

Clojure, Web and Luminus

About

- `:name “Edward Tsech”`
- `:nick “edtsech”`
- `:langs [:clojure :haskell :shen]`
- `:interests [:fp :frp :data]`

Agenda

- Why Clojure?
- Clojure + Web
- Clojure Toolbox
- Libraries vs Frameworks
- Existing frameworks
- Luminus' approach

Why Clojure?

Clojure as Ecosystem

- Mature ecosystem of JVM
- Interactive development (REPL)
- ClojureScript
- Leiningen
- Emacs/Vim/SublimeText??
- Datomic

Clojure as Language

- Rapid development
- Concurrency
- FP
- Metaprogramming
- DSL
- Data centric

Clojure + Web

Clojure + Web

- Ring - HTTP abstraction (WCGI, Rack, Hack)
- Compojure - routing DSL (Sinatra, Scotty, Scalatra)

Functional Web Architecture

[https://speakerdeck.com/weavejester/functional-web-
architecture](https://speakerdeck.com/weavejester/functional-web-architecture)

Clojure Web Toolbox

- Auth - Friend
- JSON - data.json, cheshire
- Validation - lib-noir, Validateur
- Testing - Kerodon, Peridot
- Logging - tools.logging
- XML - data.xml, data.zip
- SQL - Korma, clojure.java.jdbc
- Deploy - Leiningen
- HTML - ...
- CRUD - ?
- Performance - Grinder

Libraries vs Frameworks

Libraries

- Easy to compose
- You have to know ecosystem
- You are not limited what you can build and how to build it
- You have to create your own architecture


Frameworks

- Take care of users (security, ...)
- Basic architecture
- Defaults (Libraries)
- Docs, tutorials, guides, ecosystem
- Habits
- Limitations (what..., how...)

Existing Frameworks

- Conjure
- Noir
- Jodo
- Pedestal
- Luminus

Origins

- Noir
 - Noir + lib-noir
 - lib-noir
 - lib-luminus + Luminus
 - lib-noir + Luminus
- 

Luminus

- Freedom (up to you what and how)
- Utilize existing Clojure ecosystem
- Libraries composability
- Flexible templates
- Basic architecture
- Defaults
- Documentation
- Take care of newcomers

Improvements

- Improve profiles system
- Improve architecture
- Add profiles*
- Write guides, tutorials, docs

Questions?

Links I

- Luminus - <http://www.luminusweb.net/>
- [luminus-template](https://github.com/yogthos/luminus-template) - <https://github.com/yogthos/luminus-template>
- [luminus](https://github.com/yogthos/luminus) - <https://github.com/yogthos/luminus>
- [lib-noir](https://github.com/noir-clojure/lib-noir) - <https://github.com/noir-clojure/lib-noir>

Links 2

- A brief overview of the Clojure web stack - http://brehaut.net/blog/2011/ring_introduction
- Project Templates - http://brehaut.net/blog/2013/project_templates
- Functional Web Architecture - <https://speakerdeck.com/weavejester/functional-web-architecture>