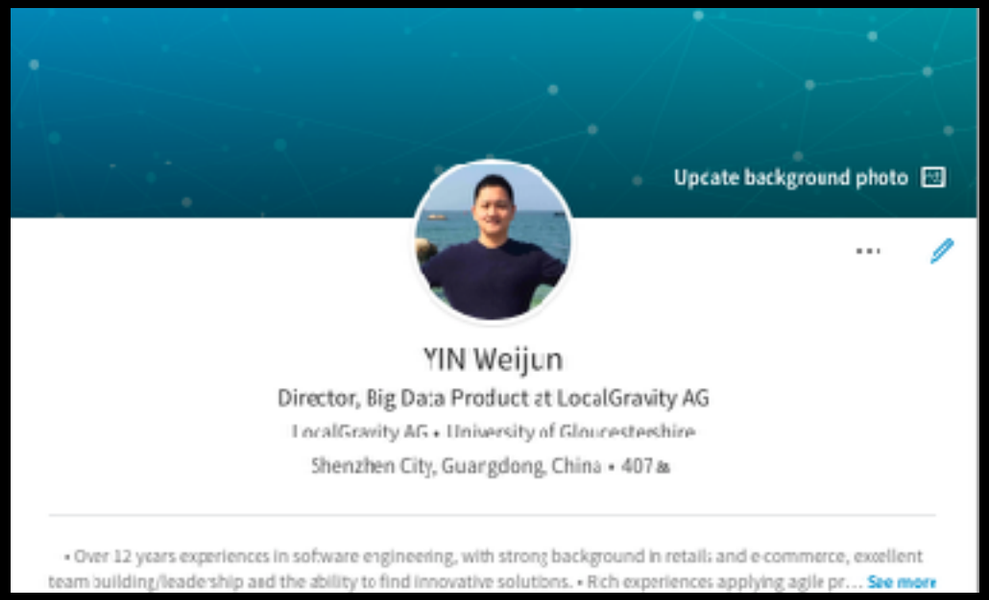
My Story: Paths I Learn Elixir

Since 2014



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