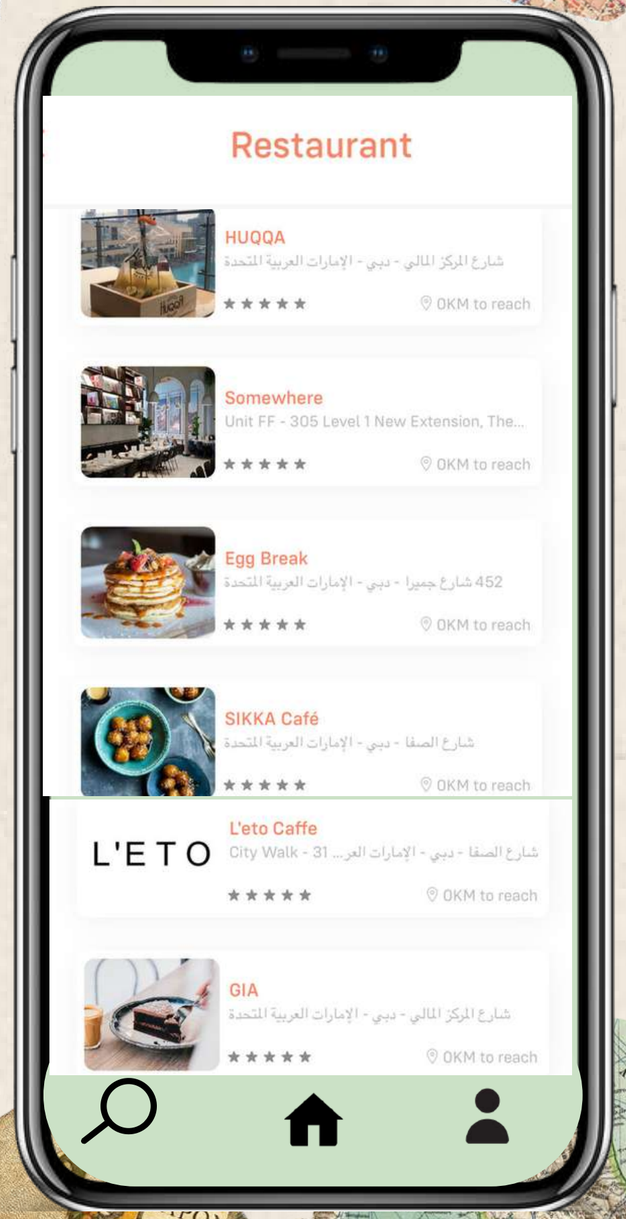
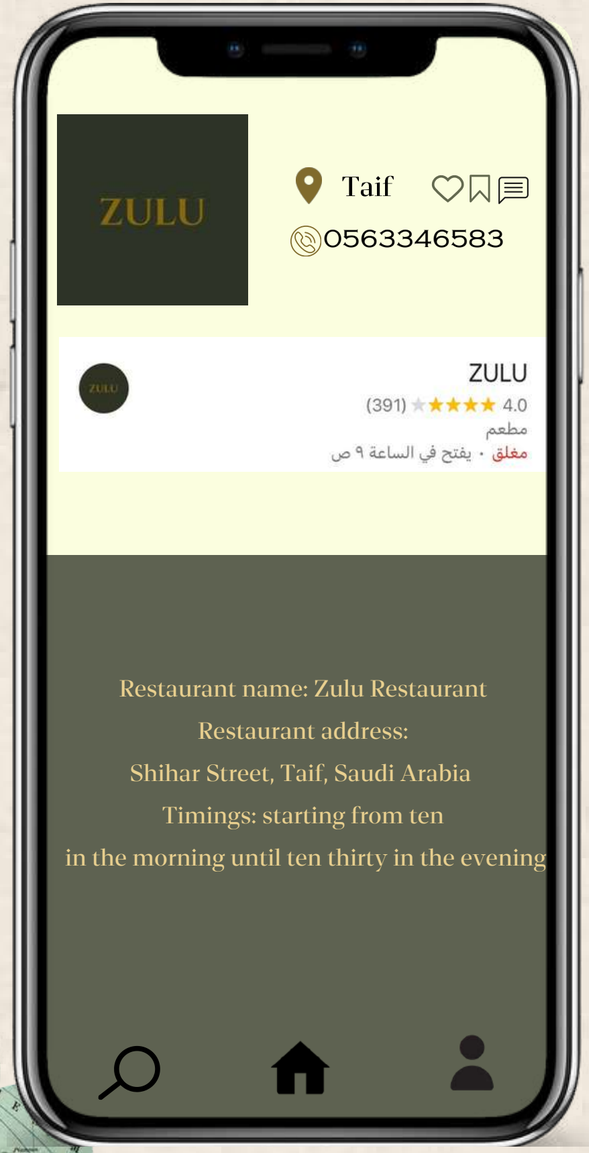
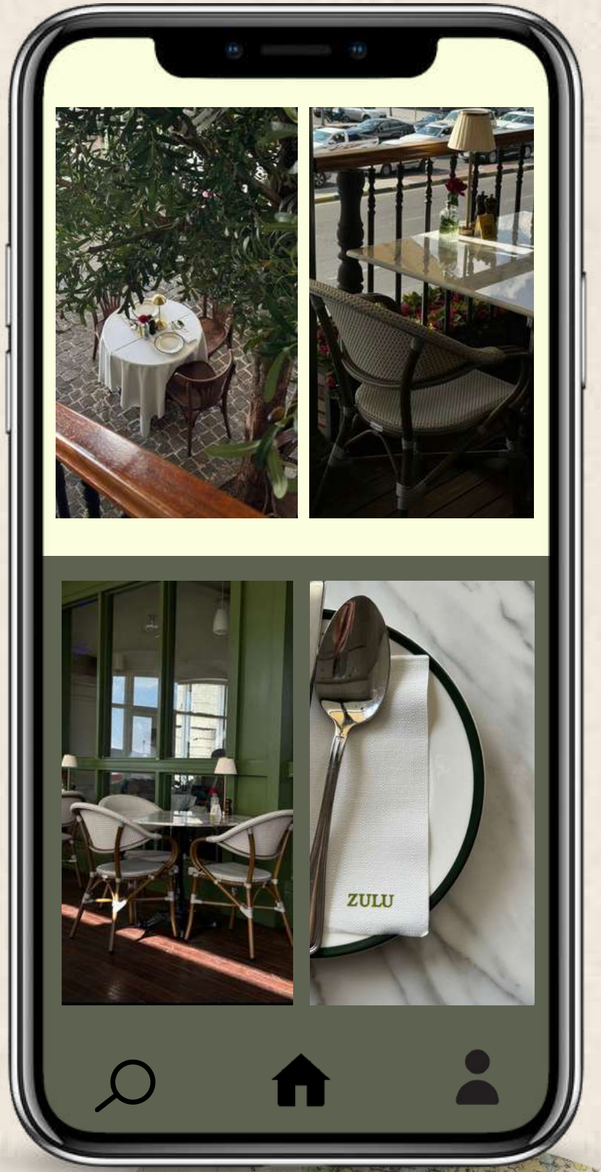

