

Delivery System

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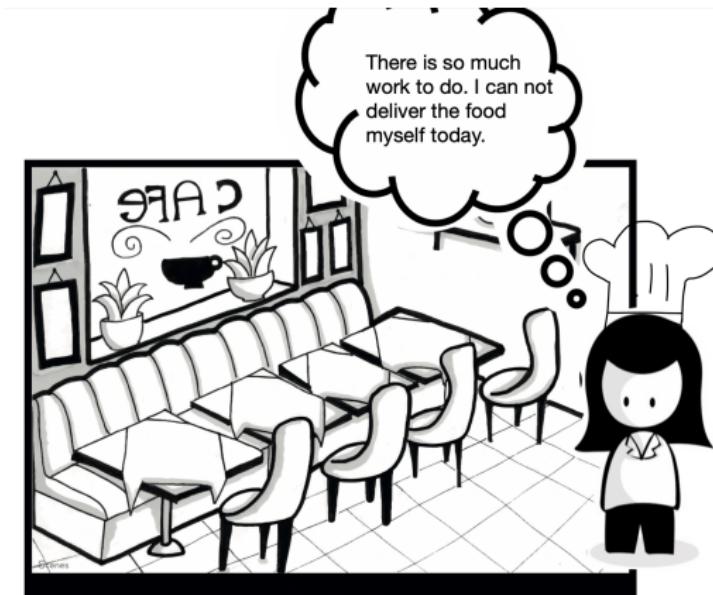
Outline

- 1 Service Idea
- 2 Service Architecture
- 3 API Overview
- 4 Implementation Details
- 5 Demo

Service Idea



Service Idea



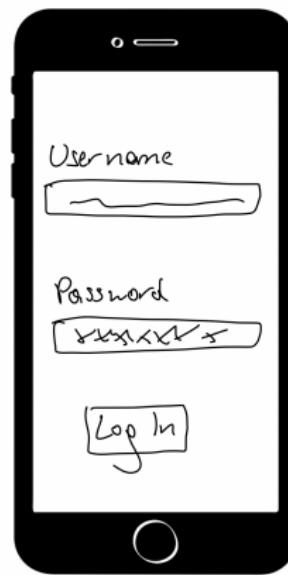
Service Idea



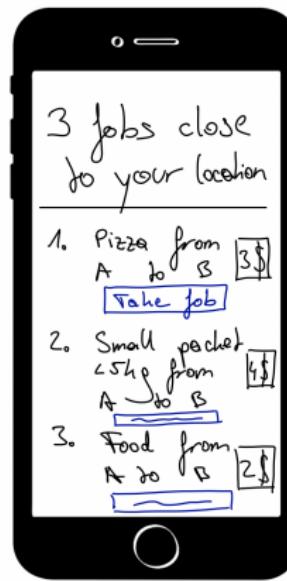
Service Idea



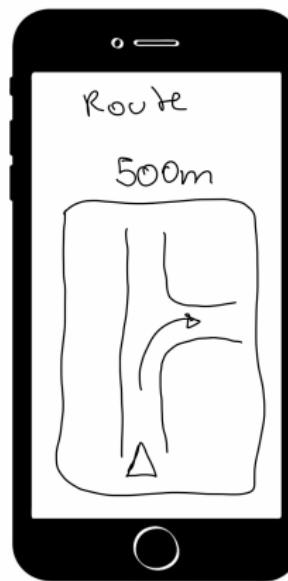
Service Idea



Service Idea



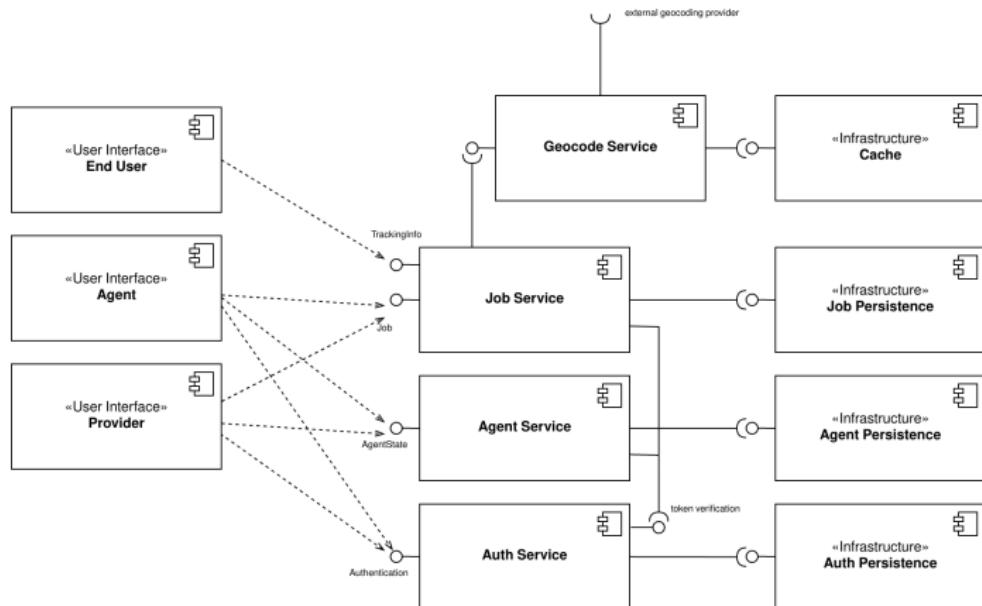
Service Idea



Important terms

- Job
- Provider
- Agent
- End User

Components



Example flow (provider)

1. Receives order from end user
2. Provider logs in: POST /auth/login
3. Provider creates job: POST /job

Example flow (agent)

1. Agent logs in: POST /auth/login
2. Agent queries jobs: GET /job?<filters=...>
3. Agent claims job: PUT /job/<job_id>
4. Agent's pushes updates: (PUT /agent/<agent_id>)*
5. Agent marks job as delivered: PUT /job/<job_id>
6. ...
7. Profit

Example flow (end user)

1. Orders food at restaurant...
2. ... and receives tracking link from provider
3. (GET /job/tracking/<job_id>)*

Implementation

- API implemented as microservices
- different frameworks for individual services
- based on precise definition



Swagger™



Dapper

SQLAlchemy

Auth and Job Service

- Python
- Flask
- SQLAlchemy
- SQLite

Agent and Geo Service

- C#
- .NET Core
- Dapper
- SQLite
- Open Street Map

Demo