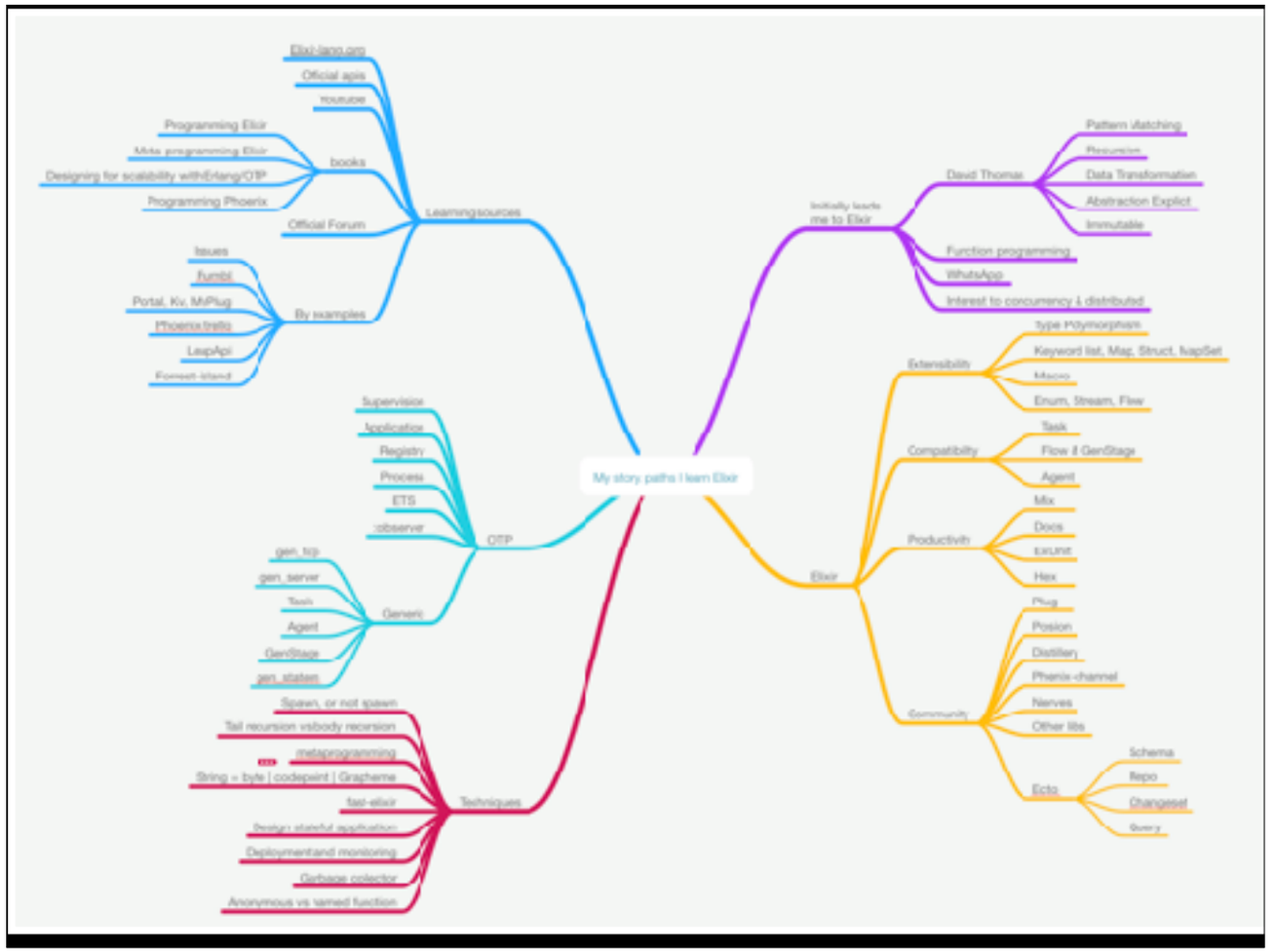
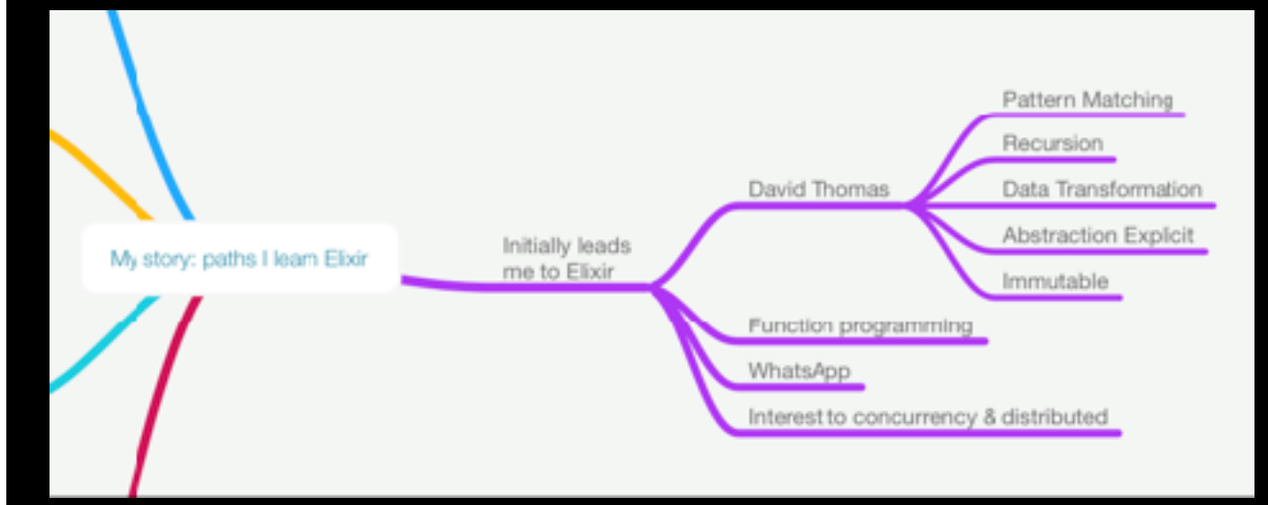
Agenda

