A tropical beach at sunset. The sky is a mix of deep blue and orange, with scattered white clouds. The sun is low on the horizon, casting a warm glow over the ocean. Waves are breaking gently onto a sandy beach. On the right side, there are several palm trees and large, dark rocks.

A Journey to the Future

Reisebüro Reis

Agenda for Today

A Journey to the Future



01 **Introduction**
Welcome, Meet the
Team

02 **Storyline**
Our Journey to the
Future

03 **Our Approach**
Roadmap of the
Project

04 **UI**
Mockup, UML,
Demo

05 **API**
Idea, Demo

Welcome to “Völkerswalden an der Südlichen Weinstraße”

Fibre Optic Cable

for the 2.000 citizens

How can we help digitalize the local jobs?

Where can software be utilized?

How can the locals work together?

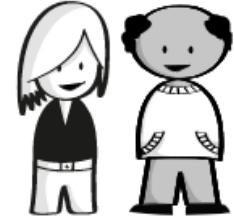
And where can interfaces be used?

Let's start



Mia Reis

Travel Agency



**Michelle & Max
Merlot**

Winery



Bruno Bärber

Barber

Digitalization



Familie Gelatelli

Ice-Cream Shop



**Dr. Carla von
Bettwitz**

Hotel Owner



Reisebüro Reis

A Journey to the future

Meet the Team

Contributors to the project



Anna Gossner

Frontend Developer, BASF



Cedrik Baedorf

Backend Developer, SAP



Florian Veitz

Backend Developer, SAP



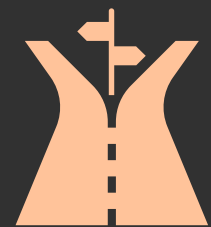
Jonas Becker

Frontend Developer, BASF



Storyline

Join us on our journey to the future



TRA

VEL

Digital Solution

What problems get solved through the software for Mia Reis and her employees?

Before:

**Paper-
work**

A lot of it.

Now:

**One
System**

Everything in one place.
Digitalized.

Sustainable



Efficient



Flexible



Satisfactory

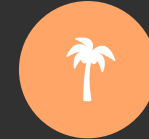


Improvements for the Travel Agency



Sustainability

No more paperwork



Flexibility

Customer wishes can be
changed quickly



Efficiency

As a result of optimized
working processes



Satisfaction

Satisfied employees, as
well as customers



Our Approach

How did we turn our ideas into code?



Our Journey

01

Idea

- Collecting ideas for the software:
 - Who is it for?
 - What processes should it include?
- Brainstorming about interfaces & possible connections
- Setting up a GitHub repository
- Division of tasks

02

Modeling

- Use Case Diagram
- Use Case Documents
- Class Diagram
- Entity Relationship Model

Programming

- JPA Entities
- Junit Tests
- Frontend: JavaFX
- Backend

Mockup

Designing a mockup for the different use cases,
as well as alternative flows & errors

