

BookSmart Agent

Conversational Google Calendar Booking
System (Medical | Salon | Any Service)



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Overview

The Problem

Our Objective

Multi-Agent Architecture

Interface

Use Cases and Videos

Direct Google Calendar API = No
Middleman, Full Control, Zero Cost

Natural Language Magic: "tomorrow", "next
Friday"

Limitations

The Problem

You have a business. A saloon, a medical studio, a restaurant..

The outdated appointment booking is slowing down your business and it is too time consuming for your clients/patients:

- Customers abandon clunky forms
- Paid tools cost €€€ and still feel robotic
- Patients/clients want to book in 10 seconds, in natural language, 24/7

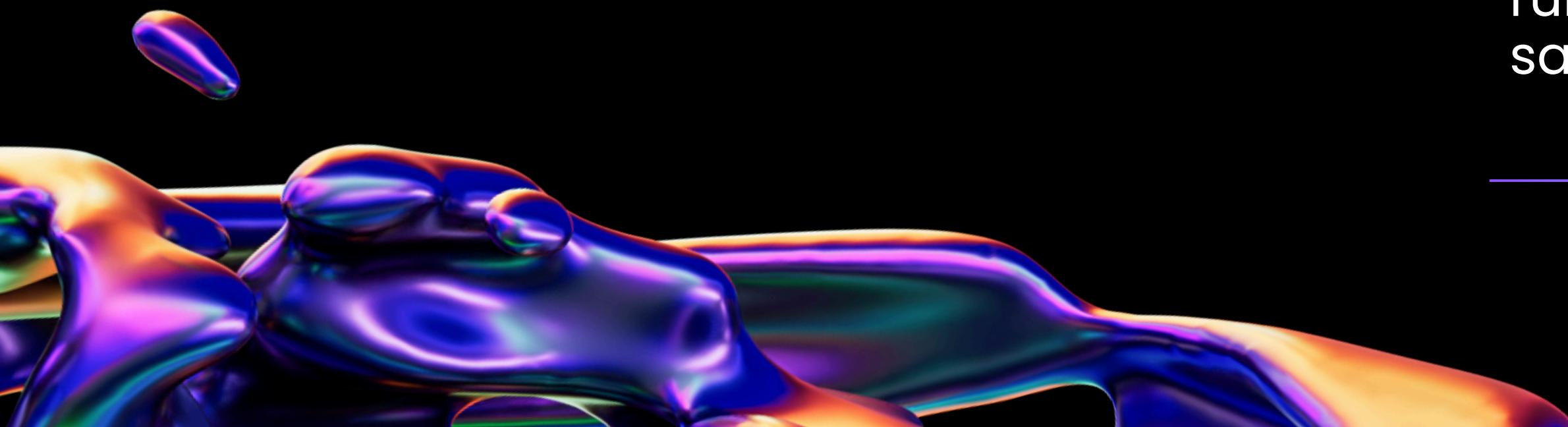
Our Objective

Replace human receptionists and
clunky forms with an AI that never sleeps

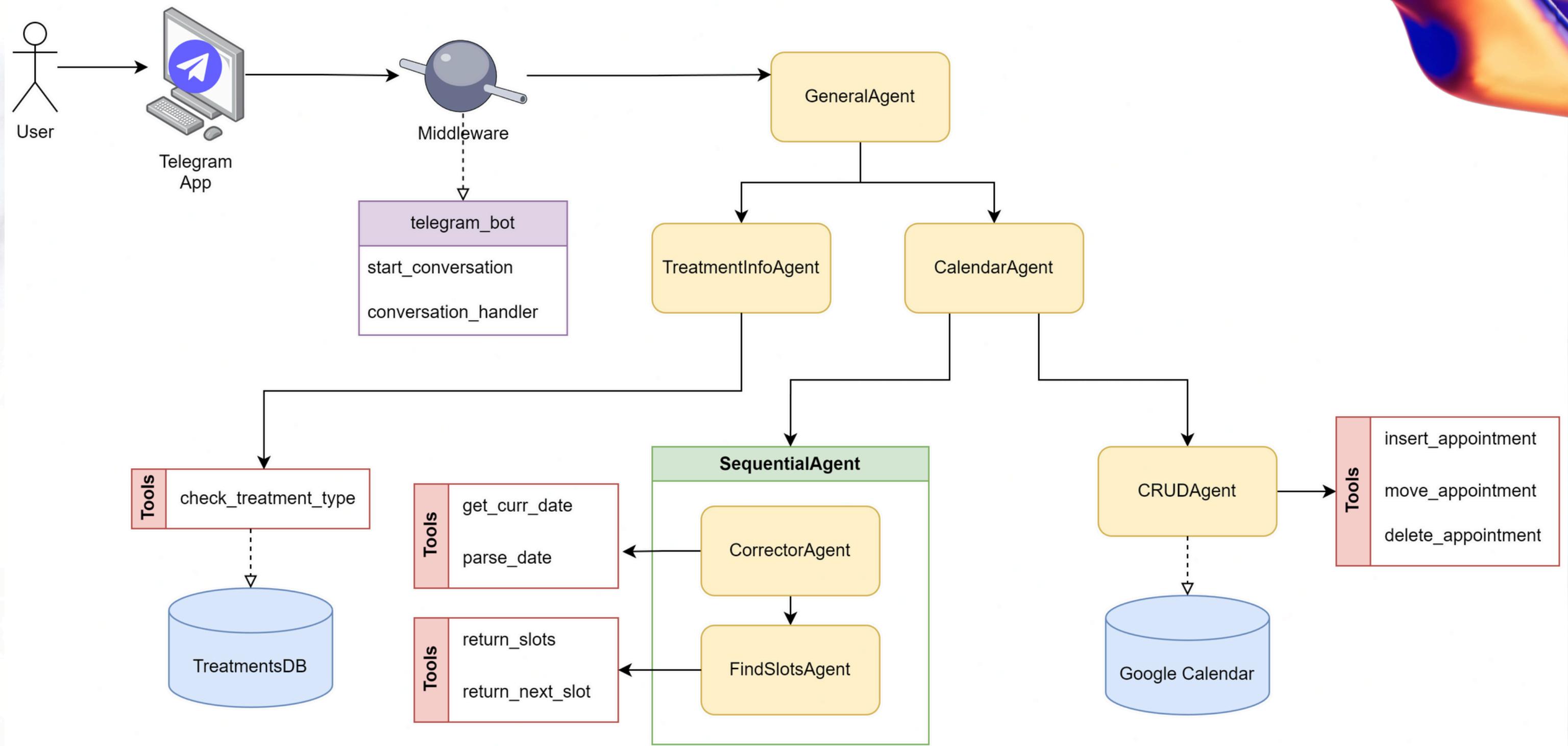
Books, reschedules, and
cancels appointments
100% conversationally