- 为什么走上Elixir/OTP这条道
- Elixir Language Goals
- Learning Suggestions
- Techniques

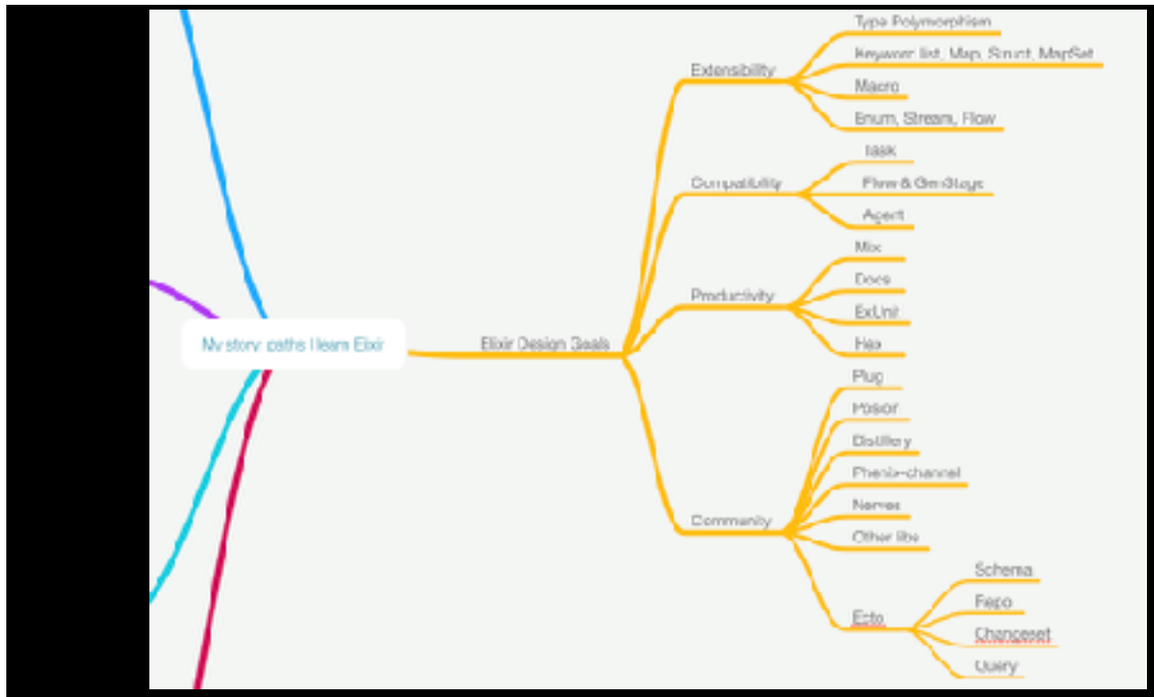
希望让大家明白Elixir，Erlang，Erlang OTP的区别


My story paths I learn Elixir
Learningsources
Elixir-lang.org
Official apis
Youtube
books
Programming Elixir
Meta programming Elixir
Designing for scalability withErlang/OTP
Programming Phoenix
Official Forum
By examples
Issues
Fumbl
Portal, Kv, MyPlug
Phoenix trello
LaupApi
Forest-liland
OTP
Supervisor
Application
Registry
Process
ETS
:observer
Generic
gen_tcp
gen_server
Task
Agent
GenStage
gen_statem
Techniques
Spawn, or not spawn
Tail recursion vsbody recursion
metaprogramming
String = byte | codepoint | Grapheme
fast-elixir
Design stateful application
Deployment and monitoring
Garbage collector
Anonymous vs named function
Initially learnt me to Elixir
David Thomas
Pattern Matching
Recursion
Data Transformation
Abstraction Explicit
Immutable
Function programming
WhatsApp
Interest to concurrency & distributed
Elixir
Extensibility
type Polymorphism
Keyword list, Map, Struct, MapSet
Macro
Enum, Stream, Flow
Compatibility
Task
Flow // GenStage
Agent
Productivity
Mix
Docs
ExUnit
Hex
Community
Plug
Posion
Distillery
Phenix-channel
Nerves
Other libs
Ecto
Schema
Repo
Changeset
Query



