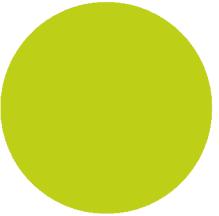




# VG I booking

## TOPIC 2: A BOOKING PLATFORM FOR GROUPS

**Objective:** Develop a WEB APP that allows both customers and administrators to perform booking processes in different roles.

 Team Franz

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Natalia Dolynska

# OUR USERS COME FROM:



1. <https://www.ingolstadt.de/kitas-in>

2. <https://www.ingolstadt-ifg.de/wirtschaft-foerdern/standort-wirtschaft/bildung>

3. <https://www.ingolstadt.de/Wirtschaft/Wissenschaft/>

# PROBLEM STATEMENT

WHAT PROBLEM ARE WE TRYING TO SOLVE?



Overcrowded busses



Safety

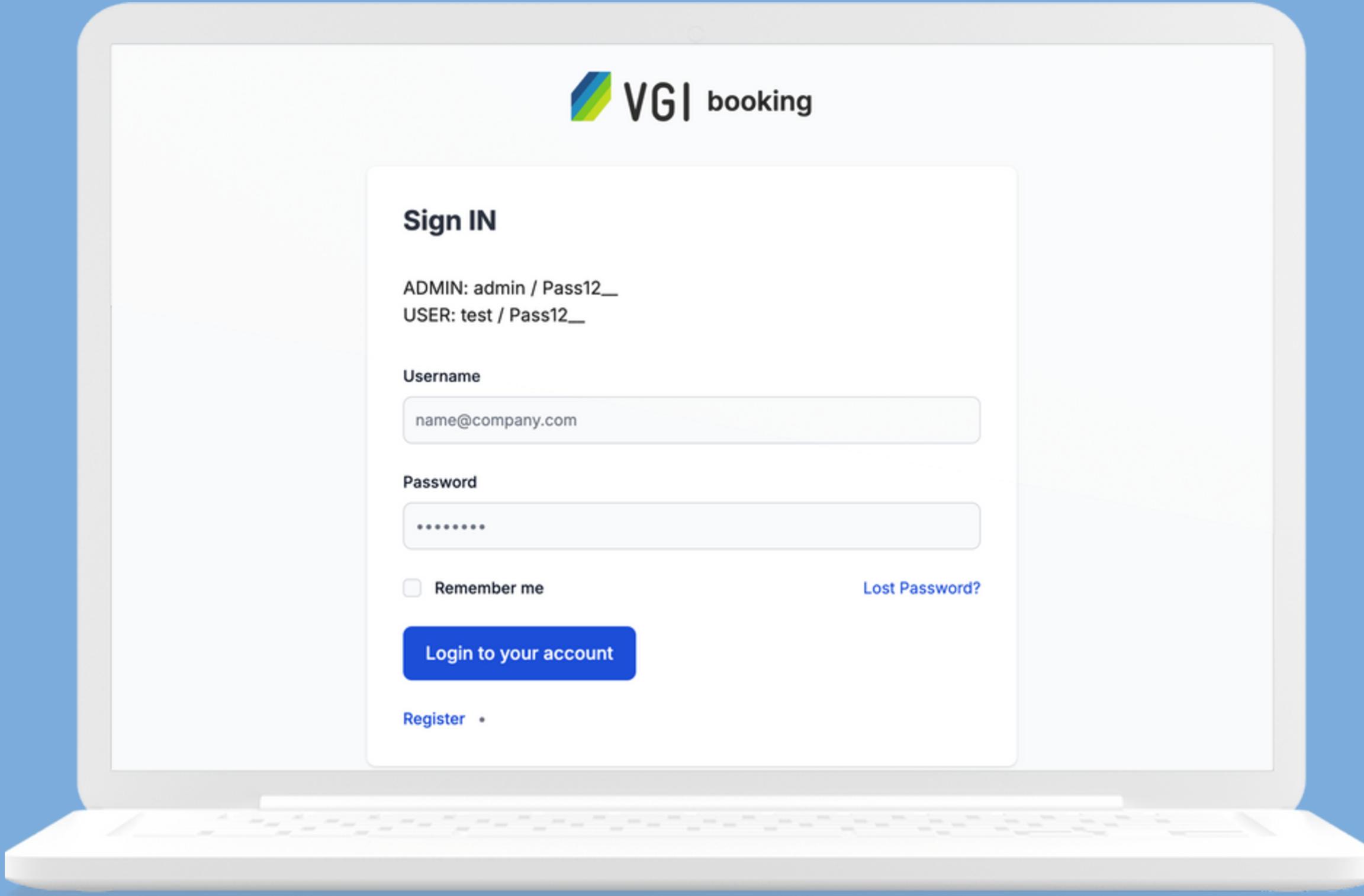


Manual phone administration



"Making Bus Excursions

Easy, Organized, and Safe"



---

## WHAT WE HAVE ACHIVED



# DETAILS: USER ROLE

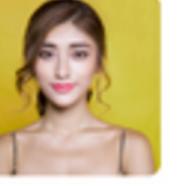
VGI booking

Bookings

Profile

Home > Users > Settings

## User settings



**Katharina Hoffmann**  
JPG, GIF or PNG. Max size of 800K

[Upload picture](#) [Delete](#)

### General information

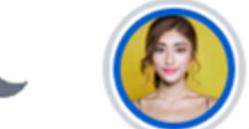
Full name	Country
Katharina Hoffmann	Country
City	Zip code
City	Zip code
Address	Email
Address	Email
Phone	
123-123-123	

[Save all](#)

### Password information

Current password	Current password
Current password	New password

[Save all](#)



test@school.de

Bookings

Sign Out

ACTION

# DETAILS: USER ROLE - BOOKING SECTION

The image displays two screenshots of the VGI booking application interface.

