Watup, could you pick up this thing for me NEARBY?

HOME

**NEARBY** 



After **20** metres



After **10** metres

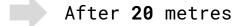


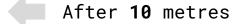
After **5** metres

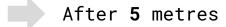
Destination

#### HOME

#### **NEARBY**







**Destination** 



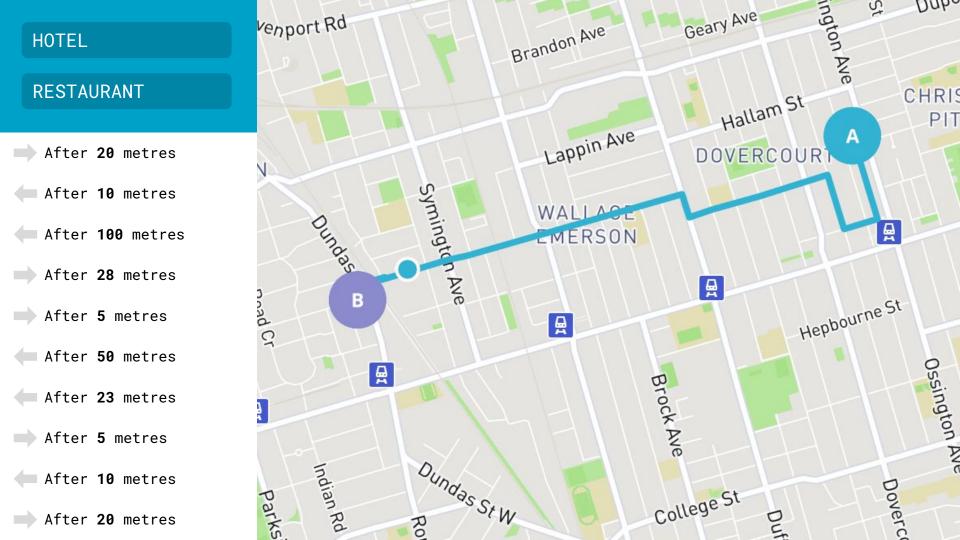
You have to check out this RESTAURANT on your trip abroad!

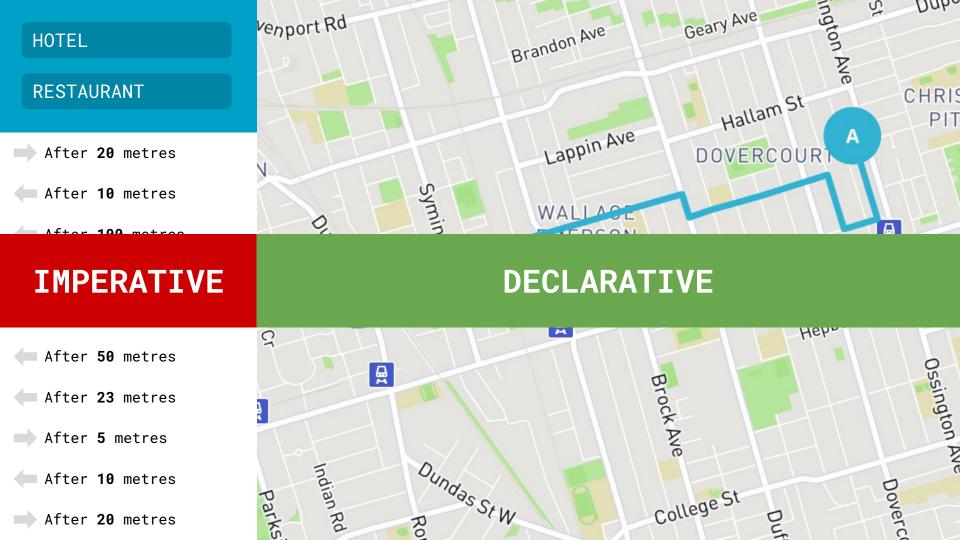
#### HOTEL

#### **RESTAURANT**

- After 20 metres
- After 10 metres
- After 100 metres
- After 28 metres
- After **5** metres
- After **50** metres
- After 23 metres
- After **5** metres
- After 10 metres
- After 20 metres









# Cerebral

Declarative **state and side effects management** for popular
JavaScript frameworks