Works exactly like a perfect
secretary — instantly, politely,
without mistakes

Deploys in 5 minutes and
runs forever, for any clinic,
salon, or law firm

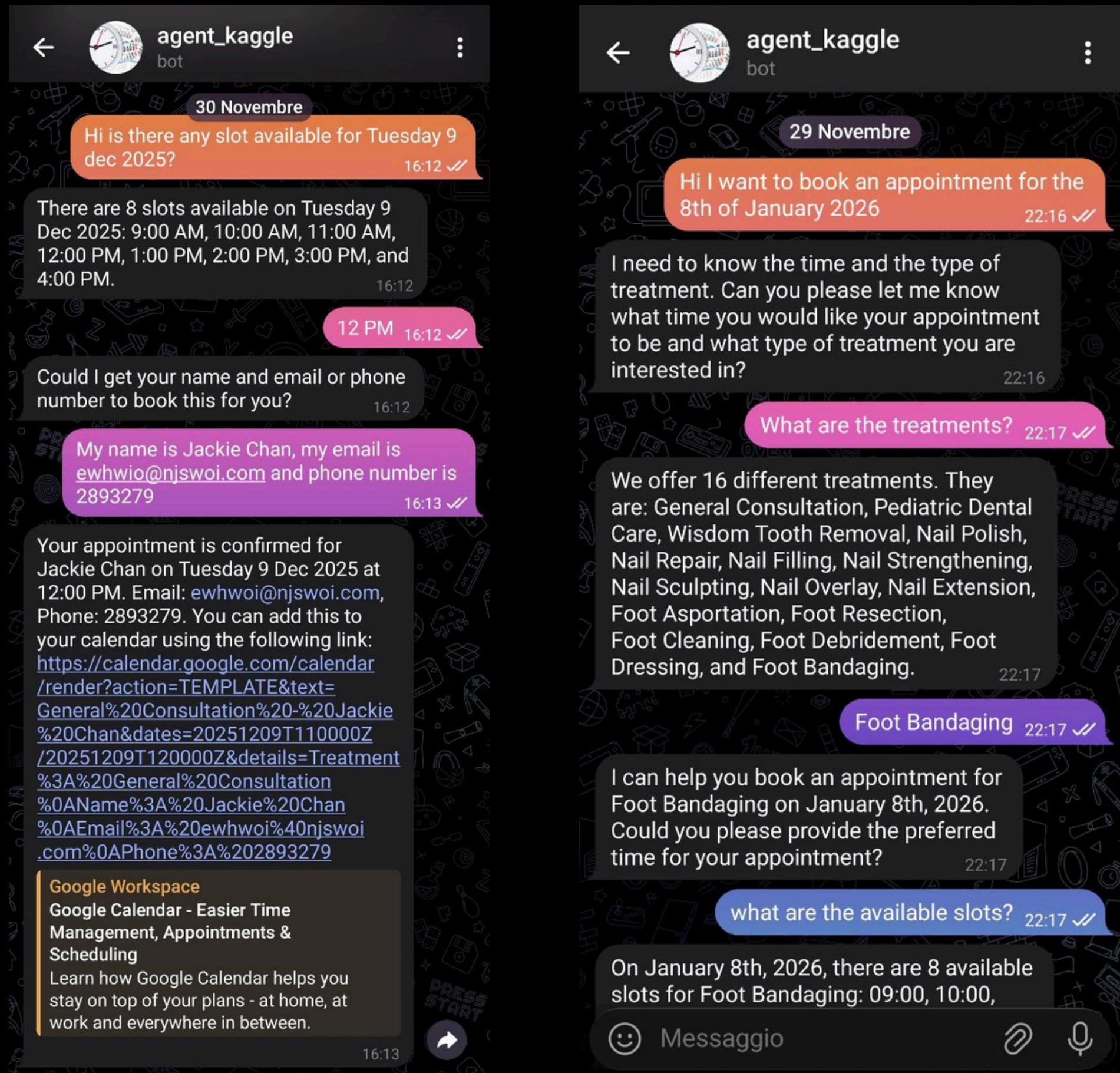


Multi Agent Architecture



Interface

- Just a Telegram bot
- Any activity can instantiate their own one



Use Cases and Videos

TITLE	LAST MODIFIED
 Booking an appointment.mp4	8:13 am
 Remove an appointment.mp4	8:33 am
 Rescheduling an appointment.mp4	8:15 am

- Book an appointment
- Move an existing appointment to a new date
- Cancel an appointment
- Ask what treatments are offered
- Ask what are the available slots

Natural Language Magic

“tomorrow”, “next Friday”

- This is possible thanks to the `parse_date_expression()` too

```
days_ahead = (target_weekday - today_weekday + 7) % 7
```

Important: “next month” is not handled yet

Direct Google Calendar API

= No Middleman, Full Control, Zero Cost

- We chose not to use the Google Calendar MCP
- We wanted to have full controllability on insertion / rescheduling / cancelling of events, pulling slot availability and so on

Privacy Guardrails

Security Risk Scenario: Impersonation Attack

What if a malicious user tries to extract information by pretending to be the real client?

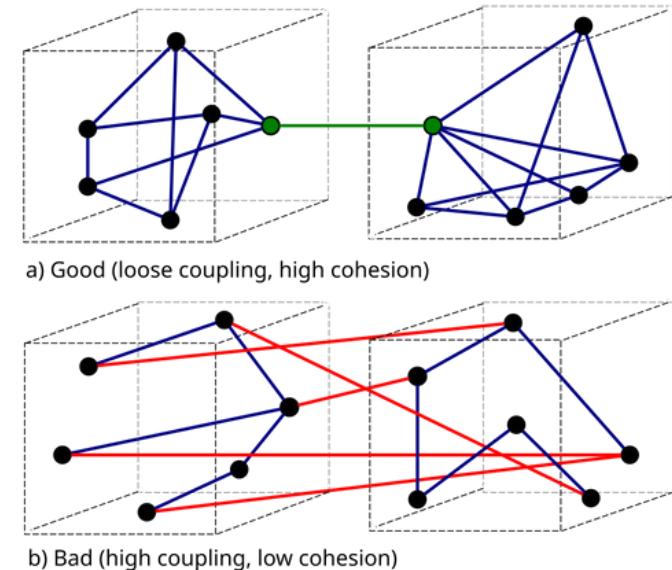
Example queries:

- “Who is coming at 15:00 tomorrow?”
- “Can I cancel the appointment at 15:00 tomorrow?”

ANSWER: NO

- There are guardrails that avoid Agents to retrieve any personal information regarding events
- You cannot cancel an appointment without having both the Email and the Phone used to register it. Moreover you need to know exactly the date and time it was set first.

Limitations



Free Version of Gemini

Depending on the user usage, sometimes many requests per minute (RPM) can be done and the free version of Gemini Flash 2.5 will stop working correctly.

Tight coupling is behind the corner!

Having one agent that performs all doesn't work, but having many agents adds a lot of complexity too. We think that this project requires a non-trivial architecture and use of the agents to actually work smoothly.

Future work



Connect to a ERP

Connect the agents to an ERP would allow to handle:

- inventory
- places at the tables (restaurant)
- expected costs and expected income per day

Create an interface for the Activities

Activities, professionals, restaurants, etc. will be able to register online and based on their necessities, the Chatbot will have different toolsets and, possibly, agents.

Thanks!



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