Phoenix Framework for Beginners

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1. Preface

[Phoenix](https://www.phoenixframework.org) is very good but the initial learning curve is steep. Very steep! Most new Phoenix developers have never worked with [Elixir](https://elixir-lang.org) and it being their first functional programming language doesn't help either. As with so many other frameworks the usual how-tos and tutorials all start with "this is easy" followed by a way too complicated example of how to build something you have no intention to build anyway. Mostly leaving a couple of steps out because the author thought of them as obvious.

- This book is written as a step by step guide. We start at zero. You are expected to understand the basics of programming and HTML but other than that you don't have to have any knowledge of Phoenix or Elixir.

- I will not hesitate to oversimply stuff. My aim is to get you productive in the quickest time possible.

- The applications in this book are not intended to become eye candy. We will not waste time and energy to make stuff beautiful.

And we are not going to build one giant application in the course of the book. We tackle small problems which make sense within their realm. If a specific chapter doesn't interest you: Go ahead and skip it. Only one expection: If you have never worked with Elixir you have to start with [elixir_introduction].

Stefan Wintermeyer

1.1. Finding Help

During or after reading this book there will come the time when you have a problem or a question. Here is my advise for those times:

- https://www.google.com `Phoenix` is not an easy to search for term. There are millions of construction companies with Phoenix in their name which can help you build a house but don't offer any programming help on their webpage. You often want to add either `Framework` or `Elixir` to your search queries.

- https://stackoverflow.com My favorate spot to find help. There is a good chance somebody already had the same problem and it is answered on stackoverflow. If not you normally get surprisingly fast answers there for new questions.

- Send me an e-mail to sw@wintermeyer-consulting.de Feel free to send me an email if everything else doesn't help. Please add the used Elixir and Phoenix version and other information which helps (e.g. database and operation system). If possible, create a first a question on stackoverflow.com and send me an email with the link of that question. By that I can answer it for you and for everybody who has the same problem in the future.

1.2. Training and Consulting

I offer Phoenix Framework beginners training and consulting. Onside and remote. Please send me an email to sw@wintermeyer-consulting.de and give me some background information (e.g. 1:1 training or a big group of attendees). I'll send you an offer.

Elixir Introduction

This chapter will teach you the absolut basics you need to programm with Elixir. All code examples are tested with Elixir version 10.2.

2. iex

Your Elixir installation comes with an Elixir's Interactive Shell (`iex`) which we will use for most examples in this chapter. Please go to your command line and fire it up:

```
$ iex
Erlang/OTP 22 [erts-10.6.1] [source] [64-bit] [smp:4:4] [ds:4:4:10] [async-threads:1]
[hipe]

Interactive Elixir (1.10.2) - press Ctrl+C to exit (type h() ENTER for help)
iex(1)> ①
```

① This is your iex prompt.

> ❗ You have to press `CTRL-C` twice(!) to leave the `iex`.

3. Hello world!

The classic! But never the less important. You can use the function `IO.puts()` to print a string to standard output:

```
iex(1)> IO.puts("Hello world!")
Hello world!
:ok
```