Full-stack cljs web apps

with and without Sitefox

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ClojureScript w/o the JVM

why?

- Deployment
- Dependencies
- Experience
- Startup
- Unified

Ways to run CLJS (without the JVM)

Backend

	Compiled	Java	Clj data	Reagent?	
shadow-cljs	compiled	java build	clj collections	as library	
nbb	interpreted	no build	clj collections	built in	✔
squint	compiled	node build	js native	native react	✔

Frontend

	Compiled	Java	Clj data	Reagent?	
shadow-cljs	compiled	java build	clj collections	as library	
scittle*	interpreted	no build	clj collections	js module	✔
squint	compiled	node build	js native	native react	✔

- sitefox & cherry

The examples

- nbb
- shadow frontend
- shadow fullstack
- scittle
- squint
- sitefox (on shadow-cljs)

nbb

Cljs interpreter for Ad-Hoc Node scripting

`examples/nbb`

tradeoffs

- easy to get started
- no compile step
- fast startup time
- backend only
- consume Node deps
- consume Clojure deps
- small artifact (1.2Mb JS)
- macros
- reagent available
- no live-reloading built in

shadow-cljs (frontend)

traditional ClojureScript build tool

`examples/shadow-frontend`

shadow-cljs (full-stack)

compiled output run on Node

`examples/shadow-fullstack`

tradeoffs

- more complex setup
- compilation step
- dependent on Java
- slower startup time
- consume Node deps
- consume Clojure deps
- medium sized artifact (275kb JS)
- macros
- reagent available
- great tooling

squint

a new borkdude cljs variant

`examples/squint`

tradeoffs

- setup varies from simple to complex
- native node integrated builds
- dependent on node not java at build
- can consume node deps
- no clojure deps
- reagent not available
- uses javascript datastructures
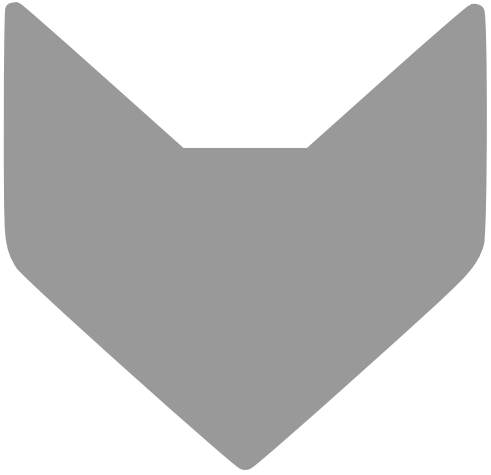- smaller artifact sizes
- macros
- tooling from javascript

scittle

frontends without build

`examples/scittle`

tradeoffs

- super simple setup
- no build at all
- not dependent on java or node
- consume JS modules from CDN
- some clojure deps pre-compiled
- larger artifact (1.14MB)
- macros
- reagent available
- basic tooling

Sitefox

Sitefox

```
npm init sitefox-shadow-fullstack@latest sitefoxdemo
```

Batteries included

- Routing (Express)
- Templates (Reagent)
- Key-value store + Database (Keyv)
- Sessions (Express)
- Authentication (passport.js)
- Email (Nodemailer)
- Forms (node-input-validator)
- Logging (rotating-file-stream)
- Live reloading (shadow-cljs)

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