#### Stateful Component method

# APPLICATION on LOGIC Redu

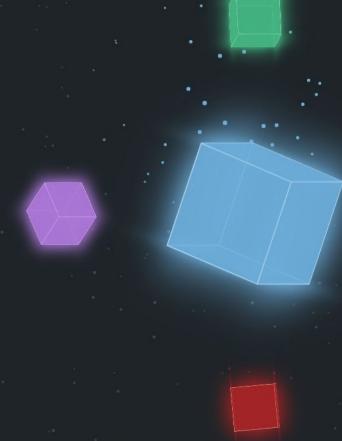
Mobx Action

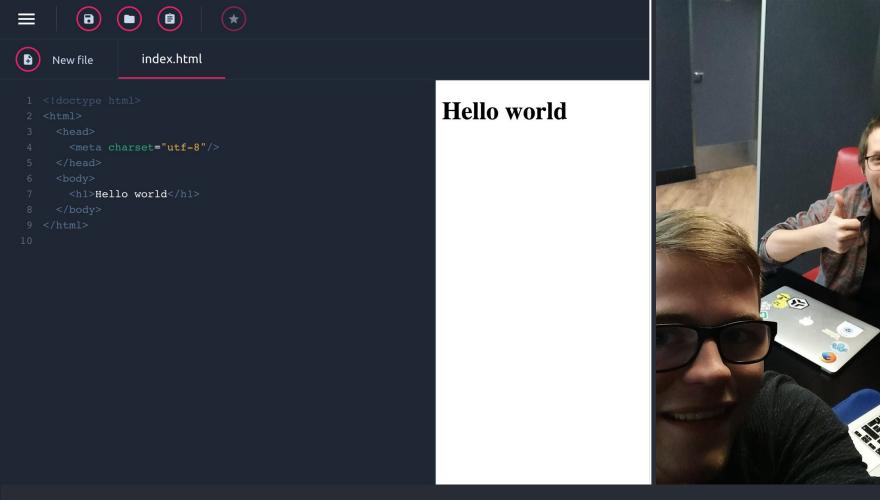
Redux Thunk/Reducer

Cerebral Signal

## CodeSandbox

The online code editor for web applications





webpackbin - 2016 collaboration - 2017

DEBUGGER

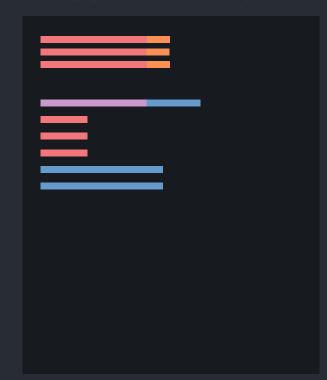
CODE

PROJECT

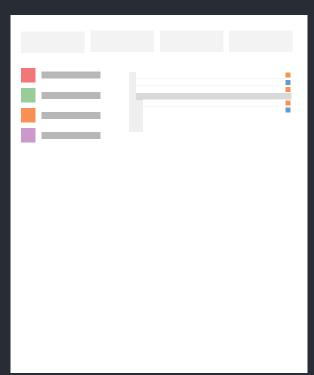
#### CODE EDITOR

#### **BROWSER**

#### COMPANION



http://localhost



#### sandboxChanged

- 21 state changes
- 9 side effects

#### 3 files

store/sequences.js store/actions.js store/factories.js

#### 10 files

pages/index.js store/connection/actions.js store/connection/reducer.js store/user/actions.js store/user/reducer.js store/api/actions.js pages/Sandbox/index.js store/entities/sandboxes/actions/index.js store/entities/sandboxes/reducer.js

store/entities/sandboxes/entity.js

### sandboxChanged

21 state changes

9 side effects

**3** files

store/sequences.js

store/actions.js store/factories.js

#### **10** files

pages/index.js
store/connection/actions.js
store/connection/reducer.js
store/user/actions.js
store/user/reducer.js
store/api/actions.js
pages/Sandbox/index.js
store/entities/sandboxes/actions/index.js
store/entities/sandboxes/reducer.js
store/entities/sandboxes/entity.js

```
set(state `editor.error`, null),
when(state`editor.sandboxes.${props`id`}`),
 true: [
  set(state`editor.currentId`, props`id`),
 false: [
  set(state`editor.isLoading`, true),
  set(state`editor.notFound`, false).
  set(state`editor.changedModuleShortids`, []),
   success: [
    set(state `editor.sandboxes.${props `sandbox.id `}`, props `sandbox `),
    set(state`editor.currentId`, props`sandbox.id`),
   notFound: set(state`editor.notFound`, true),
   error: set(state `editor.error`, props `error.message`),
```

#### export const loadSandbox = withLoadApp([

•••

]);