03



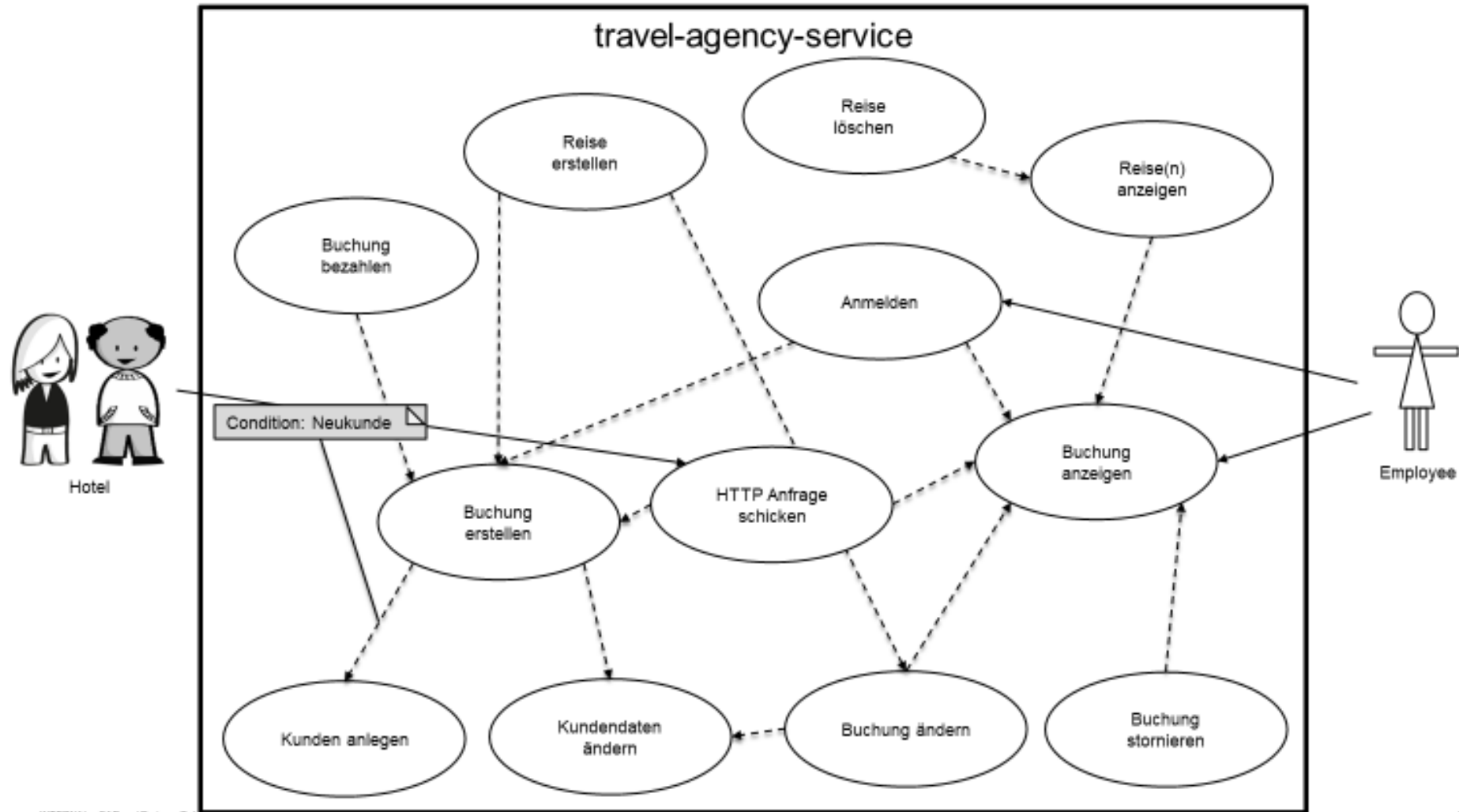
Backend

- Database
- Server
- API

04



Use Cases

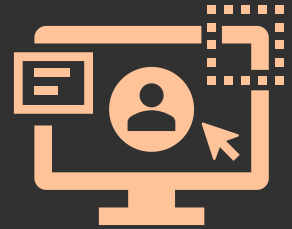