为什么走上Elixir这条道

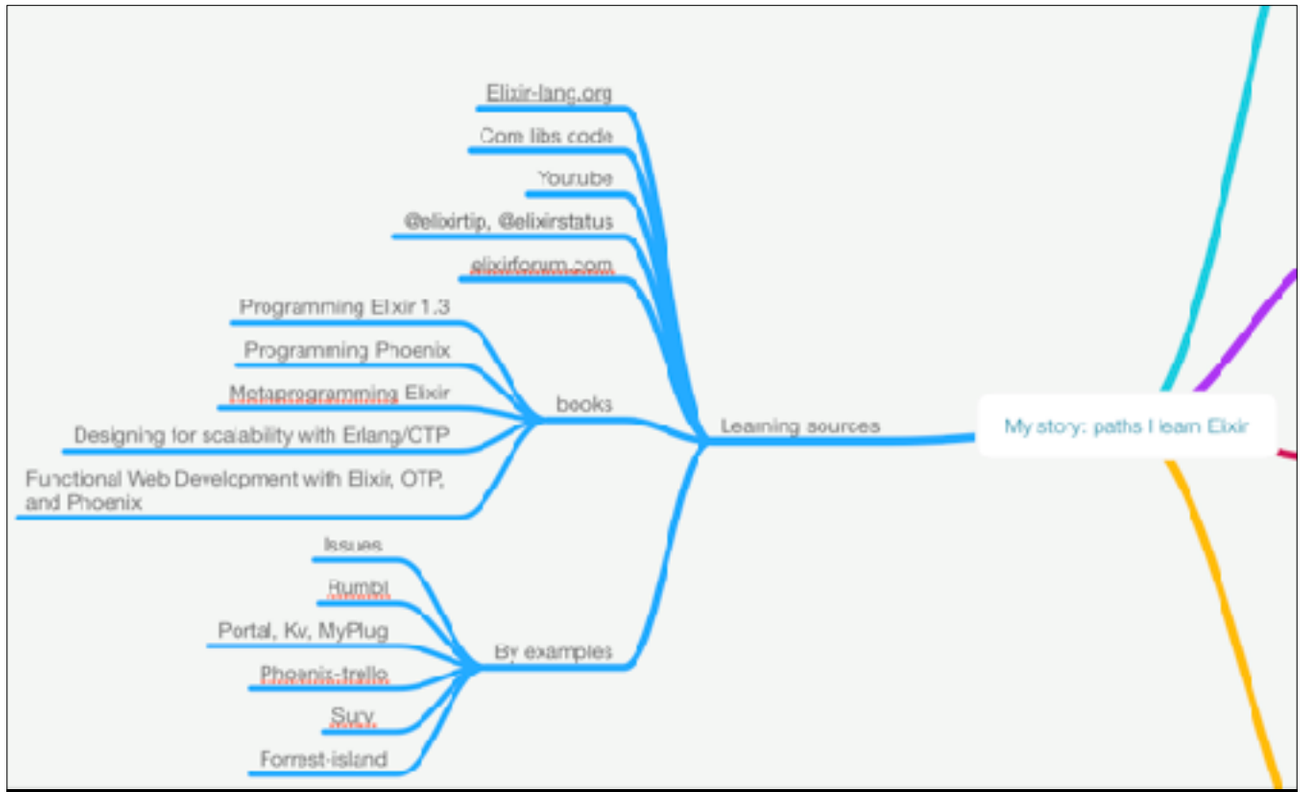
1. David Thomas @pragdave, who change my thinking, 特别是data transformation, thinking in invariant
2. Functional programming: Recursion. Lazy evaluation. Referential transparency. Eliminating side effects. Functions as first-class objects. Higher-level functions. Currying. Immutable data. Type systems. Pattern matching.
3. Facebook bought WhatsApp for $19 billion in 2014; 50 engineers for 900 million users
4. 对并行计算，分布式计算的好奇心; 明天属于parallel
5. Bleacher Report has gone from needing 150 servers to just five
6. Stateful app, state machine, github stars