على وين؟
Book a place
Check reservation


Restaurants
Cafe
Events
Study places

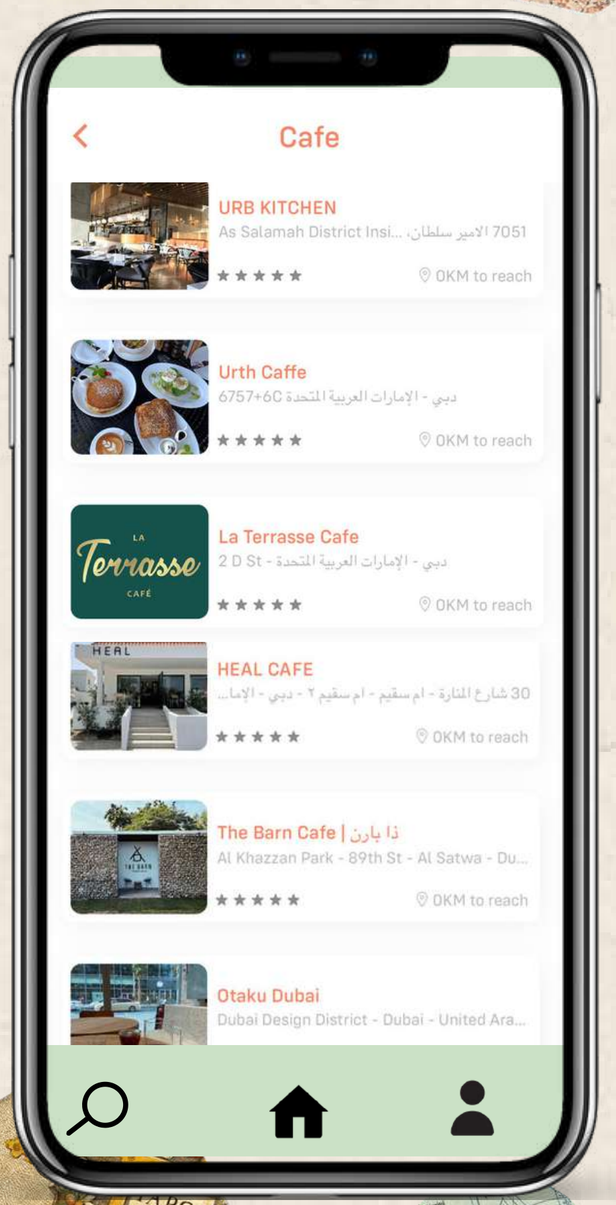
Prototype:


Restaurant
HUQQA
شارع المركز المالي - دبي - الإمارات العربية المتحدة
0KM to reach
Somewhere
Unit FF - 305 Level 1 New Extension, The...
0KM to reach
Egg Break
شارع جميرا - دبي - الإمارات العربية المتحدة 452
0KM to reach
SIKKA Café
شارع الصفا - دبي - الإمارات العربية المتحدة
0KM to reach
L'ETO
L'eto Caffe
City Walk - 31 ... شارع الصفا - دبي - الإمارات العر
0KM to reach
GIA
شارع المركز المالي - دبي - الإمارات العربية المتحدة
0KM to reach


ZULU
Taif
0563346583
ZULU
4.0 (391)
مطعم
مغلق · يفتح في الساعة ٩ ص
Restaurant name: Zulu Restaurant
Restaurant address:
Shihar Street, Taif, Saudi Arabia
Timings: starting from ten
in the morning until ten thirty in the evening


ZULU

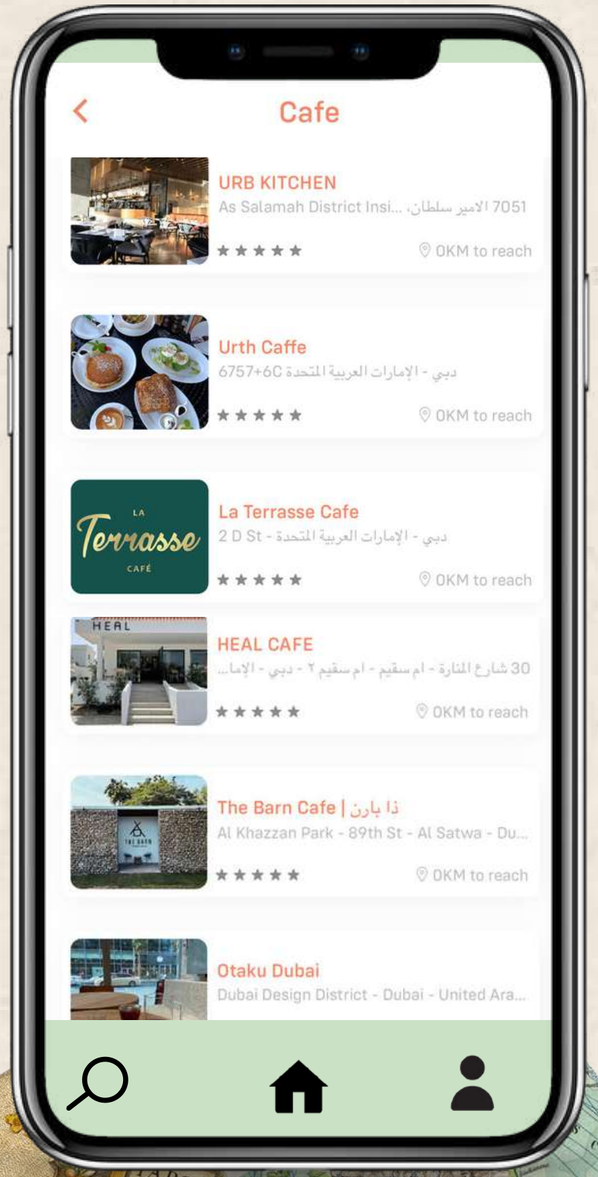
Prototype:

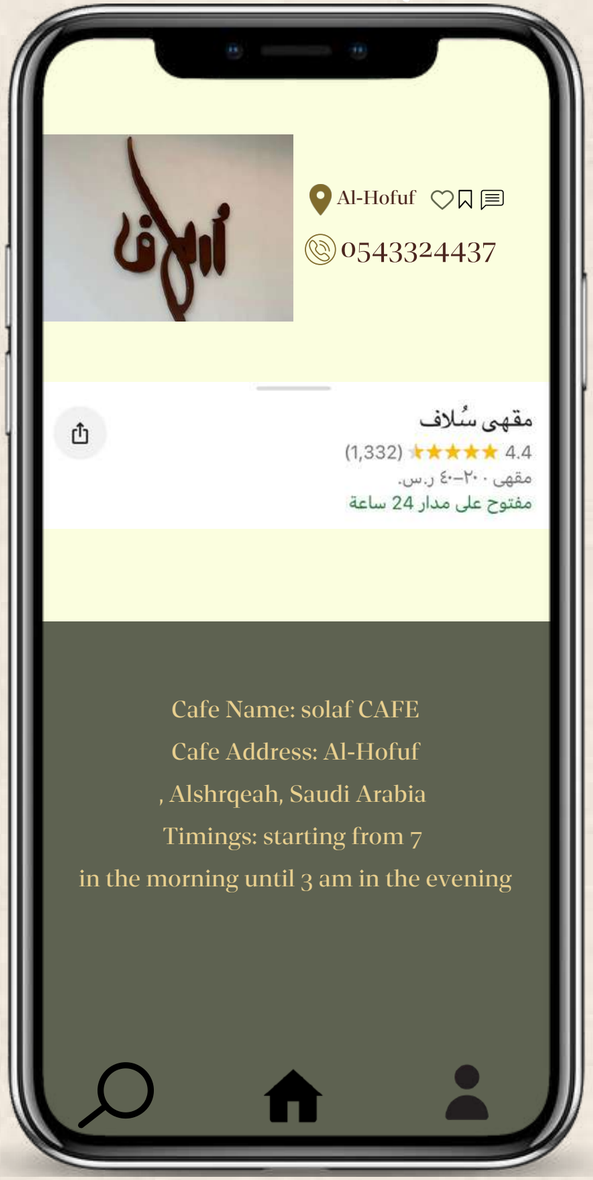

Cafe
URB KITCHEN
As Salamah District Insi... ،الامير سلطان 7051
OKM to reach
Urth Caffe
6757+6C دبي - الإمارات العربية المتحدة
OKM to reach
La Terrasse Cafe
2 D St - دبي - الإمارات العربية المتحدة
OKM to reach
HEAL CAFE
30 شارع المنارة - ام سقيم - ام سقيم ٢ - دبي - الإما...
OKM to reach
The Barn Cafe | ذا بارن
Al Khazzan Park - 89th St - Al Satwa - Du...
OKM to reach
Otaku Dubai
Dubai Design District - Dubai - United Ara...