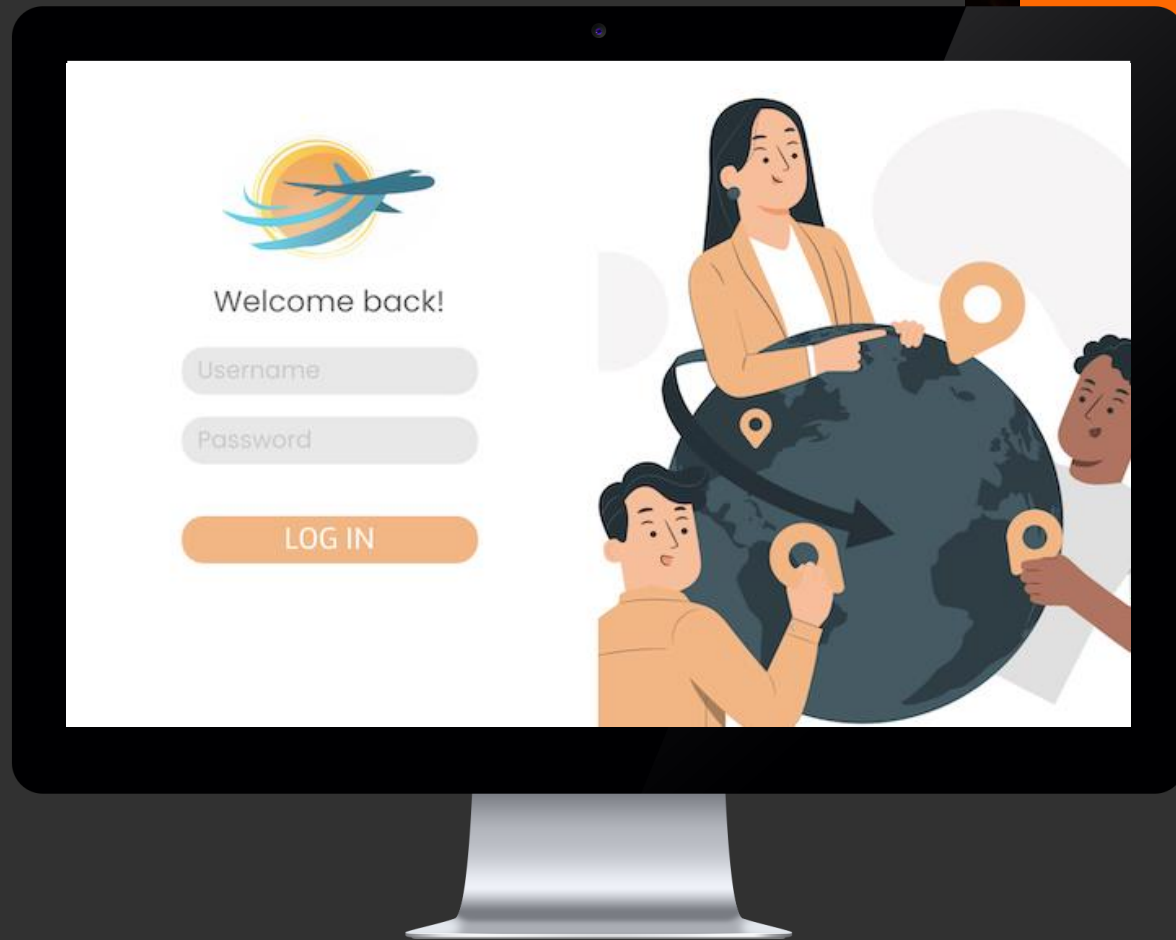
UI

User Interface

Mockup, Database Model and Demo



UI Mockup Demo