**Screenshot 1: All bookings**

This screenshot shows the main dashboard with the VGI booking logo at the top left. A navigation bar on the left includes 'Bookings' (selected) and 'Profile'. On the right, there's a user profile icon and a 'Add new booking' button. The central area is titled 'All bookings' and contains a table header with columns: ROUTE, DATE, FROM, TO, DEPARTURE, GROUP SIZE, STATUS, and ACTION.

**Screenshot 2: Add new booking**

This screenshot shows the 'Add new booking' form. It has several input fields: 'Group Size' (placeholder: Enter group size), 'Departure Date' (placeholder: Enter date), 'Departure Stop' (placeholder: Enter departure stop), 'Arrival Stop' (placeholder: Enter arrival stop), 'Time' (input: 00:00, with a radio button next to it), 'Line Name (Optional)' (placeholder: Enter line name), and a checkbox 'Is Arrival Time'. At the bottom is a 'Search' button.

# DETAILS: USER ROLE - BOOKING SECTION

Group Size  Departure Date

Departure Stop  Arrival Stop

Time  Line Name (Optional)

Is Arrival Time

**Search**

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Group Size  Departure Date

Departure Stop  Arrival Stop

Time  Line Name (Optional)

Is Arrival Time

**Search**

**70** 2024-11-20  
Verkehrsverbund Großraum Ingolstadt AöR  
**Departure:** 15:02  
**Arrival:** 15:12  
**Travel Time:** 10 minutes  
**Available Seats:** 0 / 30

Is Arrival Time

**Search**

**70** 2024-11-20  
Verkehrsverbund Großraum Ingolstadt AöR  
**Departure:** 15:02  
**Arrival:** 15:12  
**Travel Time:** 10 minutes  
**Available Seats:** 0 / 30  
**Fully Booked**

**70** 2024-11-20  
Verkehrsverbund Großraum Ingolstadt AöR  
**Departure:** 15:12

# DETAILS: USER ROLE - BOOKING RESTRICTION

Is Arrival Time

[Search](#)

