HTL Leoben	**HTL Leoben** **Higher Federal Technical College of Industrial Engineering – Information technology and smart production**	**Diploma Exam**

DIPLOMA THESIS
Documentation

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Topic	Taxi Booking System with Supabase
Co-operation partners	NSJ Cars

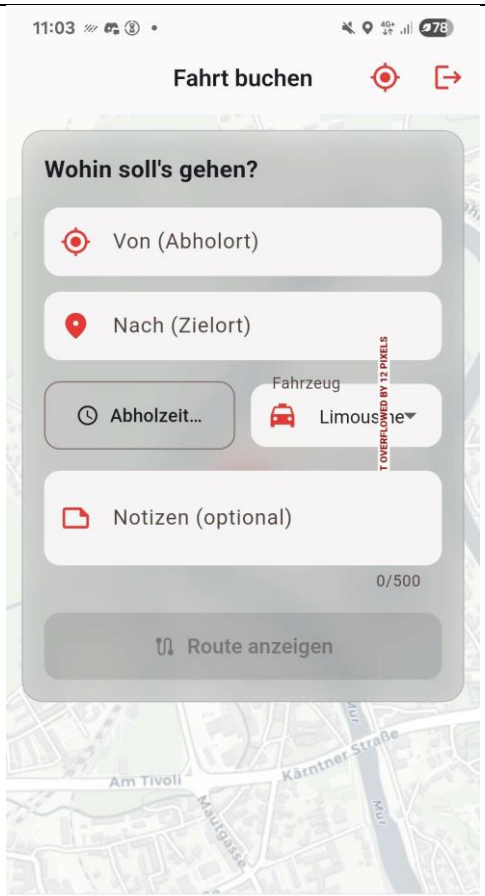
Assignment of tasks	The partner company currently only offers an outdated website for booking rides. This site is neither mobile-optimized nor user-friendly. There is no app solution, and all management is handled manually. A comprehensive modernization is necessary in order to improve customer service and efficiency.

Realisation	Driver App (Iszovits David) • Mobile Flutter app for drivers • Display of ride assignments in real time • Capture and transmission of GPS data to the backend • Focus areas: efficient location processing, user guidance, offline capability, integration with Supabase for live data handling Customer App (Winter Marvin) • Book rides and transmit current position • Track driver status in real time • Focus areas: secure user registration with Supabase Auth, positioning with Geolocator, realtime communication with the backend, intuitive UI/UX Admin Web Interface (Maksic Nikola) • Browser-based management of drivers, customers and rides • Focus areas: data structuring and editing, role and permission system, data filtering, usability Project Management (Luschenz Marvin) • Steering the overall development process • Coordination of task distribution, milestone planning, time management, quality assurance • Focus areas: agile methods (Kanban), team communication, documentation standards, selection of appropriate tools (Git, Notion, GitHub Projects), integration of all subprojects Overall System

	All modules are connected via Supabase. • Focus on: • Data consistency • Scalability • Real-time capability • User-friendliness

Results	The goal is a fully functional booking system that enables real-time ride dispatch, takes driver location data into account, and digitizes the management of bookings and personnel.

Illustrative graph, photo (incl. explanation)	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Fahrt buchen
Wohin soll's gehen?
Von (Abholort)
Nach (Zielort)
Abholzeit...
Fahrzeug
Limousine
Notizen (optional)
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Route anzeigen
Am Tivoli
Karntner Straße
Karte
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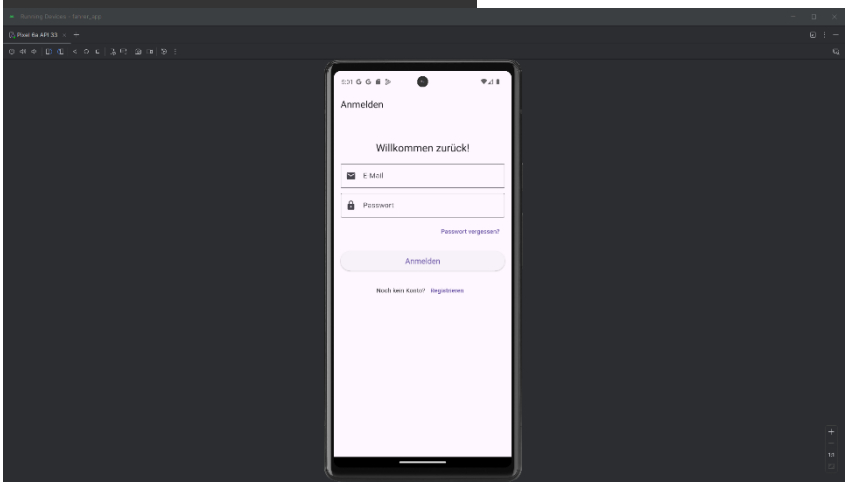
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