#### cport const loadSandbox = withLoadApp([

set(state`editor.error`, null),

```
when(state`editor.sandboxes.${props`id`}`),
 true: [
     • • •
 false: [
     • • •
```

```
set(state`editor.currentId`, props`id`),
set(props`sandbox`, state`editor.sandboxes.${props`id`}`),
actions.setCurrentModuleShortid,
actions.setMainModuleShortid,
actions.setInitialTab,
actions.setUrlOptions,
actions.setWorkspace,
```

```
set(state`editor.currentId`, props`id`),
set(props`sandbox`, state`editor.sandboxes.${props`id`}`),
 set(state `editor.sandboxes.${props `sandbox.id`}`, props `sandbox`),
```

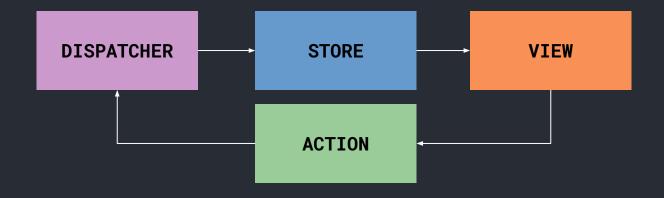
```
actions.getSandbox,
 success: [
      ...
 notFound: set(state`editor.notFound`, true),
 error: set(state`editor.error`, props`error.message`),
```

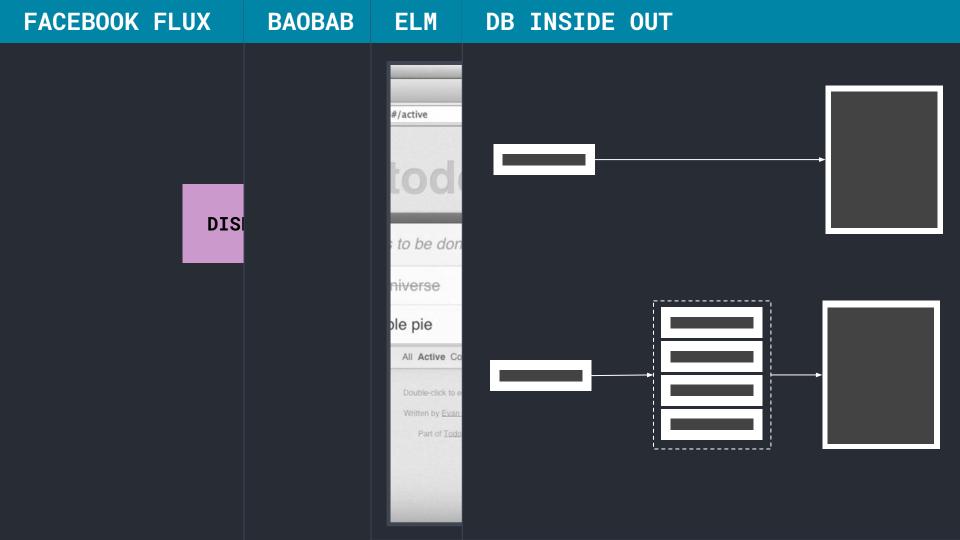
```
success: [
notFound: set(state`editor.notFound`, true),
error: set(state `editor.error `, props `error.message `),
```

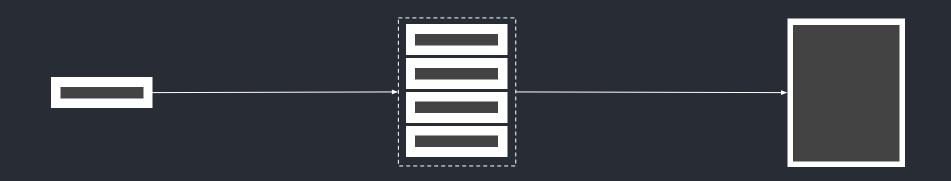
## Lessons learned refactoring Codesandbox.io from Redux to Cerebral

https://medium.com/@christianalfoni/lessons-learned-refactoring-codesandbox-io-from-redux-to-cerebral-40e9a5646281