**70**

Verkehrsverbund Großraum Ingolstadt AöR

Departure: 15:02

Arrival: 15:12

Travel Time: 10 minutes

Available Seats: 0 / 30

Fully Booked

2024-11-20

**70**

Verkehrsverbund Großraum Ingolstadt AöR

Departure: 17:02

Arrival: 17:12

Travel Time: 10 minutes

Available Seats: 30 / 30

[Book Now](#)

2024-11-20

**70**

Verkehrsverbund Großraum Ingolstadt AöR

Departure: 17:22

Arrival: 17:32

Travel Time: 10 minutes

Available Seats: 30 / 30

[Book Now](#)

**Booking Successful!**

Your booking has been confirmed. You can make another booking or view your booking list.

[Make Another Booking](#)

[View All Bookings](#)



Bookings

Profile

## All bookings

Add new booking

ROUTE	DATE	FROM	TO	DEPARTURE	GROUP SIZE	STATUS	ACTION
37	20 Nov 2024 (Wed)	Theodor-Heuss-Straße	Audi-Ring/Am Westpark	17:02	20	Pending	⌚
37	20 Nov 2024 (Wed)	Theodor-Heuss-Straße	Audi-Ring/Am Westpark	17:32	20	Pending	⌚
37	20 Nov 2024 (Wed)	Theodor-Heuss-Straße	Audi-Ring/Am Westpark	17:52	20	Pending	⌚
37	20 Nov 2024 (Wed)	Theodor-Heuss-Straße	Audi-Ring/Am Westpark	12:02	10	Pending	⌚
37	20 Nov 2024 (Wed)	Theodor-Heuss-Straße	Audi-Ring/Am Westpark	17:22	20	Pending	⌚

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# DETAILS: ADMIN ROLE

VGI booking

Dashboard      Restrictions      Capacities      Users      Upload GTFS      Admin View

### Upload GTFS Zip File

GTFS Zip File  
Choose File    GTFS-Daten.zip

Upload and Import

### Import Progress

54%  
102 entries loaded from routes.txt

VGI booking

Dashboard      Restrictions      Capacities      Users      Upload GTFS      Admin View

### 37 bookings

Booking this week (example)

The chart displays two data series: Bookings (blue line with dots) and Searches (orange line with dots). The x-axis represents the days from 01 Feb to 07 Feb. The y-axis represents the count of bookings or searches, ranging from 0 to 20. The chart shows a general upward trend with some fluctuations. A green arrow at the top right indicates a 12.5% increase.

ROUTE      DATE      FROM      TO      DEPARTURE      GROUP SIZE      STATUS      ACTION

VGI booking

### Bookings

This is a list of all bookings

ROUTE	DATE	FROM	TO	DEPARTURE	GROUP SIZE	STATUS	ACTION

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VGI booking

Dashboard      Restrictions      Capacities      Users      Upload GTFS      Admin View

### All route capacities

ROUTE      CAPACITY      ACTION

ROUTE	CAPACITY	ACTION
82	30	edit

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# DETAILS: ADMIN ROLE

The screenshot shows the 'All restrictions' page of the VGI booking application. On the left, there is a sidebar with icons for Dashboard, Restrictions (which is selected), Capacities, Users, Upload GTFS, and Admin View. The main area has a title 'All restrictions' and a button 'Add restriction'. Below is a table with columns: ROUTE, STATION, FROM DATE, TO DATE, IS ACTIVE, HIDE RESULTS, and ACTION. A single row is shown with values: (Tue) 19.11.2024 16:03, (Tue) 19.11.2024 16:03, True, False, and an edit icon. At the bottom, it says 'Crafted with ❤️ by Team Franz.' and '© 2024 All Rights Reserved.'

