



---

# Investec Bank ← GraphQL API

---

*Out of the Ordinary*

 **Investec**  
Private Banking

 **Programmable Banking for Businesses**

**OFFER** ZEN

# Hello! 🖱️



## Marcin Jekot | Got.Codes

A functional programming fan.

Different languages make you think differently.

## Investec Bank ← GraphQL API

- **What** GraphQL for Investec Open Banking API
- **Why** GraphQL has a lot of benefits over REST
- **Stack** F# / .Net Core

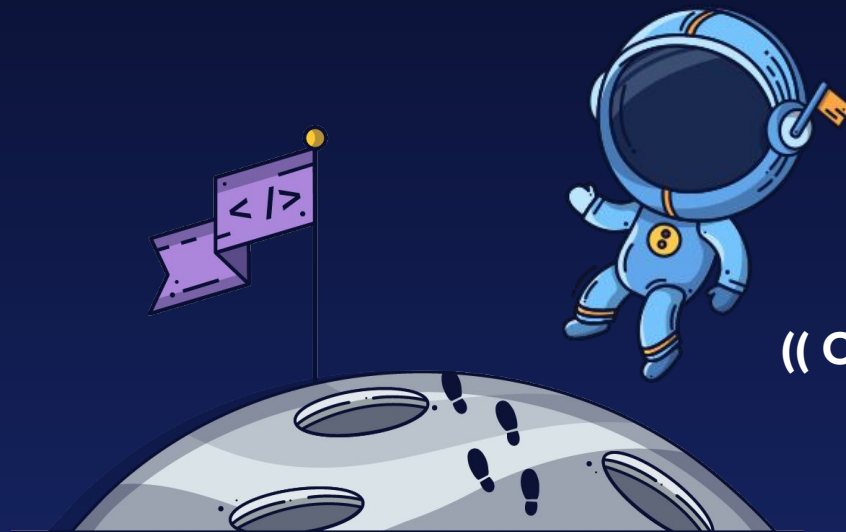
Out of the Ordinary

**“ The human is more important  
than the technology.  
Make things more human.**

**Steve Wozniak**



*Out of the Ordinary*



(( Off the beaten track ))

---

# Concepts

---

*Out of the Ordinary*

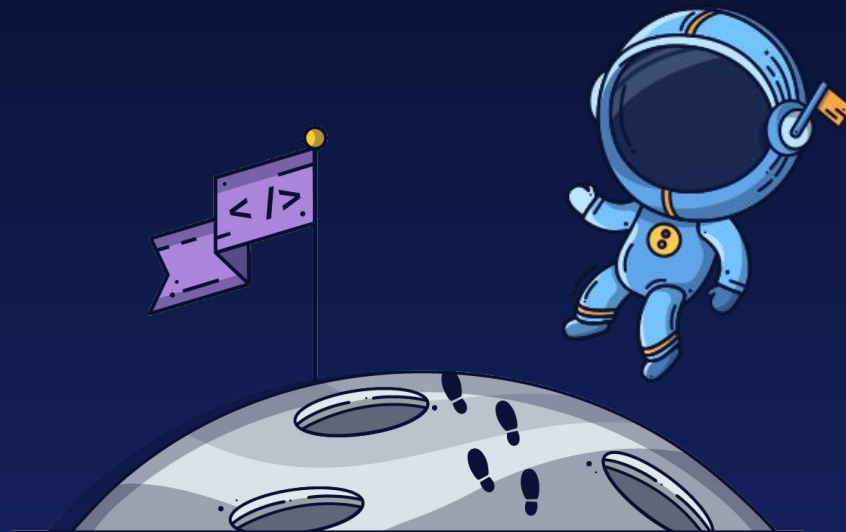
# GraphQL

- API + types + documentation
- Always in sync
- OpenAPI (Swagger): no guarantees
- GraphQL keeps you honest
- REST: wrapper for each language
- GraphQL: single request to get what you need

# ..... Functional Programming .....

## **F#:** Functional Programming with Static Types

- Evaluate F# for solving business problems
- Type inference
- Less code
- “Once your code compiles it usually works”
- Less bugs
- Good fit for GraphQL / JSON / REST



---

# Demo

---

*Out of the Ordinary*

 **Investec**  
Private Banking

**OFFER** ZEN

# Conclusions

- F# → 👍
- GraphQL → 🙌

## Investec API 🙏

- Add timestamps 🕒
- Add original currency / amount € \$ £
- Add GraphQL 😬

Out of the Ordinary



# Next steps

## Round 2:

- Evaluate using OCaml language
- GraphQL client libraries
- Frontend
- Real-time “live” queries (subscriptions)
- Multiple banks under one endpoint

*Out of the Ordinary*



Get Involved!

*Out of the Ordinary*

 **Investec**  
Private Banking

**OFFER** ZEN

# Get in touch

Twitter: [@\\_naartjie](#)

GitHub: [@naartjie](#)

GitLab: [@naartjie](#)

// Code will be open sourced soon

*Out of the Ordinary*



---

# Questions?

---

*Out of the Ordinary*