#### FACEBOOK FLUX







```
method: 'set',

tree.set(['text'], 'newText')

path: ['text'],

value: 'newText'
```

May 8th **2015** 

Immutable-store gets signals and a time machine

https://www.youtube.com/watch?v=Txpw4wU4BCU&t=127s

May 9th **2015** 

Cerebral first commit

July 2nd **2015** 

Live React: Hot Reloading with Time Travel at react-europe 2015

https://www.youtube.com/watch?v=xsSnOQynTHs





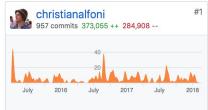
CEREBRAL

https://localhost

FUNCTION-TREE

**ADDRESSBAR** 





















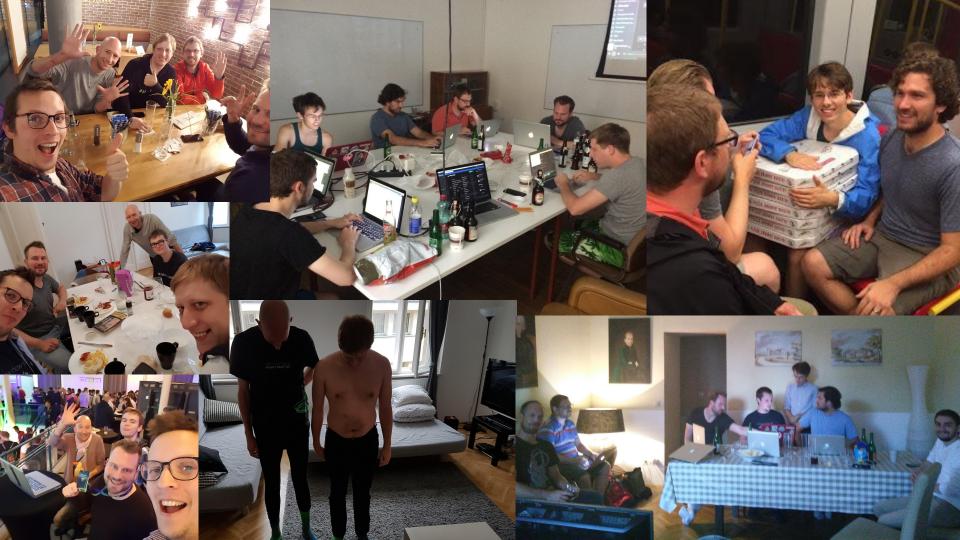


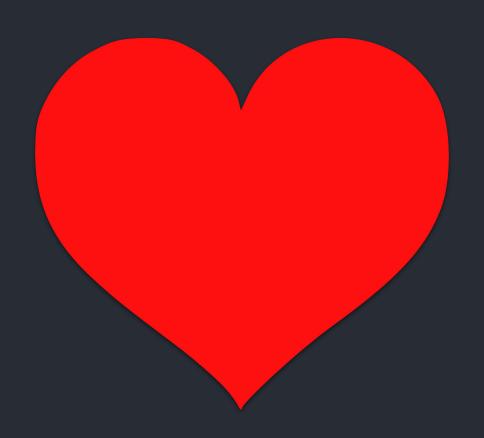






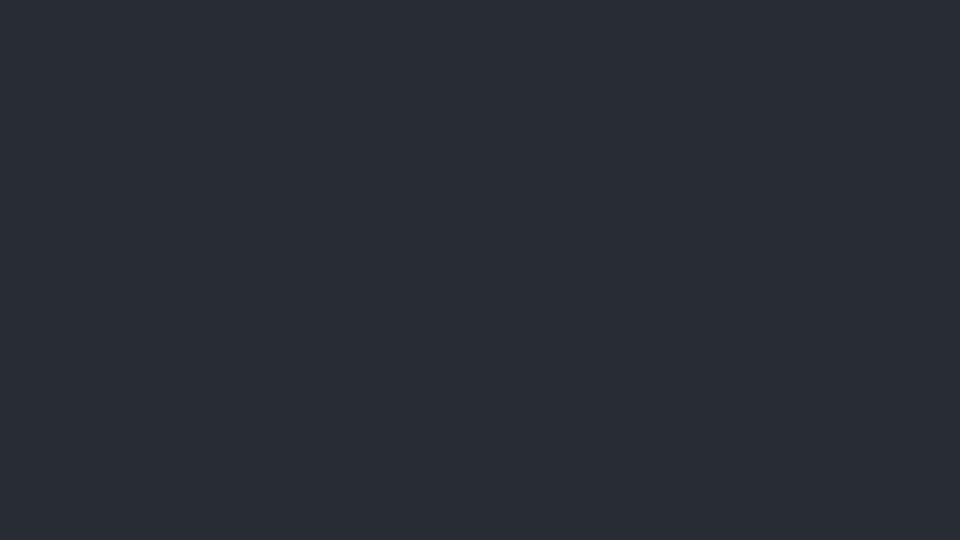








www.cerebraljs.com



```
dispatch({
    type: 'UPDATE_TEXT',
    payload: 'newText'
}

    (state, action) => {
        return newState
    }
}
```

#### **DISPATCH**

#### **TRANSACTION**

MUTATION

TREE

```
tree.set(['text'], 'newText'
```

```
method: 'set',

path: ['text'],

value: 'newText'
}
```



```
dispatch({
  type: 'UPDATE_TEXT',
  payload: 'newText'
```

```
type: 'UPDATE_TEXT',

payload: 'newText'
```

(state, action) => {
 return newState
}

