Mage TITANS

MCR 2017

SHANE OSBOURNE

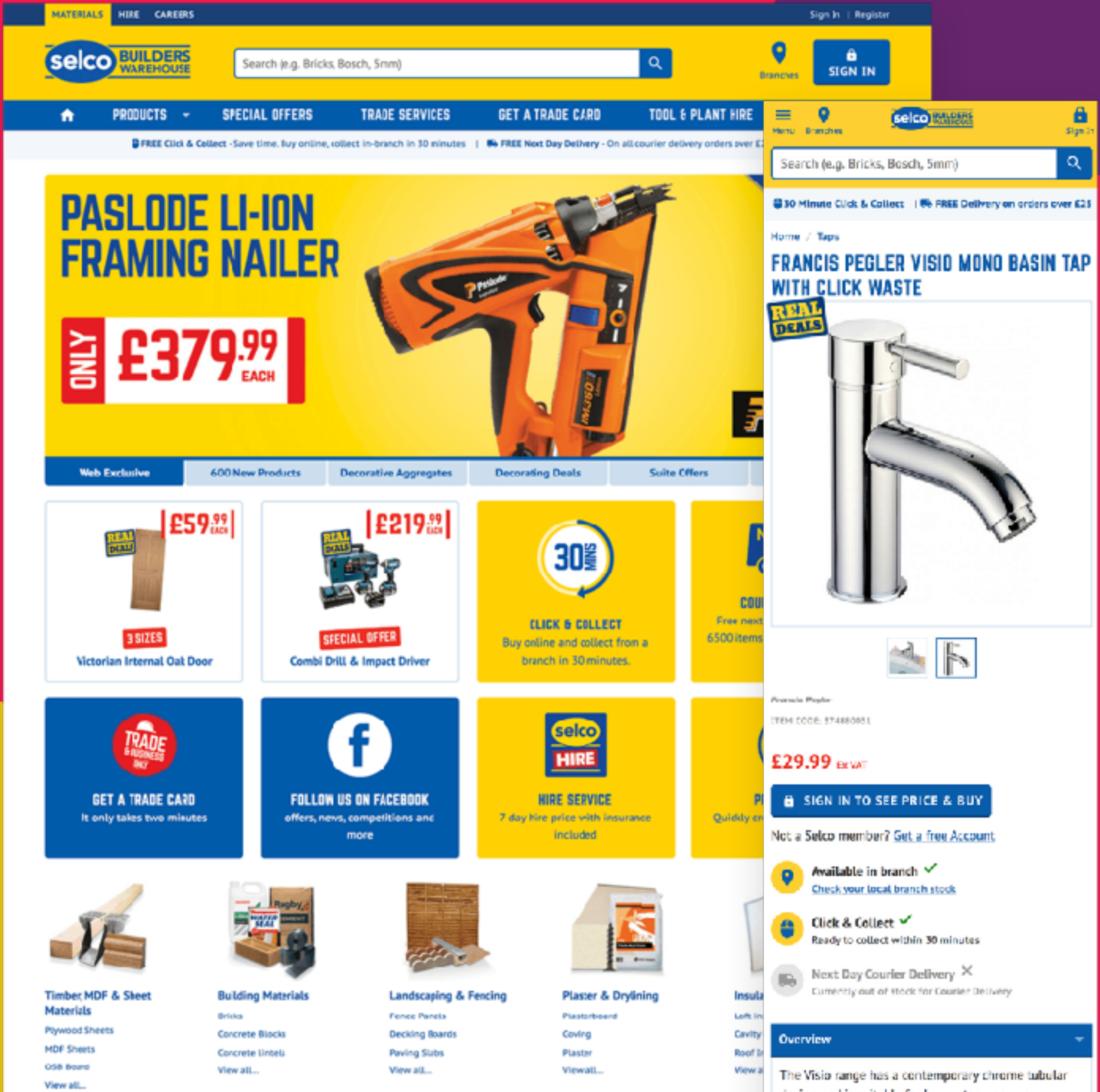
Lead Front-End Developer at JH

@shaneOsbourne

Using React-Native to build an M2 powered App on both iOS and Android

UK.MAGETITANS.COM

#MageTitansMCR @MageTitans



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Francis Pegler

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Overview

The Visio range has a contemporary chrome tubular

php

JS

Required Skills

Design / UX ☑

API Development ☑

APP Development

Objective C / **Swift**

Java / **Kotlin**

React Native

iOS and Android Apps from JavaScript

No need to hire anyone new

No need to learn new languages

Who’s using it?