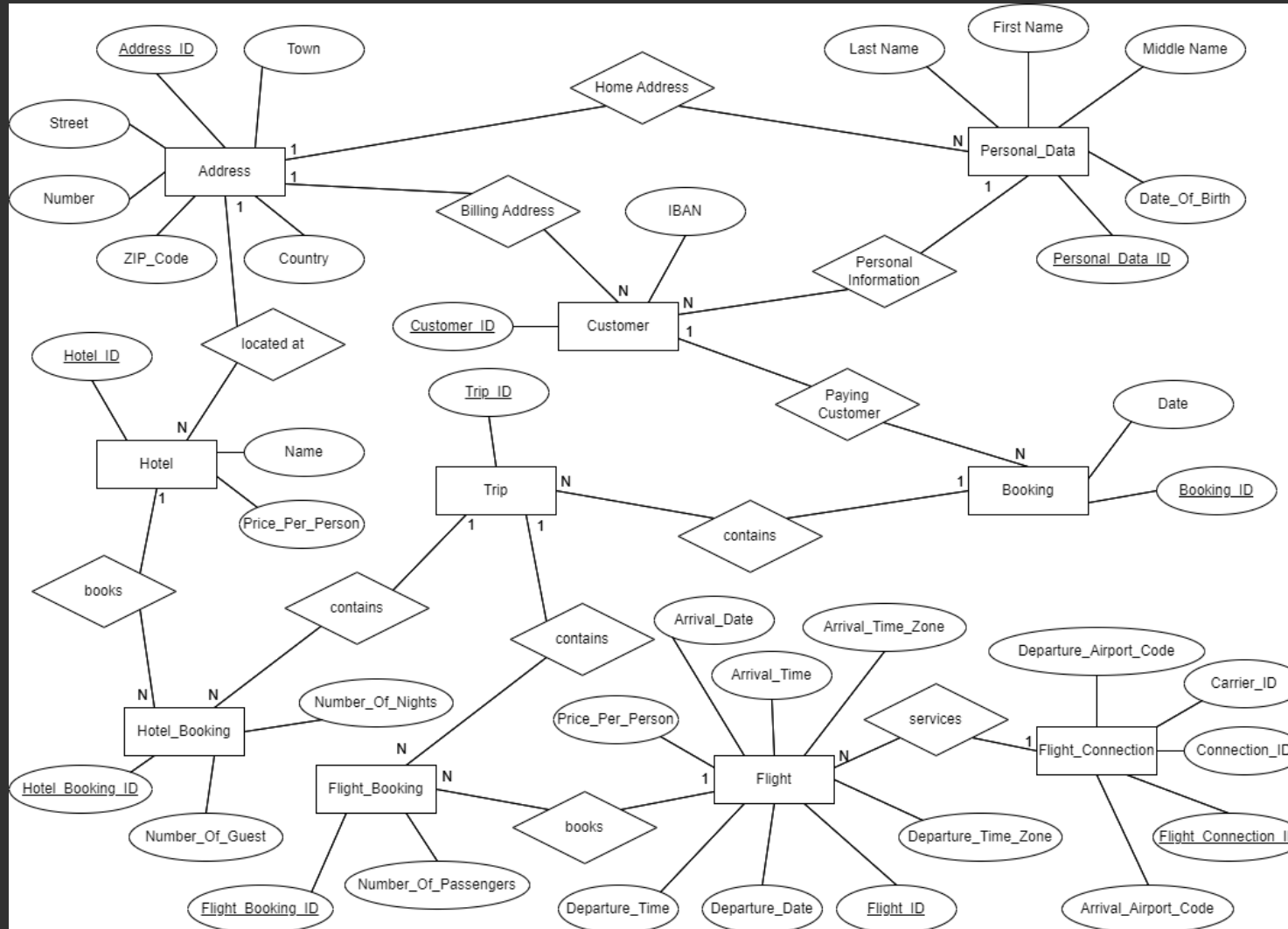


Mockup

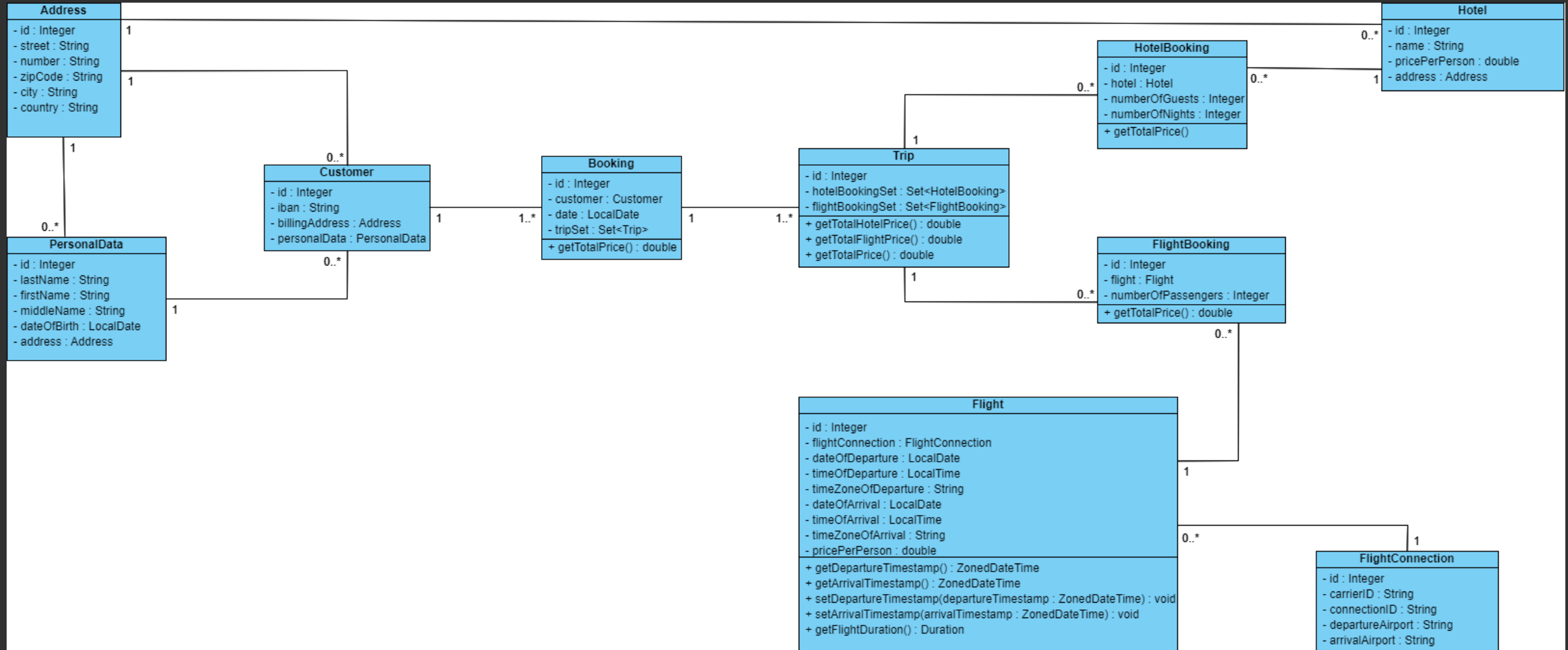
Database Model

Entities

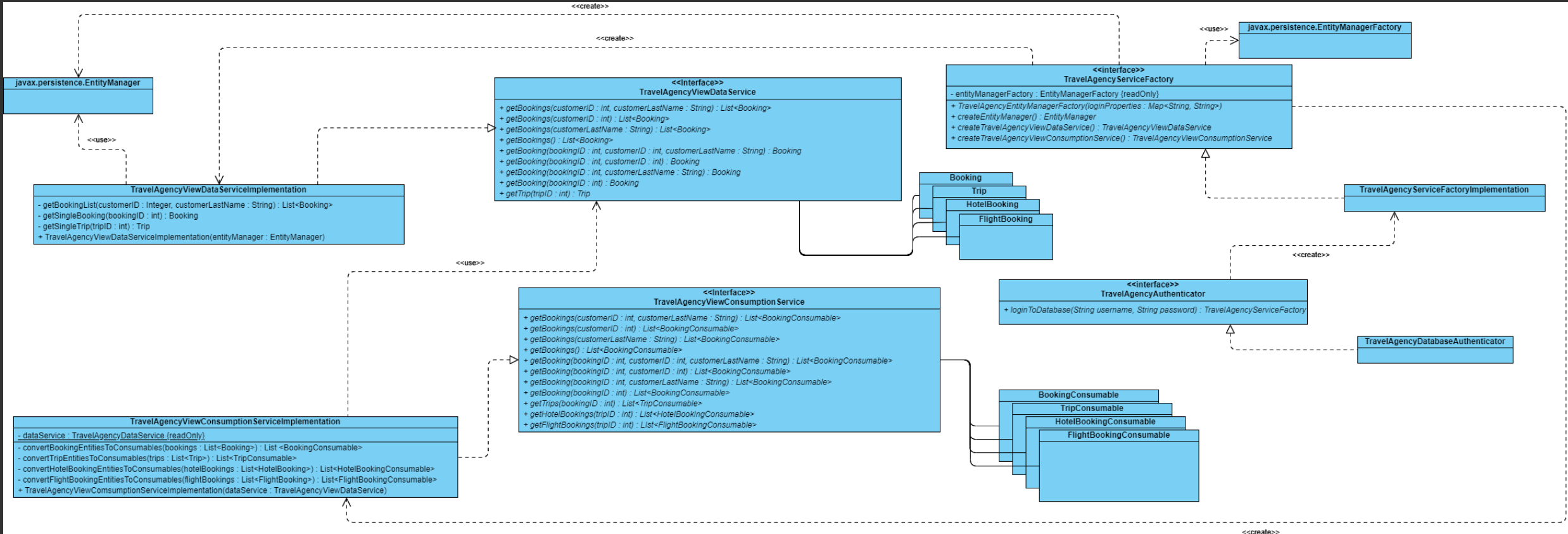
- Address
- Personal data
- Customer
- Hotel
- Hotel booking
- Flight connection
- Flight
- Flight booking
- Trip
- Booking