Elixir语言 3个小目标

https://elixir-lang.org/blog/2013/08/08/elixir-design-goals/

介绍一下围绕3个设计目标Elixir都做了哪些工作，



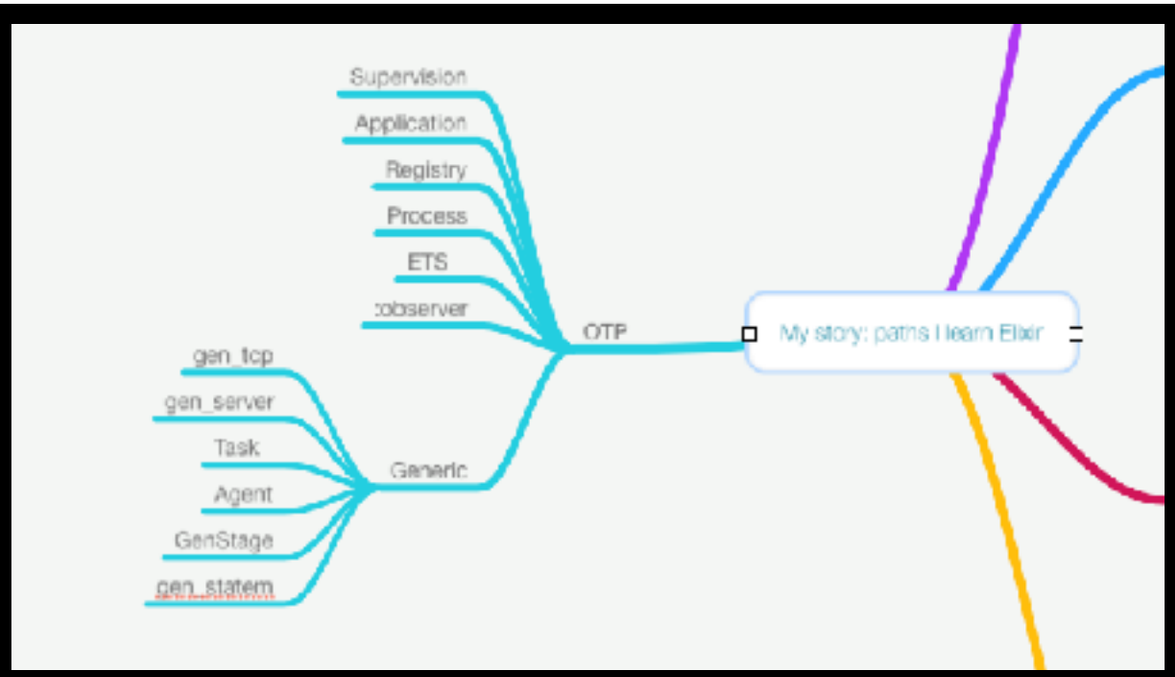
Learning Sources

1. Programming elixir, programming phoenix, meta programming elixir, elixir-lang.org
2. iex, issues, rumbl, portal, kv, my-plug, hex, awesome elixir, dojo-toulouse/elixir-koans
3. Best code: Ecto, Plug, Hex
4. How to choose data structure, Enum, Stream, String, ETS, Protocol

Learning Suggestions

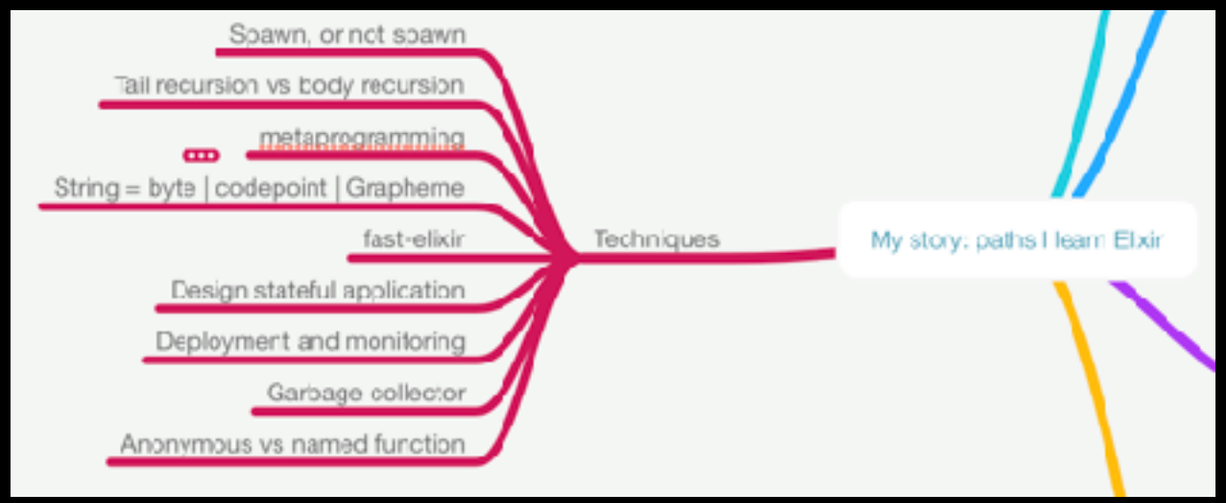
- Choose learning materials that suit you
- Learn from the best code
- Learn from examples
- Subject by subject
- Stay tuned with: @elixirtip, @elixirstatus, elixirforum.com, youtube

1. Programming elixir, elixir-lang.org 官方教材完全可以覆盖你需要了解Elixir语言的全部。在了解phoenix前可以先了解Plug和Ecto，authentication, web socket and channel, 再到programming phoenix。
2. 学习升级：分布式方向：erlang / OTP；elixir库开发： meta programming elixir。
3. iex, issues, rumbl, portal, kv, my-plug, hex, awesome elixir, dojo-toulouse/elixir-koans
4. Best code: Ecto, Plug, Hex
5. How to choose data structure, Enum, Stream, String, ETS, Protocol



Erlang/OTP

A Well Established Design Pattern, and Libs



Advance Techniques

问题?

Or, Pattern Matching