

main

1 Branch

0 Tags

Go to file

Add file

<> Code

🌱 Rodrigo-P-C


docs: fix bidirectional arrows in mermaid diagram

ed29edc · 3 days ago

🕒 4 Commits

📁 app	feat: Initial release of Smart Logistics VRP System	3 days ago
📁 docs	feat: Initial release of Smart Logistics VRP System	3 days ago
📁 frontend	feat: Initial release of Smart Logistics VRP System	3 days ago
📁 mobile	feat: Initial release of Smart Logistics VRP System	3 days ago
📄 .gitignore	feat: Initial release of Smart Logistics VRP System	3 days ago
📄 PROCESO_DE_COMPILACION.md	feat: Initial release of Smart Logistics VRP System	3 days ago
📄 README.md	docs: fix bidirectional arrows in mermaid diagram	3 days ago
📄 backend.log	feat: Initial release of Smart Logistics VRP System	3 days ago
📄 backend_debug.log	feat: Initial release of Smart Logistics VRP System	3 days ago
📄 debug_complete.py	feat: Initial release of Smart Logistics VRP System	3 days ago
📄 debug_optimize.py	feat: Initial release of Smart Logistics VRP System	3 days ago
📄 debug_optimize_request.py	feat: Initial release of Smart Logistics VRP System	3 days ago
📄 debug_places_standalone.py	feat: Initial release of Smart Logistics VRP System	3 days ago
📄 debug_sheets.py	feat: Initial release of Smart Logistics VRP System	3 days ago
📄 fix_connection.command	feat: Initial release of Smart Logistics VRP System	3 days ago
📄 inject_data.py	feat: Initial release of Smart Logistics VRP System	3 days ago
📄 migrate_clients.py	feat: Initial release of Smart Logistics VRP System	3 days ago
📄 migrate_schema.py	feat: Initial release of Smart Logistics VRP System	3 days ago
📄 reload_trigger.txt	feat: Initial release of Smart Logistics VRP System	3 days ago
📄 requirements.txt	chore: remove unused dependency comments	3 days ago
📄 resolve_huichapan.py	feat: Initial release of Smart Logistics VRP System	3 days ago
📄 snippet.py	feat: Initial release of Smart Logistics VRP System	3 days ago
📄 snippet_final.py	feat: Initial release of Smart Logistics VRP System	3 days ago
📄 start_all.command	feat: Initial release of Smart Logistics VRP System	3 days ago
📄 tunnel_fix.log	feat: Initial release of Smart Logistics VRP System	3 days ago
📄 update_url.py	feat: Initial release of Smart Logistics VRP System	3 days ago

README



Smart Last-Mile Logistics System (VRP Optimization)

A full-stack logistics platform designed to optimize delivery routes for small-to-medium businesses. It solves the **Vehicle Routing Problem (VRP)** with real-world constraints (security waypoints) and features an **Offline-First** mobile application for drivers.