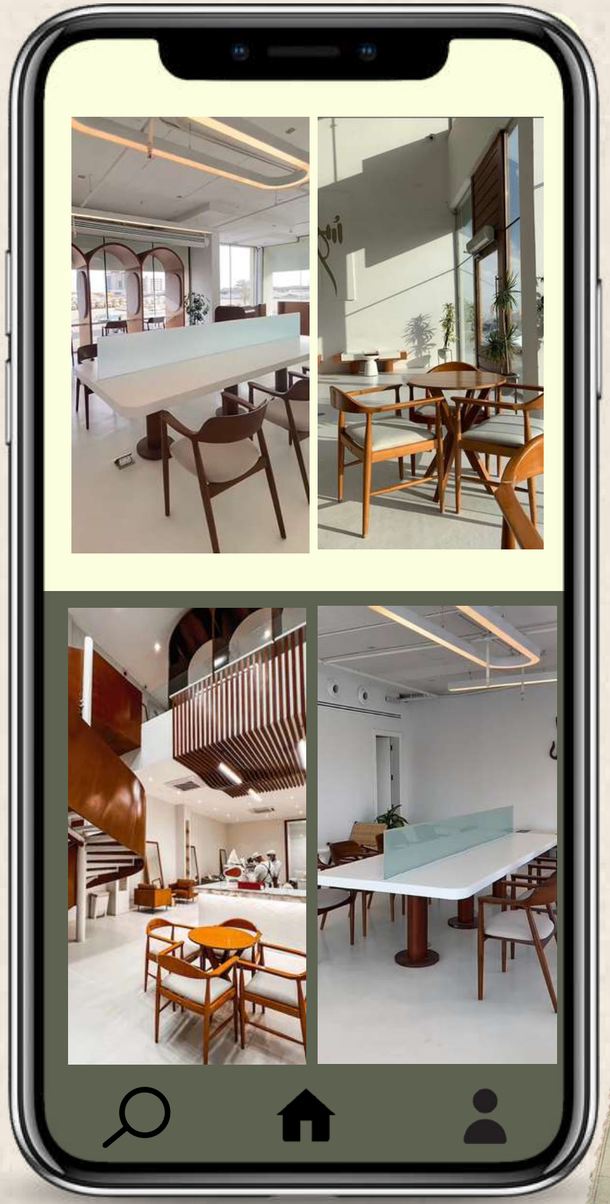
Joint
Mecca
053 757 3241
جوينت
4.6 ★★★★★ (6,407)
كافيه · ٢٠٠–٤٠٠ ر.س. ·
مفتوح · يغلق ٣ ص
Cafe Name: Joint CAFE
Cafe Address: Alshoqiyah
, Mecca, Saudi Arabia
Timings: starting from 7
in the morning until 3 am in the evening

JOINT

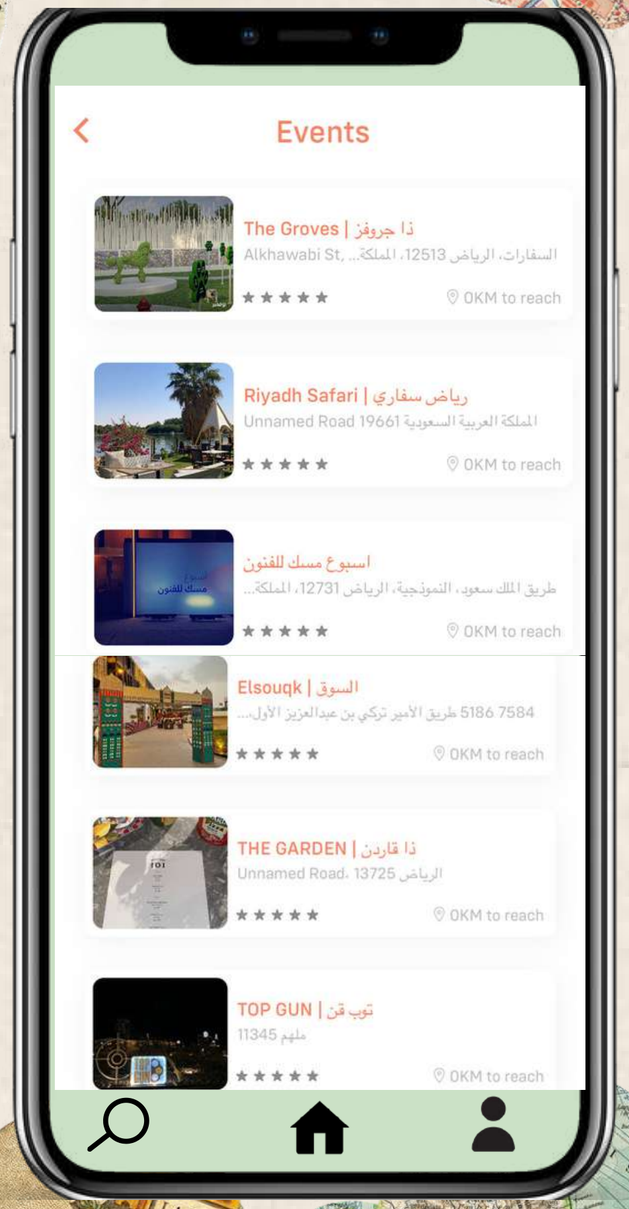
Prototype:


Cafe
URB KITCHEN
As Salamah District Insi... الامير سلطان، 7051
OKM to reach
Urth Caffe
6757+6C دبي - الإمارات العربية المتحدة
OKM to reach
La Terrasse Cafe
2 D St - دبي - الإمارات العربية المتحدة
OKM to reach
HEAL CAFE
30 شارع المنارة - ام سقيم - ام سقيم ٢ - دبي - الإما...
OKM to reach
The Barn Cafe | ذا بارن
Al Khazzan Park - 89th St - Al Satwa - Du...
OKM to reach
Otaku Dubai
Dubai Design District - Dubai - United Ara...

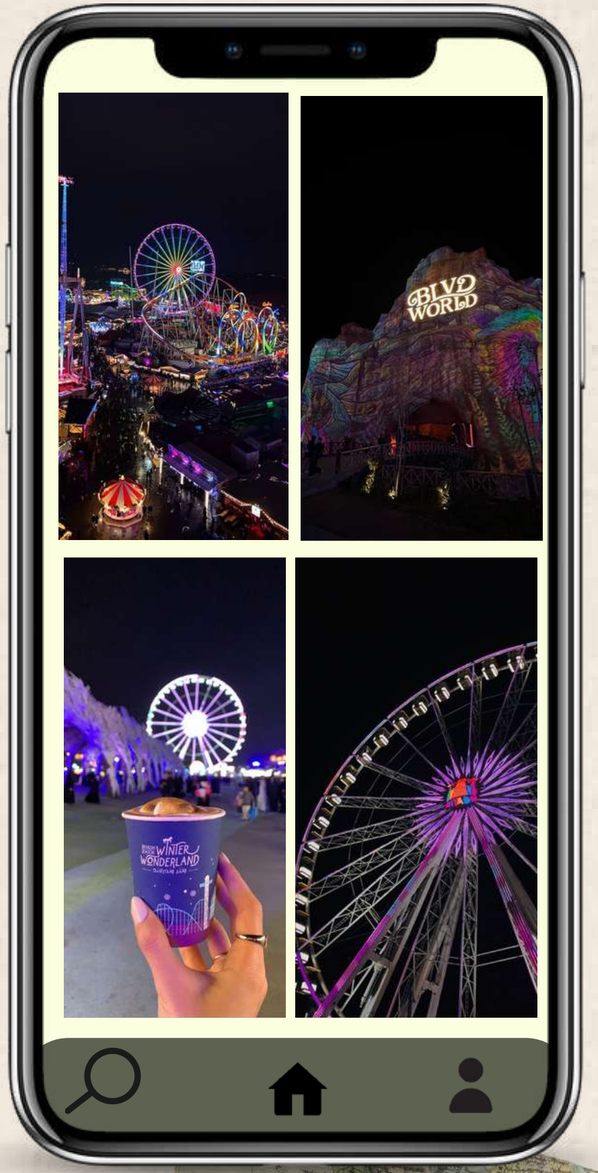

Al-Hofuf
0543324437
مقهى سُلاف
4.4 (1,332)
مقهى · ٢٠–٤٠ ر.س.
مفتوح على مدار 24 ساعة
Cafe Name: solaf CAFE
Cafe Address: Al-Hofuf
, Alshrqeah, Saudi Arabia
Timings: starting from 7
in the morning until 3 am in the evening