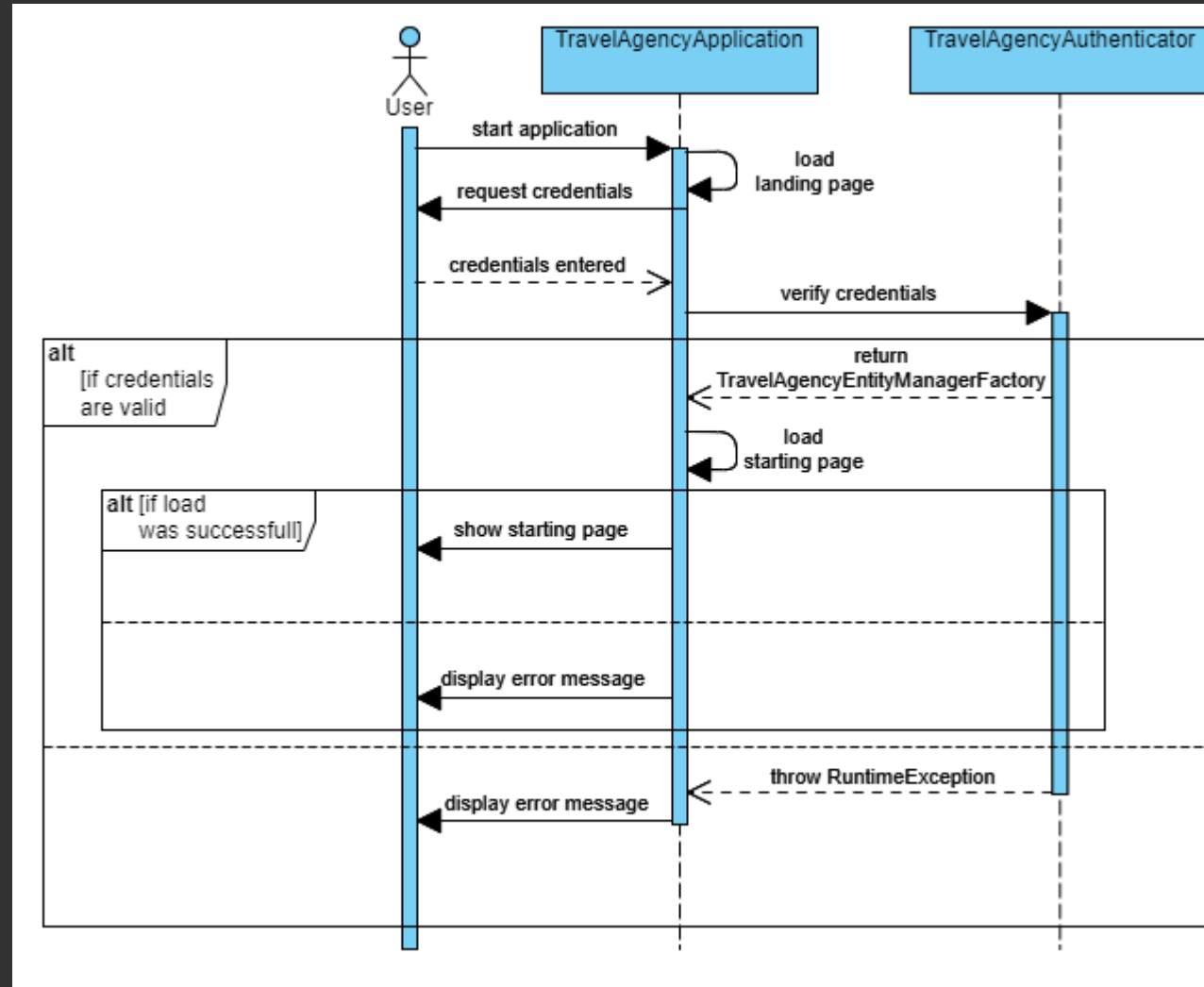
Database Model



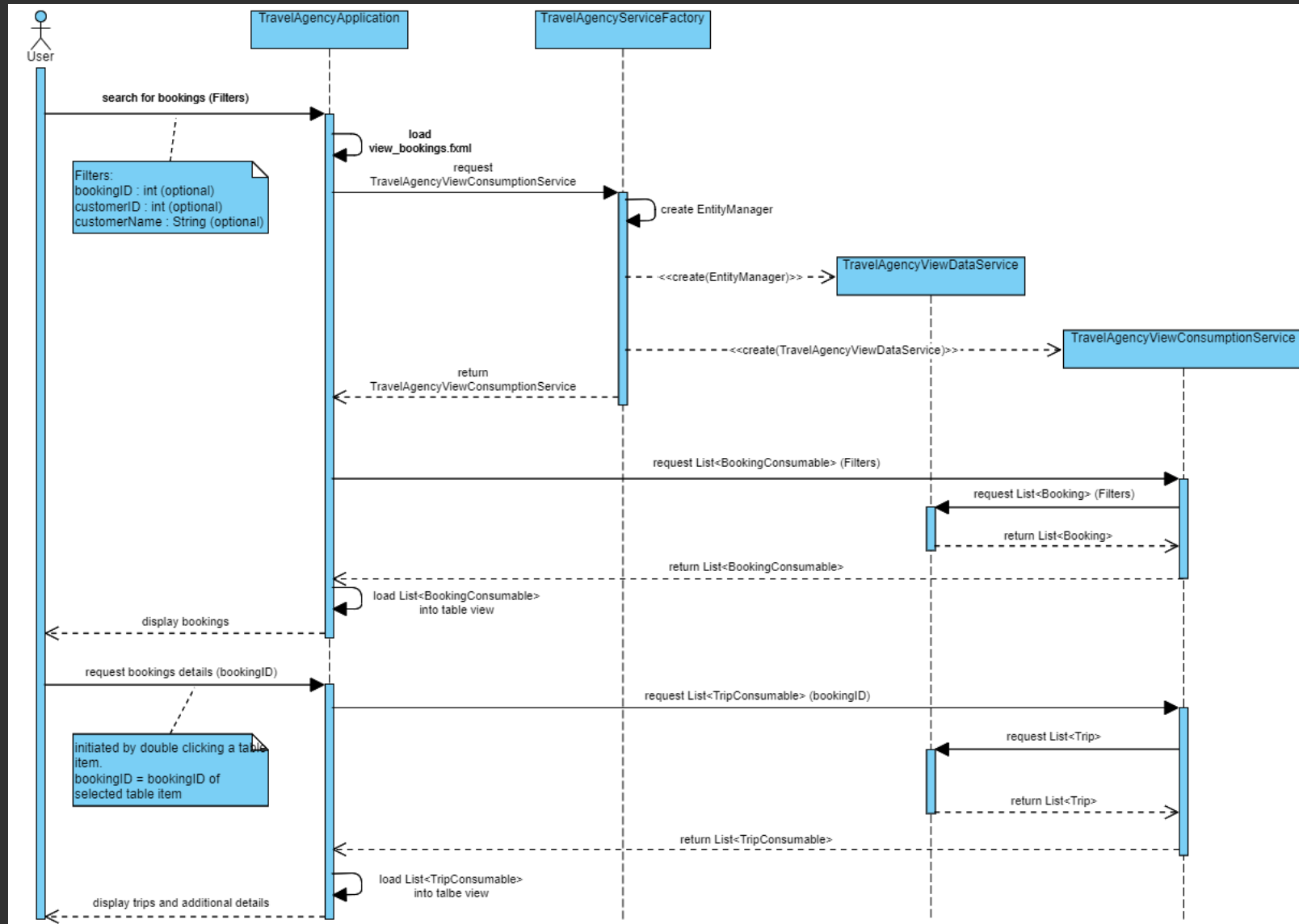
Service Architecture



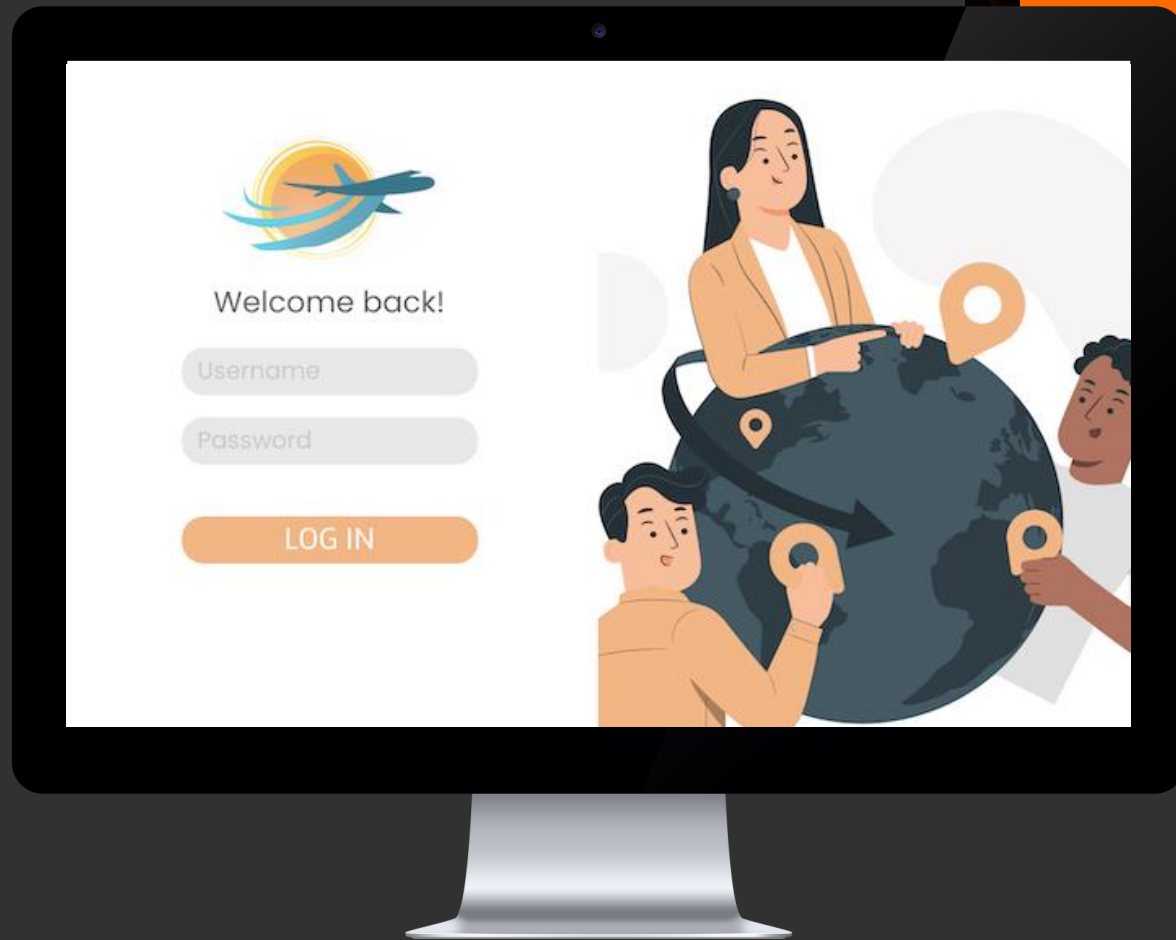
Login Process



Service Process



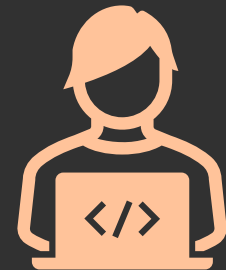
UI Demo





API

Application Programming Interface
API Ideas, Demo



Building Bridges.