TECH

FASTAPI | REACT NATIVE | OR-TOOLS | GOOGLE CLOUD

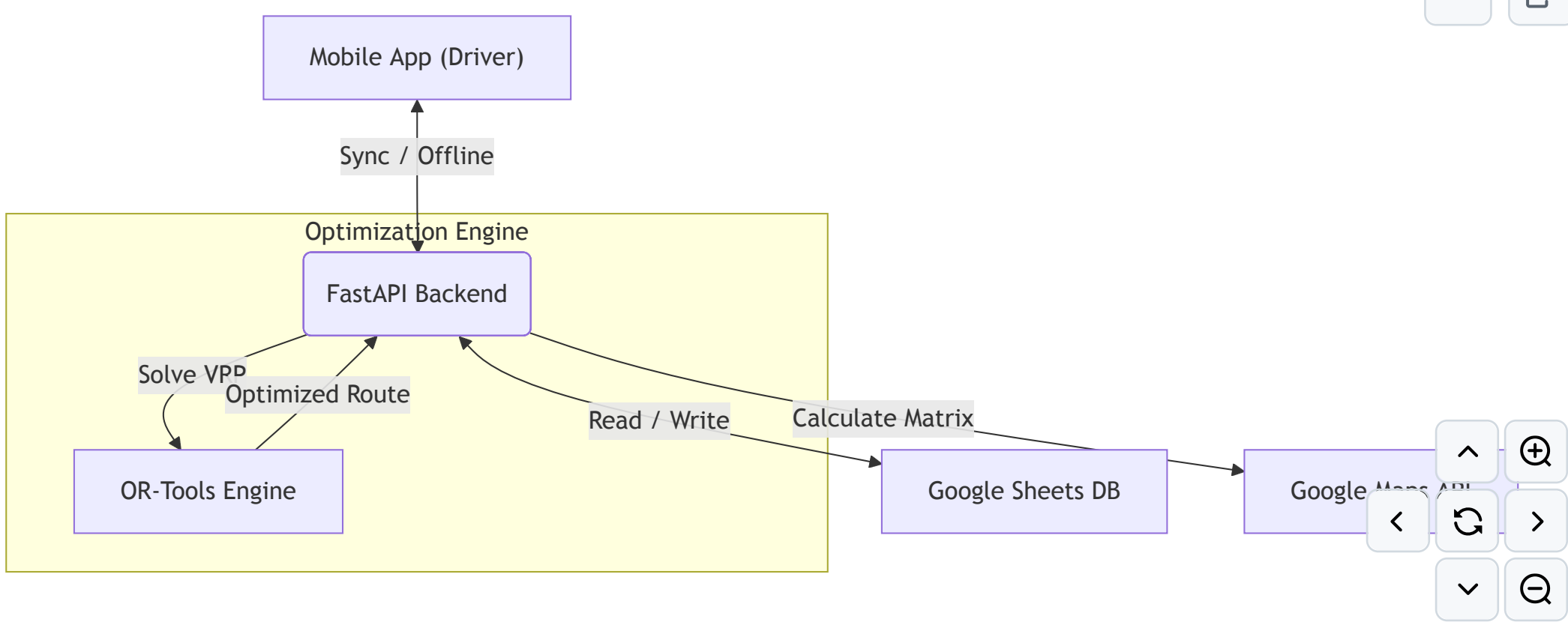
🎯 Key Features

- 📍 **Intelligent Route Optimization:** Uses **Google OR-Tools** to calculate the most efficient delivery sequence, minimizing distance and time.
- 🛡️ **Security Constraints:** Implements hard constraints (e.g., Mandatory Security Checkpoints in high-risk zones like Huichapan) directly into the routing algorithm.
- 📱 **Offline-First Mobile App:** React Native app capable of syncing data seamlessly. Drivers can complete deliveries and capture proof-of-delivery even without internet access.
- 📊 **Dynamic Dashboard:** Real-time visualization of orders, prospects, and routes using Google Sheets as a flexible, zero-cost database.
- 🧾 **Automated Invoicing:** Generates PDF receipts and WhatsApp logs automatically upon delivery completion.

🔧 Technology Stack

Component	Tech	Description
Backend	Python, FastAPI	High-performance API handling VRP logic and data sync.
Optimization	Google OR-Tools	Constraint programming solver for complex routing logistics.
Mobile App	React Native (Expo)	Cross-platform driver application with background sync.
Database	Google Sheets API	Cloud-native, user-friendly database for easy client management.
Geospatial	Google Maps API	Places, Directions, and Distance Matrix for precise navigation.

🏗️ Architecture



📦 Installation & Setup

Backend

- Clone the repo and navigate to root.
- Create a virtual environment:

```
python -m venv venv
source venv/bin/activate
```
- Install dependencies:

```
pip install -r requirements.txt
```
- Setup `.env` file with your API Keys (Google Maps, Sheets ID).
- Run the server:

```
uvicorn app.main:app --reload
```

Mobile

- Navigate to `/mobile`.
- Install dependencies:

```
npm install
```
- Run on device/simulator:

```
npx expo start
```

💡 About the Project

Developed as a solution to modernize logistics for local distributors (e.g., Dairy/Gas industries), focusing on UX and robustness against network failures.

About

Sistema de logística de última milla con optimización de rutas (VRP) y sincronización offline

📖 Readme

📈 Activity

⭐ 0 stars

👁 0 watching

🍴 0 forks

Releases

No releases published
[Create a new release](#)

Packages

No packages published
[Publish your first package](#)

Languages

JavaScript 55.5%

Python 34.4%

HTML 5.2%

CSS 2.9%

Shell 2.0%

Suggested workflows

Based on your tech stack

📦 Publish Node.js Package to GitHub Packages

Configure

Publishes a Node.js package to GitHub Packages.

📧 SLSA Generic generator

Configure

Generate SLSA3 provenance for your existing release workflows


🌀 Deno

Configure

Test your Deno project

More workflows

Dismiss suggestions

 © 2026 GitHub, Inc.

Terms

Privacy

Security

Status

Community

Docs

Contact

Manage cookies

Do not share my personal information