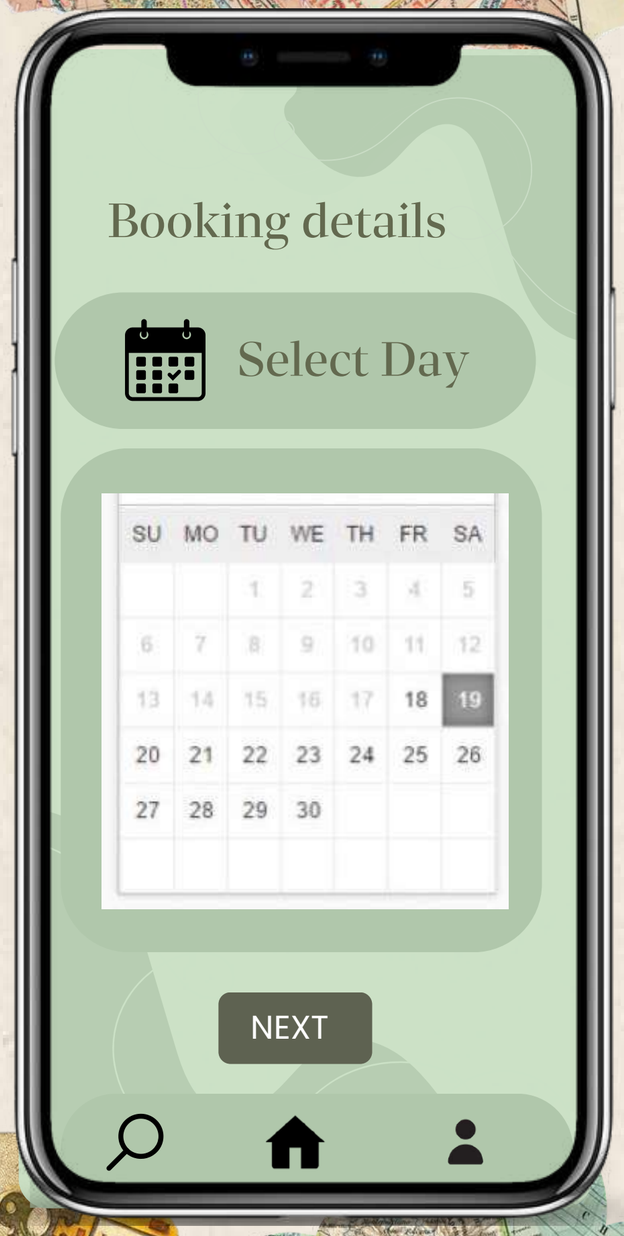
Prototype:


Events
The Groves | ذا جروفز
السفارات، الرياض 12513، المملكة... Alkhawabi St,
0KM to reach
Riyadh Safari | رياض سفاري
المملكة العربية السعودية Unnamed Road 19661
0KM to reach
اسبوع مسك للفنون
طريق الملك سعود، النموذجية، الرياض 12731، المملكة...
0KM to reach
Elsouqk | السوق
طريق الأمير تركي بن عبدالعزيز الأول... 5186 7584
0KM to reach
THE GARDEN | ذا قاردن
Unnamed Road، 13725 الرياض
0KM to reach
TOP GUN | توب قن
ملهم 11345
0KM to reach

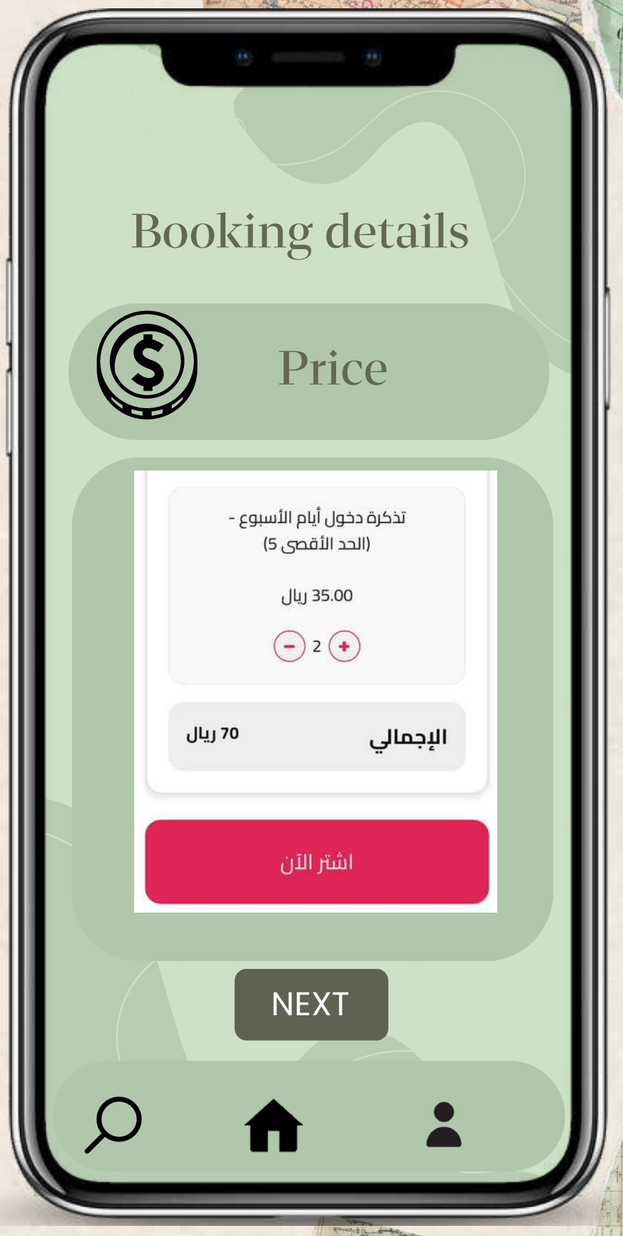
Al-Riyadh
0543324437
موسم الرياض
4.5 (16,866)
مزار سياحي ·
مفتوح · يغلق ١٢ ص
Event Name: موسم الرياض
Cafe Address: Al-Riyadh, Saudi Arabia
Timings: starting from 7
in the morning until 3 am in the evening


BLVD WORLD
WINTER WONDERLAND

Prototype:

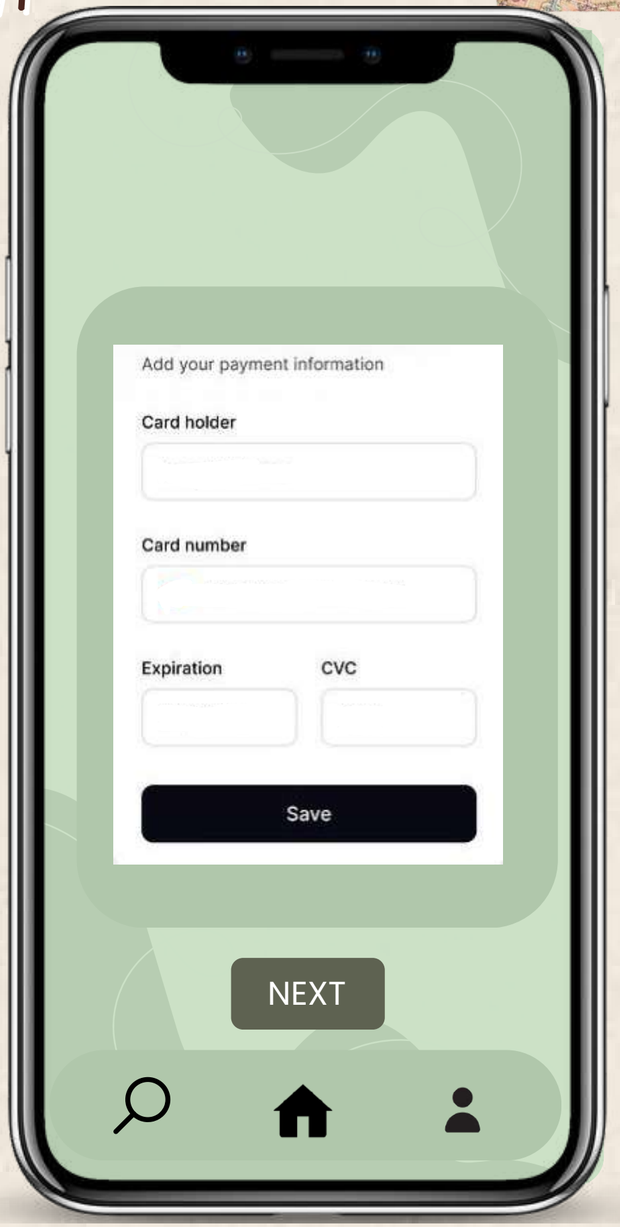

Booking details
Select Day
SU MO TU WE TH FR SA
1 2 3 4 5
6 7 8 9 10 11 12
13 14 15 16 17 18 19
20 21 22 23 24 25 26
27 28 29 30
NEXT

Booking details
Select Time
13:00
9:00
10:00
11:00
12:00
13:00
NEXT

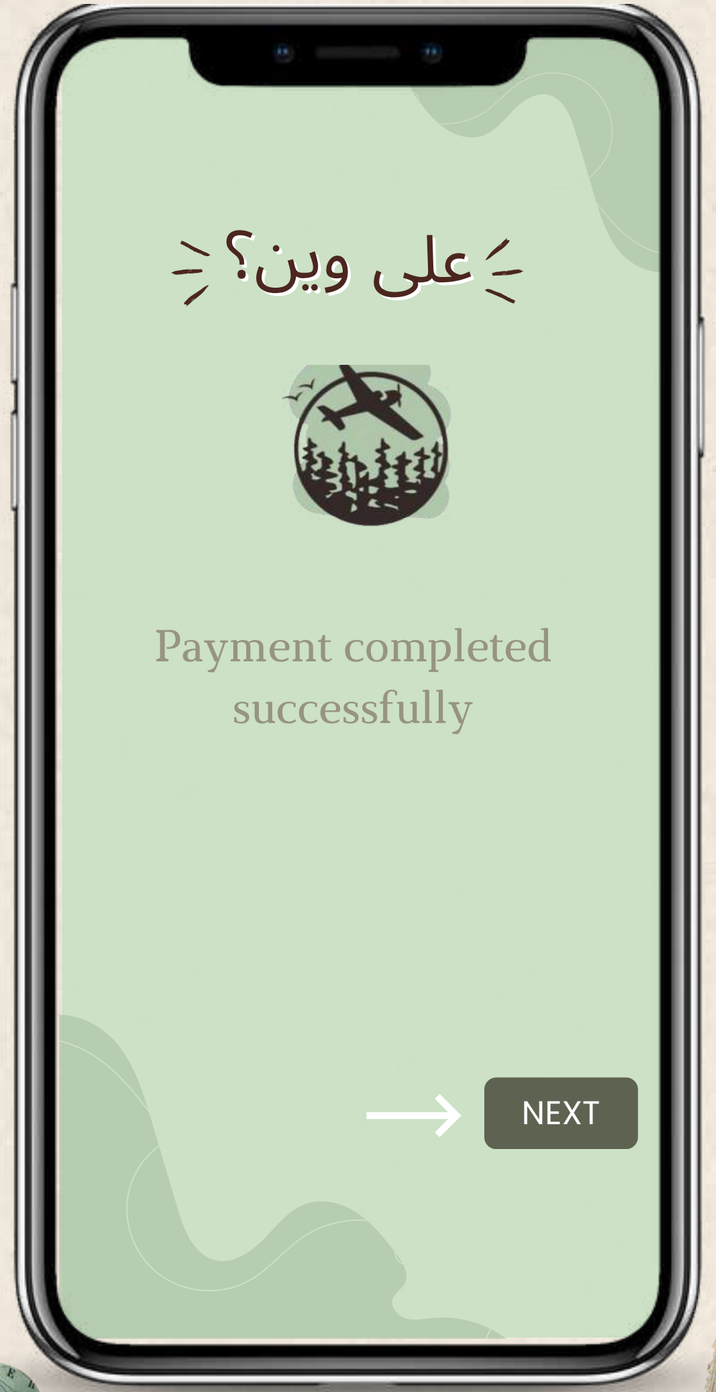

Booking details
Price
تذكرة دخول أيام الأسبوع -
(الحد الأقصى 5)
35.00 ريال
2
الإجمالي
70 ريال
اشتر الآن
NEXT

Prototype:

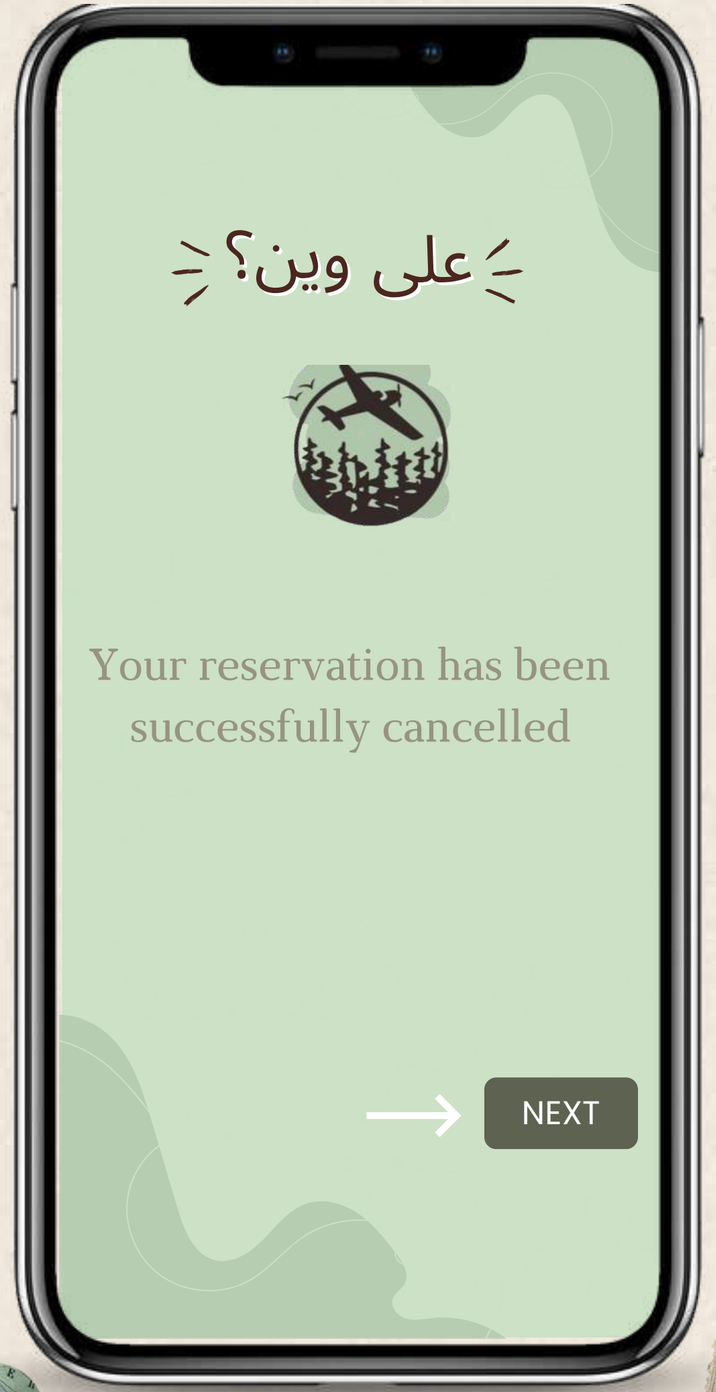
السعر
30.43 ريال
الضريبة 15 %
4.57 ريال
الإجمالي
35.00 ريال
كود الخصم
تفعيل
Apple Pay
فيزا او ماستر كارد
بطاقة مدى
بطاقة امريكان اكسبريس
نقاط قطاف
NEXT