Why React Native

It's actively developed by Facebook

It uses modern tooling

We get to write JavaScript

90% of code shared across Platforms

It's **not** just a web view wrapper

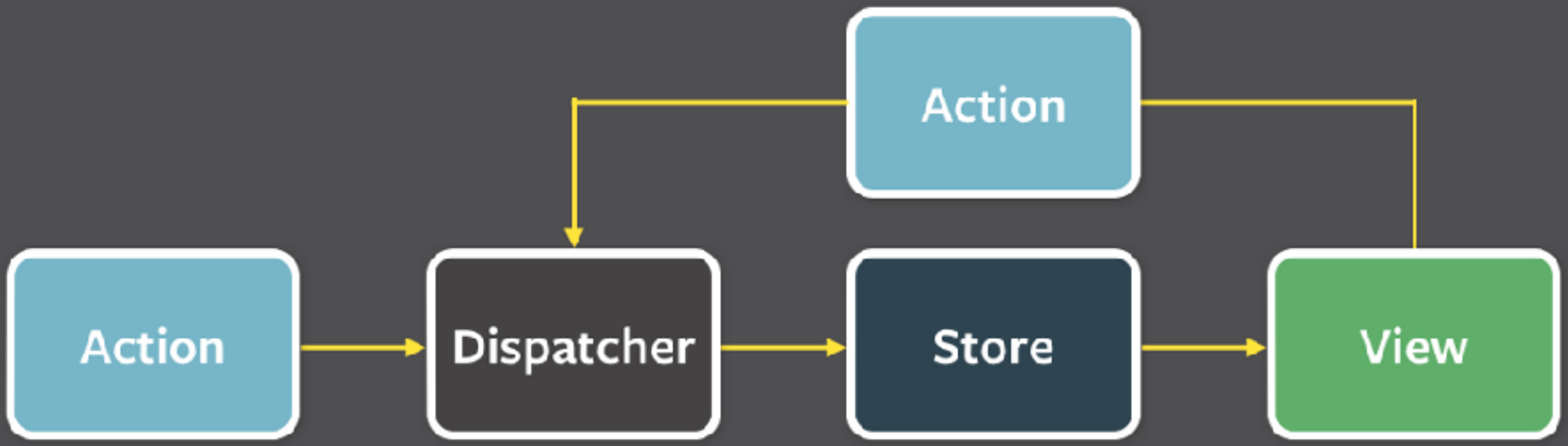
React Native
(not for beginners)

“Don’t ever get married to a particular library or framework, or even programming style - instead become an expert at the fundamentals”

- some wise developer

Redux

UNI-DIRECTIONAL DATA FLOW



Action

Action

Dispatcher

Store

View

Redux

UNI-DIRECTIONAL DATA FLOW

```
<Button onClick={() =>
  dispatch({
    type: 'SELECT_ITEM',
    payload: item.id
  })}
>
  {item.name}
</Button>
```

Redux

UNI-DIRECTIONAL DATA FLOW

```
function reducer(state = [], action) {
    switch (action.type) {
        case 'SELECT_ITEM': {
            return state
              .concat(action.payload);
        }
        default: return state;
    }
}
```

Redux

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}
```

RxJS

COMPOSITION OF SIDE EFFECTS

```
dispatch({
  type: 'LOGIN',
  payload: {
    username: 'shakyshane',
    password: 'h4cker4life',
  }
})
```

RxJS

COMPOSITION OF SIDE EFFECTS

```
function login(action$) {
  return action$.ofType('LOGIN')
    .switchMap((creds) =>
      ajax('http://example.com/signin', creds)
        .takeUntil(action$.ofType('NAVIGATE'))
        .catch(err => of({type: 'LOGIN_FAIL'}))
        .mapTo({type: 'LOGIN_SUCCESS'})
    )
}
```

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}
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Jest

TESTING APPLICATION LOGIC

```
const ajaxMock = jest.fn()
  .mockReturnsValue(of({status: 'success'}));

const store = configureStore({ajax: ajaxMock});

store.dispatch({
  type: 'LOGIN',
  payload: {
    username: 'shakyshane',
    password: 'kittenz'
  },
});

assert.equal(store.getState().auth.status, 'success');
```

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```

ESLint

ENFORCE CODE QUALITY/STYLE

```
const name = "shakyShane"
```

```
$ eslint src/** --fix
```

```
const name = 'shakyShane';
```

Flow

STATIC TYPE CHECKER

```
// @flow
type User = {
    name: string,
    age: number
}


function getUser(name: string): Observable<User> {
    return ajax(`http://example.com/user/${name}`)
}
```

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    name: string,
    age: number
}


function getUser(name: string): Observable<User> {
    return ajax(`http://example.com/user/${name}`)
}
```

Flow

STATIC TYPE CHECKER

```
// @flow
getUser('shakyshane')
    .subscribe(user => {
        console.log(user.name);
        console.log(user.age);
    });
```

What we learnt

Don’t become an expert in a single library/ framework.

Choose tools that make debugging easier

Use automation to lint & auto-fix your code

Write tests at the highest level possible

Get a grip on side-effects

@shaneosbourne

@shakyshane

egghead.io/instructors/shane-osbourne

wearejh.com