

GETTING STARTED WITH ELIXIR

SLIDES ON GITHUB¹

¹<https://github.com/Zeeker/talks>

WHAT IS ELIXIR?

*Elixir is a dynamic, functional language
designed for building scalable and
maintainable applications.*

— elixir-lang.org

Great sales pitch, right?

Elixir is young and immature!

– Some grumpy old programmer

It was released in 2011

**ELIXIR IS RUNNING
ON THE ERLANG VM**

ALSO CALLED BEAM

WHY IS THAT IMPORTANT?

In Elixir you can directly
interact with Erlang modules.
AND ...

ERLANG IS 32 YEARS OLD

OPENSOURCE FOR 20 YEARS

If you know about Erlang you
might have heard about OTP

ERLANG/OTP
OPEN TELECOM PLATFORM

OTP is a collection of useful middleware, libraries, and tools written in the Erlang programming language.

— Wikipedia on OTP

OTP IS WELL SUITED FOR

- ▶ Distributed
- ▶ Fault-tolerant
- ▶ Highly available

SYSTEMS

**OF COURSE YOU GET ALL OF
THIS "FOR FREE" WHEN
PROGRAMMING ELIXIR**

WHAT ELSE?

IMMUTABLE DATA

PATTERN MATCHING

EASY CONCURRENCY

USING THE ACTOR MODEL

TOPICS FOR TODAY?

- ▶ **Syntax**

- ▶ **Functional paradigms**

- ▶ **Immutable data**

- ▶ **Pattern matching**

LET'S GET STARTED!

UNLESS YOU HAVE SOME QUESTIONS

**FANCY NEW
STARTUP**

E-COMMERCE SHOP

A WILD CUSTOMER COMES ALONG



HE HAS SOME
REQUIREMENTS

1.

We need a way of adding products to a shopping cart!

– The wild customer

2.

*We need to calculate the overall sum of
money to be paid*

– The wild customer

3.

*We have premium customers that pay
10% less!*

– The wild customer

3.

*We need shipping costs that are
dependent on the weight of the
shipment!*

– The wild customer

4.

Free shipping over 100€!

– The wild customer

5.

When you select PayPal as your payment method, we charge 5% more because of fees that we have to pay!

– The wild customer

BONUS!

B1.

We want to know the CLVs (revenue generated per customer) to support our most valuable customers!

– The wild customer

B2.

*We need to exclude the shipping costs
from the CLVs!*

– The wild customer

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CODING DOJO

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git clone https://github.com/jfornoff/elixir-ug-rover
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