Add your payment information
Card holder
Card number
Expiration
CVC
Save
NEXT

Prototype:



Prototype:


على وين؟
Your reservation has been successfully cancelled
NEXT

Prototype:

Al-Riyadh

0543324437

موسم الرياض

4.5 ★★★★★ (16,866)

مزار سياحي ·

مفتوح · يغلق ١٢ ص

Event Name: موسم الرياض

Cafe Address: Al-Riyadh, Saudi Arabia

Timings: starting from 7

in the morning until 3 am in the evening

Profile

username

Location

Events | Like | Comment | Wallet

Wallet

Your balance

Request to withdraw the amount

SAR 35

Prototype:

Al-Riyadh

0543324437

موسم الرياض

4.5 ★★★★★ (16,866)

مزار سياحي ·

مفتوح · يغلق ١٢ ص

Event Name: موسم الرياض

Cafe Address: Al-Riyadh, Saudi Arabia

Timings: starting from 7

in the morning until 3 am in the evening

Profile

username

Location

Events

Like

Comment

Wallet

Favorite

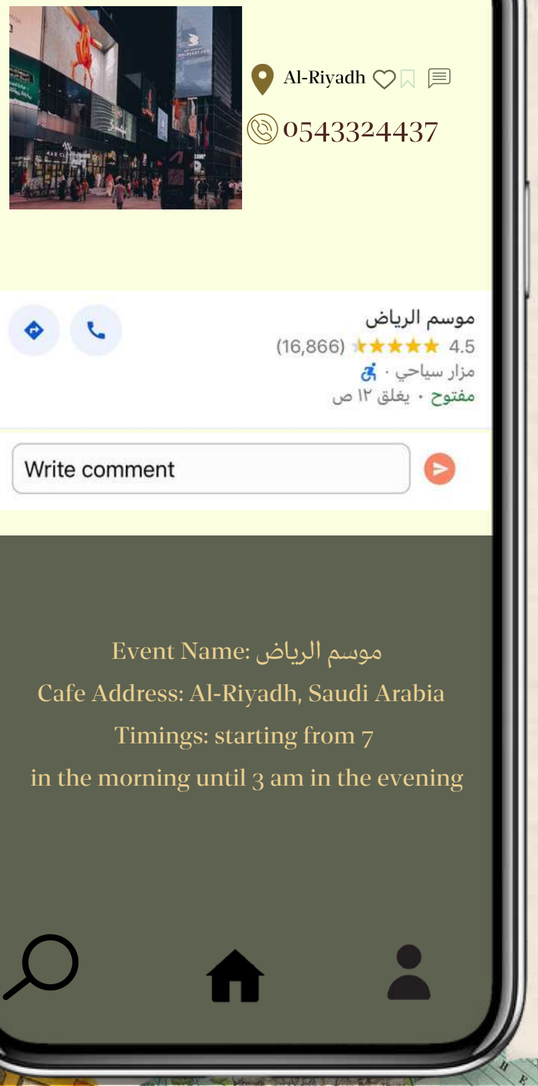
Riyadh Safari | رياض سفاري

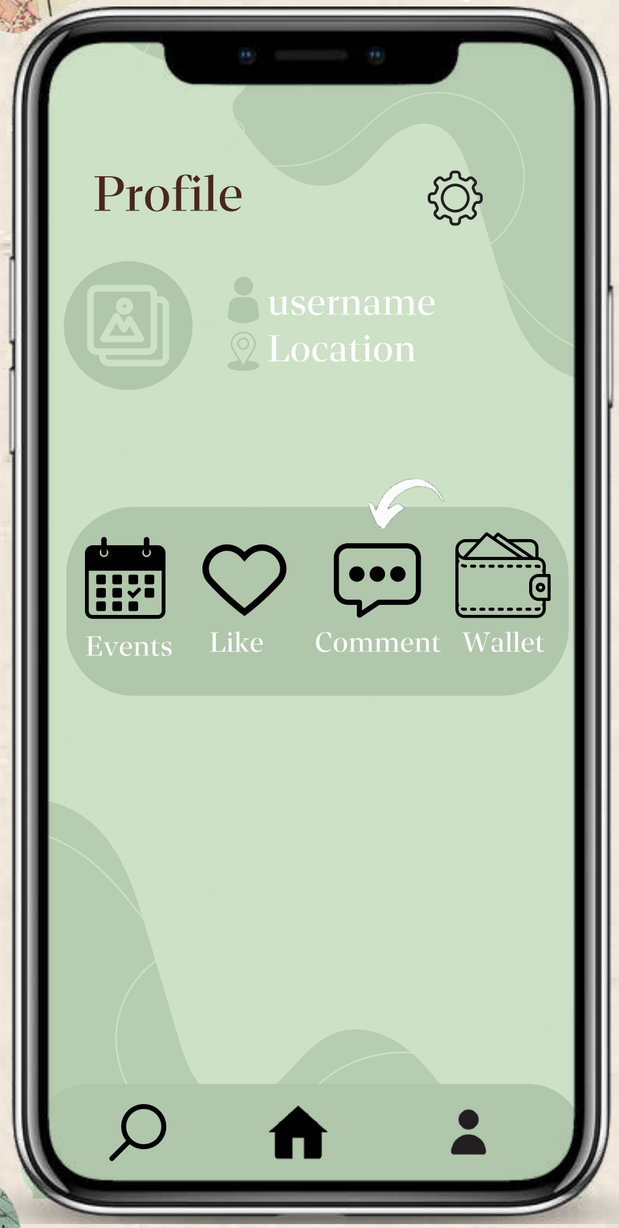
Unnamed Road 19661 المملكة العربية السعودية

★★★★★

0KM to reach

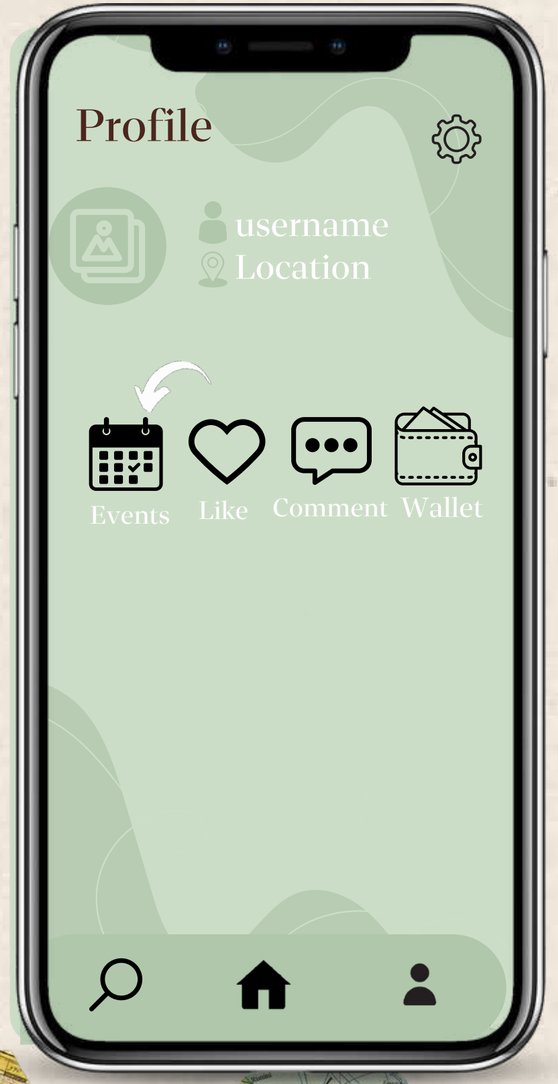
Prototype:

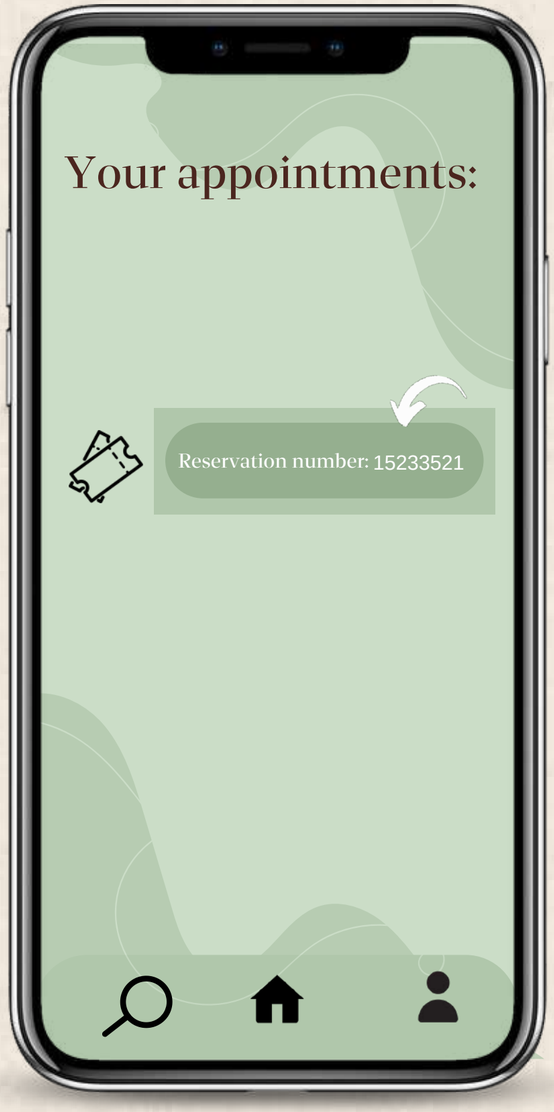

Al-Riyadh
0543324437
موسم الرياض
4.5 ★★★★★ (16,866)
مزار سياحي ·
مفتوح · يغلق ١٢ ص
Write comment
Event Name: موسم الرياض
Cafe Address: Al-Riyadh, Saudi Arabia
Timings: starting from 7
in the morning until 3 am in the evening


Profile
username
Location
Events
Like
Comment
Wallet

Comment
mzon
Tuesday 8:26 PM
الاطفال بكم عمر سنتين ونص ؟

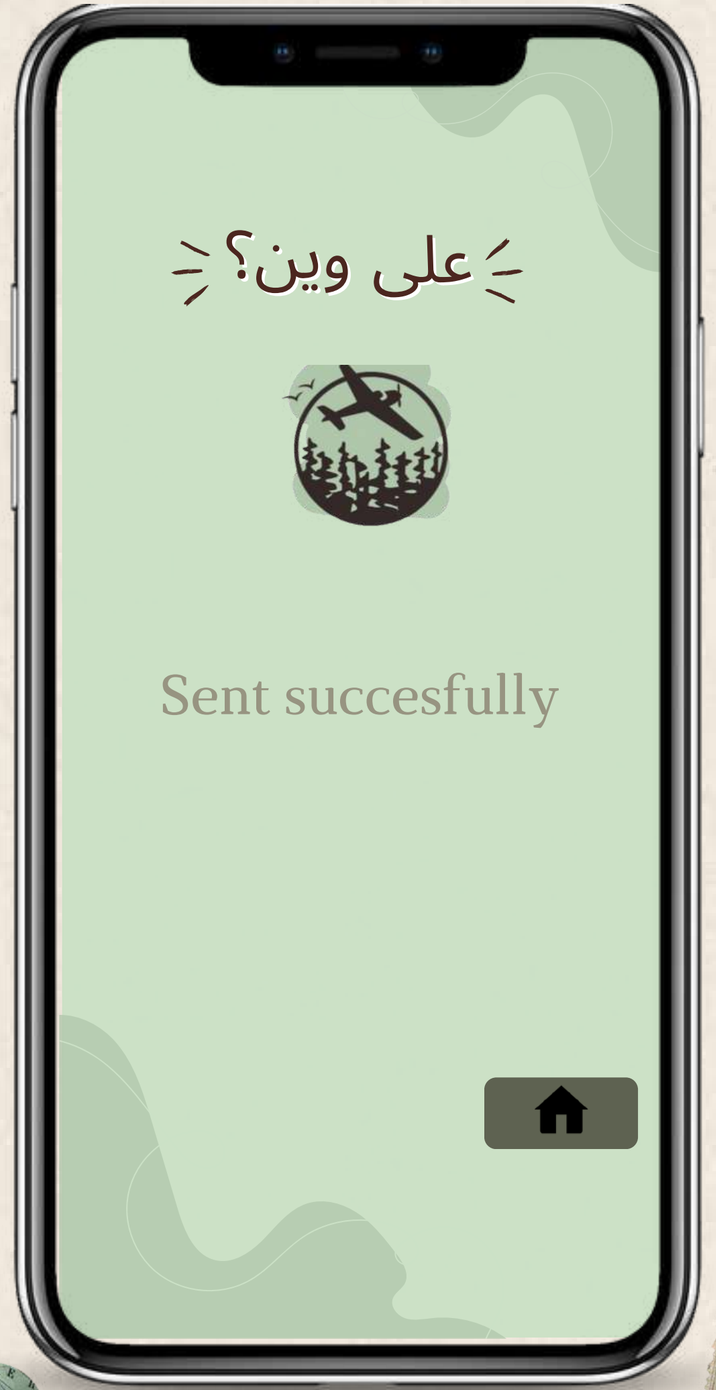
Prototype:


Profile
username
Location
Events
Like
Comment
Wallet


Your appointments:
Reservation number: 15233521

Your Ticket:
Name: your name اسم
Reference: 15233521 مرجع
Ticket Type: Golden نوع التذكرة
Table/Seat: طاولة/مقعد
Location: رياض سفاري الموقع
Attend Date: 23-1-2024 تاريخ
SAR 35 السعر
5:30 pm بداية العرض

Prototype:



Prototype:

reservation
confirmation

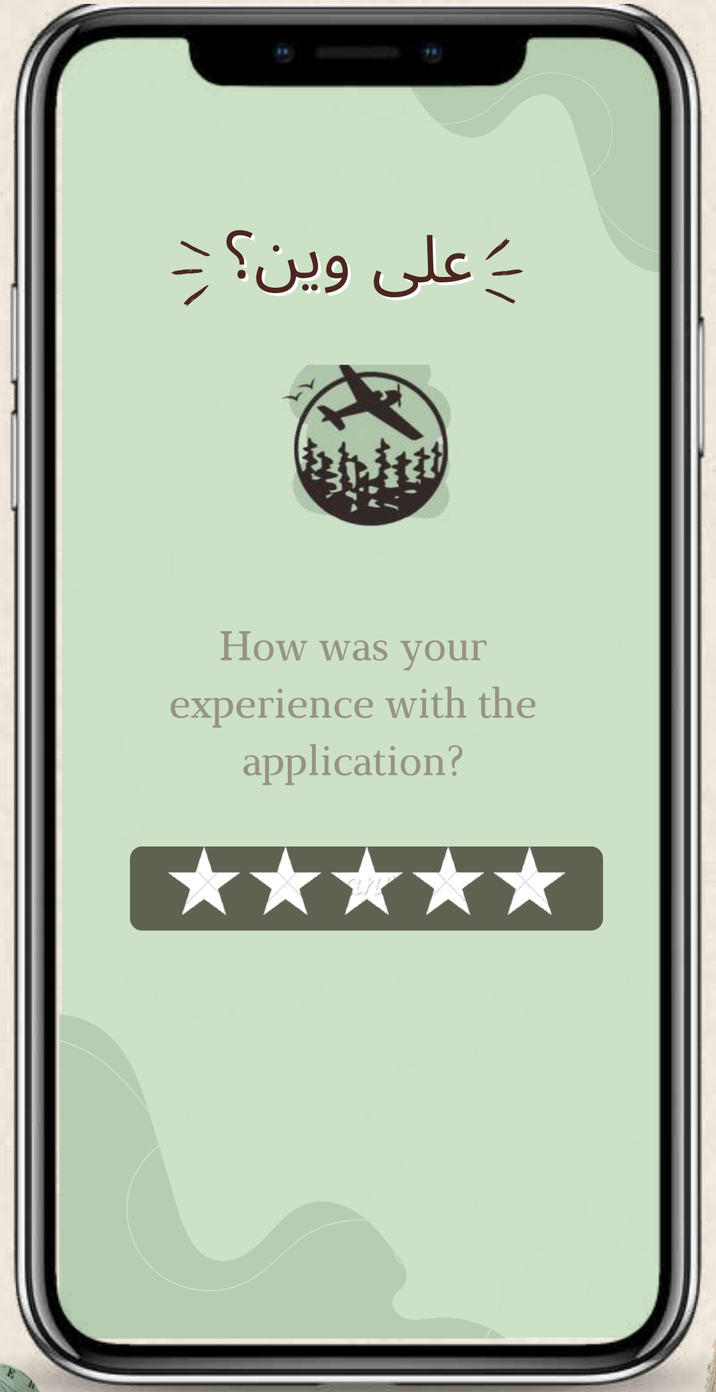
Payment

cancel
of reservation

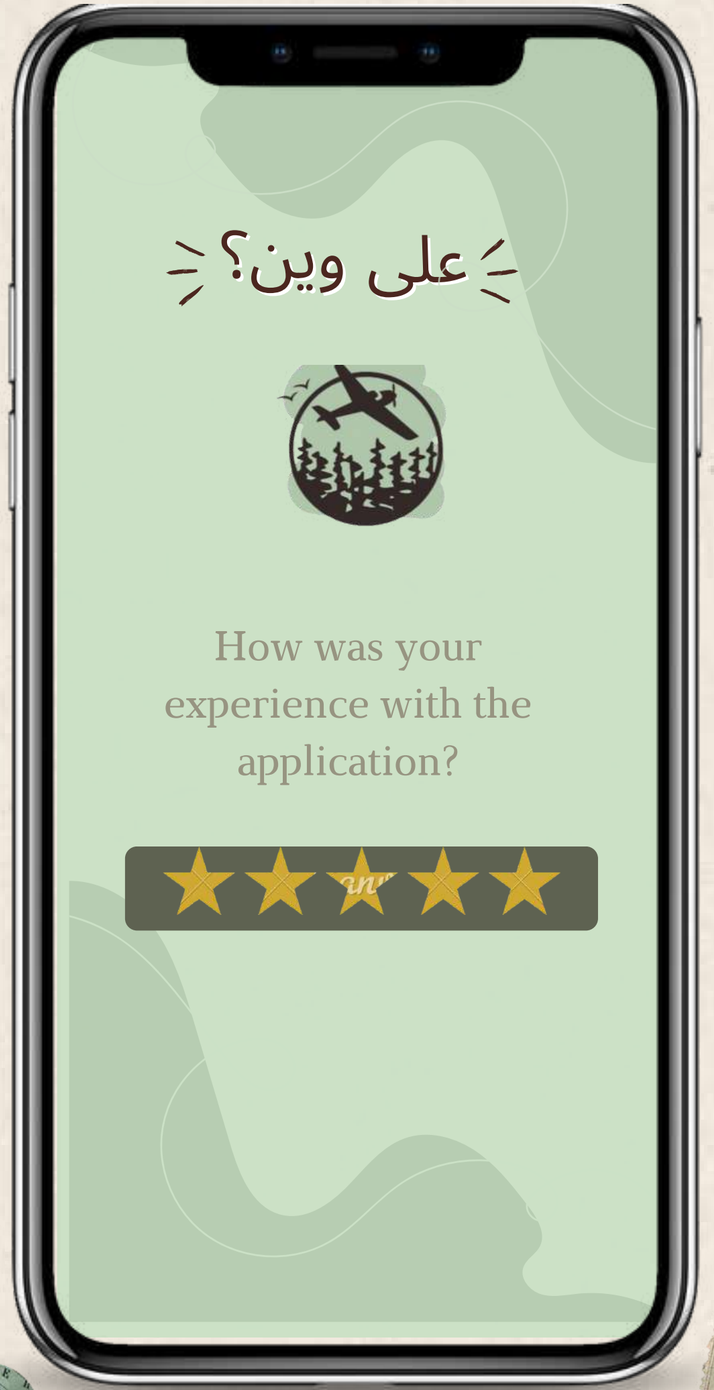
Your reservation has
been confirmed
successfully

The reservation has
been canceled and the
money has been
added to the wallet

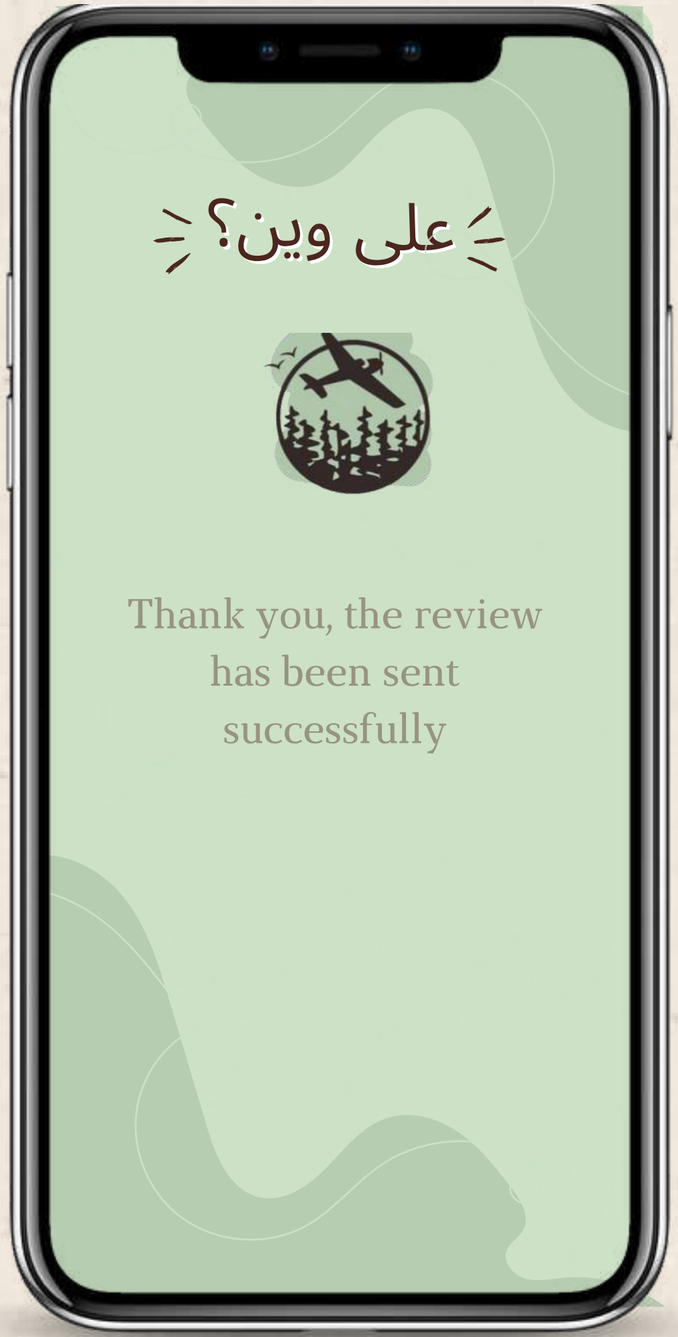
Prototype:



Prototype:



Prototype:



Thank
you very
much!