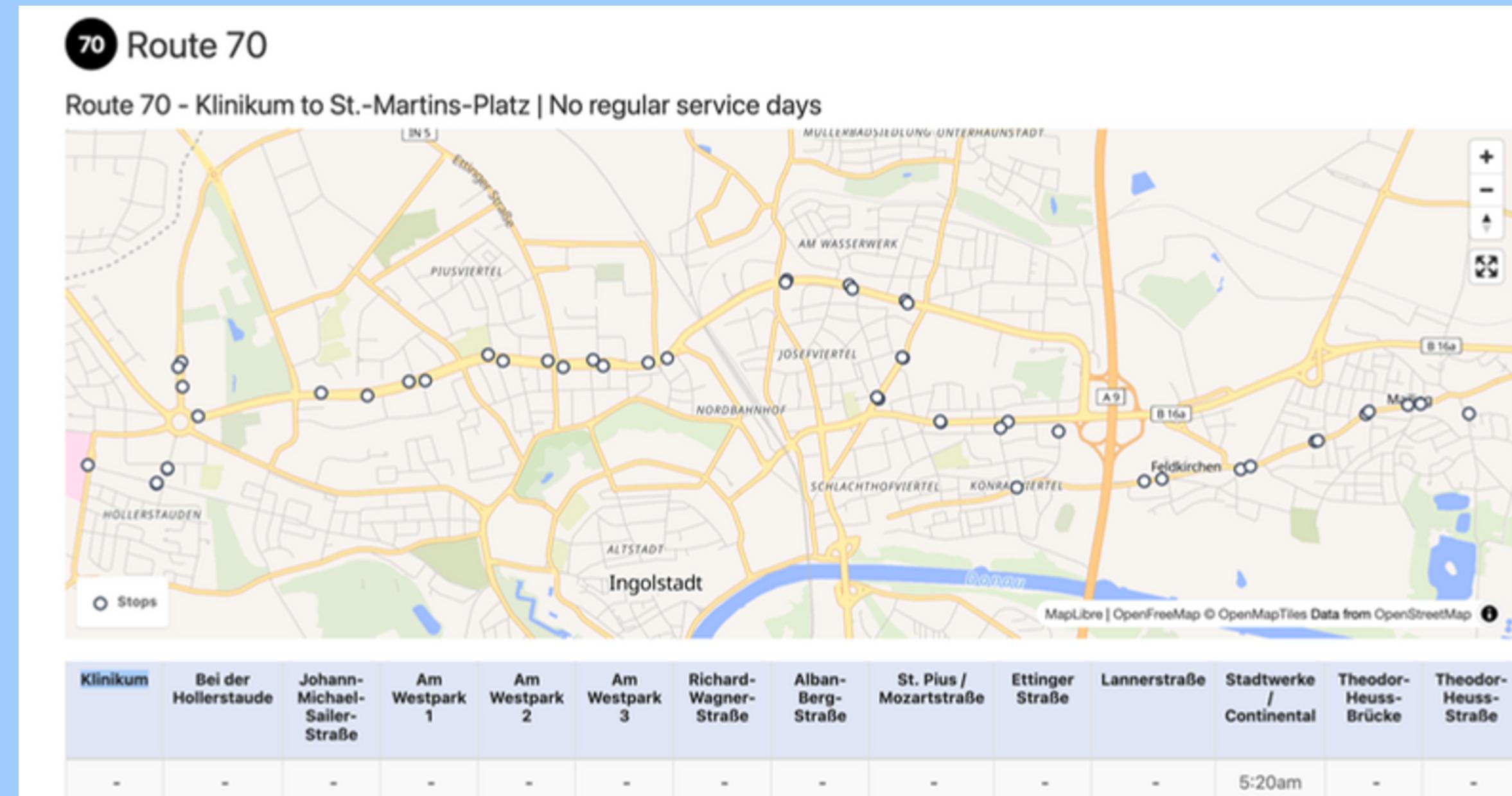
The screenshot shows the 'All users' page of the VGI booking application. The sidebar includes icons for Dashboard, Restrictions, Capacities, Users (selected), Upload GTFS, and Admin View. The main area has a breadcrumb 'Home > E-commerce > Users' and a title 'All users'. It features a search bar, filter icons, and a button 'Add new user'. A table lists two users: 'test' (Katharina Hoffmann, test@school.de, ID #5) and 'admin' (Albert Schweitzer, admin@vgi.de, ID #4). Each user row has 'Update', 'Delete', and 'Change Password' buttons. At the bottom, it says 'Showing 1-2 of 2' and 'Crafted with ❤️ by Team Franz.' and '© 2024 All Rights Reserved.'

