### **Daniel Huffman**

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**Cosmos Team** 

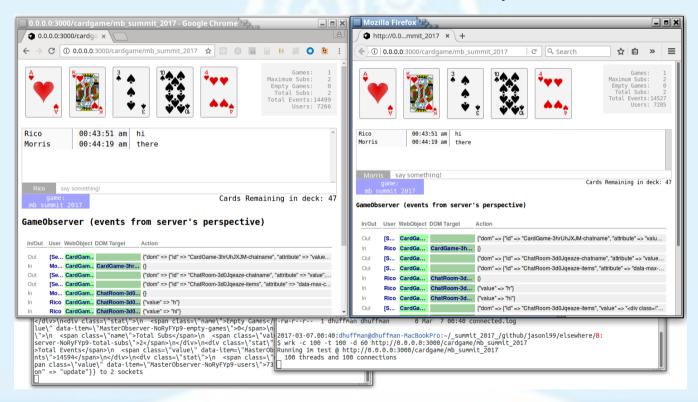
Clearwater office

https://github.com/drhuffman12/presentations/tree/master/lattice-core

#### Realtime-first web framework

https://github.com/drhuffman12/presentations/blob/master/lattice-core/

LatticeCore.CardGame.mp4



Realtime-first web framework
Based on
Crystal, Kemal, WebSockets,
Baked File System, etc.

**Jason Landry** 

https://github.com/jasonl99

Realtime-first web framework

### Server-side:

- Ruby-like developer-friendly source code syntax
- C-like speed
- Single compiled application binary
- Web assets bundled
- Browser session connected to server WebSocket
- Cross-platform (WIP)



Realtime-first web framework

### **Client-side:**

- Multiple users
- Multiple content subscriptions per user session
- Sessions/WebSockets tied to content subscribers
- All subscribers' content areas dynamically updated

Realtime-first web framework

#### **Lattice Core**

https://github.com/jasonl99/lattice-core

### **Crystal-lang**

https://crystal-lang.org/

#### Kemal

http://kemalcr.com/

### **Baked File System**

https://github.com/schovi/baked\_file\_system

**Card Game** (Example Lattice Core App) https://github.com/jasonl99/card\_game

Realtime-first web framework

#### **Install Git**

https://git-scm.com/

#### **Install Crystal**

https://crystal-lang.org/docs/installation/index.html

#### **Clone Card Game**

git clone https://github.com/jasonl99/card\_game.git

### **Update dependencies**

shards update

#### **Compile App**

crystal build --release src/card\_game.cr

### [Optional] Deploy only binary

mkdir -p ../elsewhere cp card\_game ../elsewhere cd ../elsewhere # ... or to AWS or etc.

### Run server binary

./card\_game

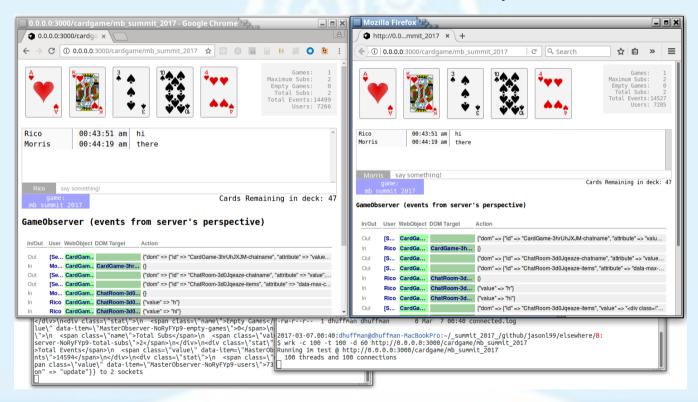
### **Browse Web App**

http://0.0.0.0:3000/cardgame/<game\_room>

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Realtime-first web framework

Therefore, I think we should take a deeper look at new technologies that are developer friendly and highly performant like Lattice-core, Kemal, Crystal, and WebSockets, so that we can keep our developers productive and our customers' experience zippy.