How can we adapt to a changing and more sustainable world?

By building bridges and leveraging the benefits of digital transformation.



Dr. Carla von Bettwitz

Hotel Owner

Data exchange

Employees of the hotel can use the software to book flights & hotels for their customers. Third parties can use our API to benefit from our solution.



Better service

For the customers & enterprises



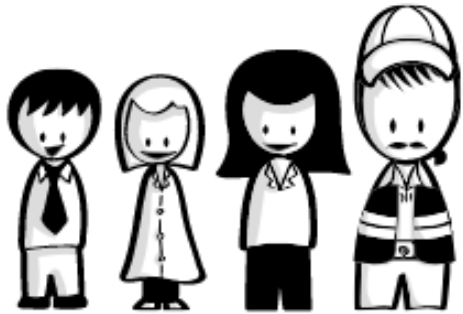
Shared system

Shared data and platform

Go to next

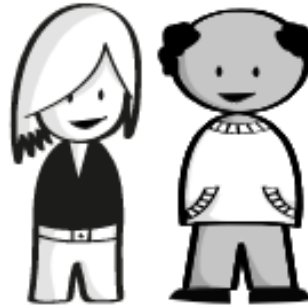


Other Possible Interfaces



Famille Gelatelli

Ice-Cream Shop



**Michelle & Max
Merlot**

Winery

Voucher Campaign

Every customer receives a voucher for either the ice-cream shop or the winery.



Support

Supporting the other local businesses



Customer Value

Increase of customer value and loyalty

API Demo

Start



● ● ● ●

Thank you
for
your
attention!

Any questions?

http://localhost:8500/getBookings

Send

200 OK

153 ms

15.6 KB

ly ▼

Auth ▼

Query ²

Headers

Docs

URL PREVIEW

http://localhost:8500/getBookings?username=demo&password=123



Add

Delete All

Toggle Description

username

demo



password

123




Preview ▼

Headers ²

Cookies

Timeline

```
1 [
2   {
3     "date": "2023-02-01",
4     "price": 17589.75,
5     "trips": [
6       {
7         "flights_price": 3000.0,
8         "flight_bookings": [
9           {
10            "flight": {
11              "flight_connection": {
12                "id": 1,
13                "carrierID": "LH",
14                "connectionID": "1007",
15                "departureAirport": "FRA",
16                "arrivalAirport": "LAX"
17              },
18              "departure_timestamp": "2023-05-01T12:45+02:00[UTC+02:00]",
19              "price": 749.99,
20              "arrival_timestamp": "2023-05-01T15:15-07:00[UTC-07:00]",
21              "id": 1
22            },
23            "passengers": 2,
24            "price": 1499.98,
25            "id": 1
26          }
27        ],
28        "hotels_price": 3000.0,
29        "id": 1,
30        "hotel_bookings": [
31          {
32            "id": 1,
33            "hotel": {
34              "id": 1,
35              "name": "Excelsior Hotel Ernst",
36              "pricePerPerson": 500.0,
37              "address": {
38                "id": 5.
```


GET  http://localhost:8500/getBookings


Send 

401 Unauthorized

2.43 ms

28 B


Body 

Auth 

Query ²

Headers

Docs

Preview 

Headers ²

Cookies

URL PREVIEW

http://localhost:8500/getBookings?username=wronguser&password=wrongpassword



Add

Delete All

Toggle Description

username

wronguser




password

wrongpassword



¹ Invalid credentials provided


GET  http://localhost:8500/getBookings


Send 

401 Unauthorized

3.06 ms

28 B


Body 

Auth 

Query ²

Headers

Docs

Preview 

Headers ²

Cookies

URL PREVIEW

http://localhost:8500/getBookings



Add

Delete All

Toggle Description

name

value




name

value



1 Invalid credentials provided


GET  http://localhost:8500/getAddresses


Send

404 Not Found

1.49 ms

50 B


Body 

Auth 

Query ²

Headers

Docs

Preview 

Headers ²

Cookies

URL PREVIEW

http://localhost:8500/getAddresses?username=demo&password=123



Add

Delete All

Toggle Description

username

demo



password

123



404 Not Found

No context found for request