# DETAILS: ADMIN ROLE

The screenshot shows the VGI booking application's Admin View. On the left, a sidebar lists navigation options: Dashboard, Restrictions, Capacities, Users, Upload GTFS, and Admin View (which is currently selected). The main area displays a timeline from 01 Feb to 07 Feb, with 'Bookings' selected over 'Searches'. A heading 'Bookings' indicates the list below is of all bookings. The booking table has columns: ROUTE, DATE, FROM, TO, DEPARTURE, GROUP SIZE, STATUS, and ACTION. Five entries are listed, all for route 37 on 20 Nov 2024 (Wed), departing from Theodor-Heuss-Straße to Audi-Ring/Am Westpark. All entries show a status of 'Pending'.

ROUTE	DATE	FROM	TO	DEPARTURE	GROUP SIZE	STATUS	ACTION
37	20 Nov 2024 (Wed)	Theodor-Heuss-Straße	Audi-Ring/Am Westpark	17:02	20	Pending	🔗
37	20 Nov 2024 (Wed)	Theodor-Heuss-Straße	Audi-Ring/Am Westpark	17:32	20	Pending	🔗
37	20 Nov 2024 (Wed)	Theodor-Heuss-Straße	Audi-Ring/Am Westpark	17:52	20	Pending	🔗
37	20 Nov 2024 (Wed)	Theodor-Heuss-Straße	Audi-Ring/Am Westpark	12:02	10	Pending	🔗
37	20 Nov 2024 (Wed)	Theodor-Heuss-Straße	Audi-Ring/Am Westpark	17:22	20	Pending	🔗

# DETAILS: VALIDATION VIA CREATED VISUALIZED SCHEDULE





**SCAN AND TRY: USER AND  
ADMIN ROLES**



<HTTP://164.92.93.229/USERS/SIGNIN/?NEXT=/>

# COMPLEXITY

Moderate level: 2 Servers - DB, Application.

**RESPONSIVE UI LIVE.**



**django**

**</>htm<sup>x</sup>**



**GTFS Kit**

# USABILITY



The solution is tested and running! DOABLE!



PostGIS extends the capabilities of the PostgreSQL.  
Allowing to use App for complex transportation tasks.



Compatible with AI solutions. Postgres can be used  
as a Vector Store.



Based on open-source resources.



Scalable and based on discussed parameters.

# FURTHER SPEPS/MODIFICATIONS:



**Flutter UI App: drastically shorten time, resources for app development for iOS and Android.**



**Admin chatbot: will provide data about ridership statistics from sensoring System (IRMA Matrix), booking trends + Infographics for Admin.**



**User chatbot: provide statistics, alerts regarding high-demand days, answer to FAQ.**



**Driver and User Notification: email, SMS, messenger, app.**

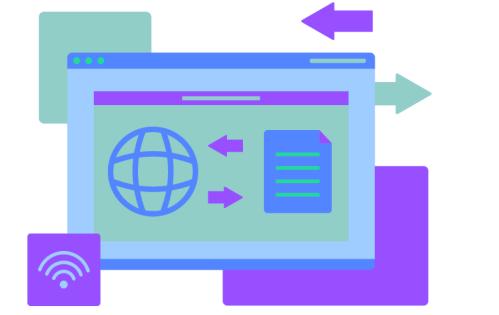


**Add a functionality regarding for notification of driver regarding disabled passanges.**

# OUR APP IS LIVE and ABLE:



- Streamline and Automate Booking
- Ensure Efficient Use of Resources
- Reduce Administrative Work
- Improve Accuracy and Convenience





# THANK YOU!

