REBUILDING THE MONOLITH WITH COMPOSABLE APPS

Front-end Developer   Startup Web Development   Startup Recruiting   +6   ✏️

Why are front end developers so high in demand at startups if front end development is relatively easier than other fields of engineering?

I am making an assumption here, but I think most people would agree that front end development is much easier than other fields of engineering. So why is it that startups have trouble finding front end developers?

✏️ Answer   Request ▾   Follow 669   Comments 10+   Share 246   Downvote   • • •

2013

http://conference.phpnw.org.uk/phpnw13/schedule/dan-rathbone/
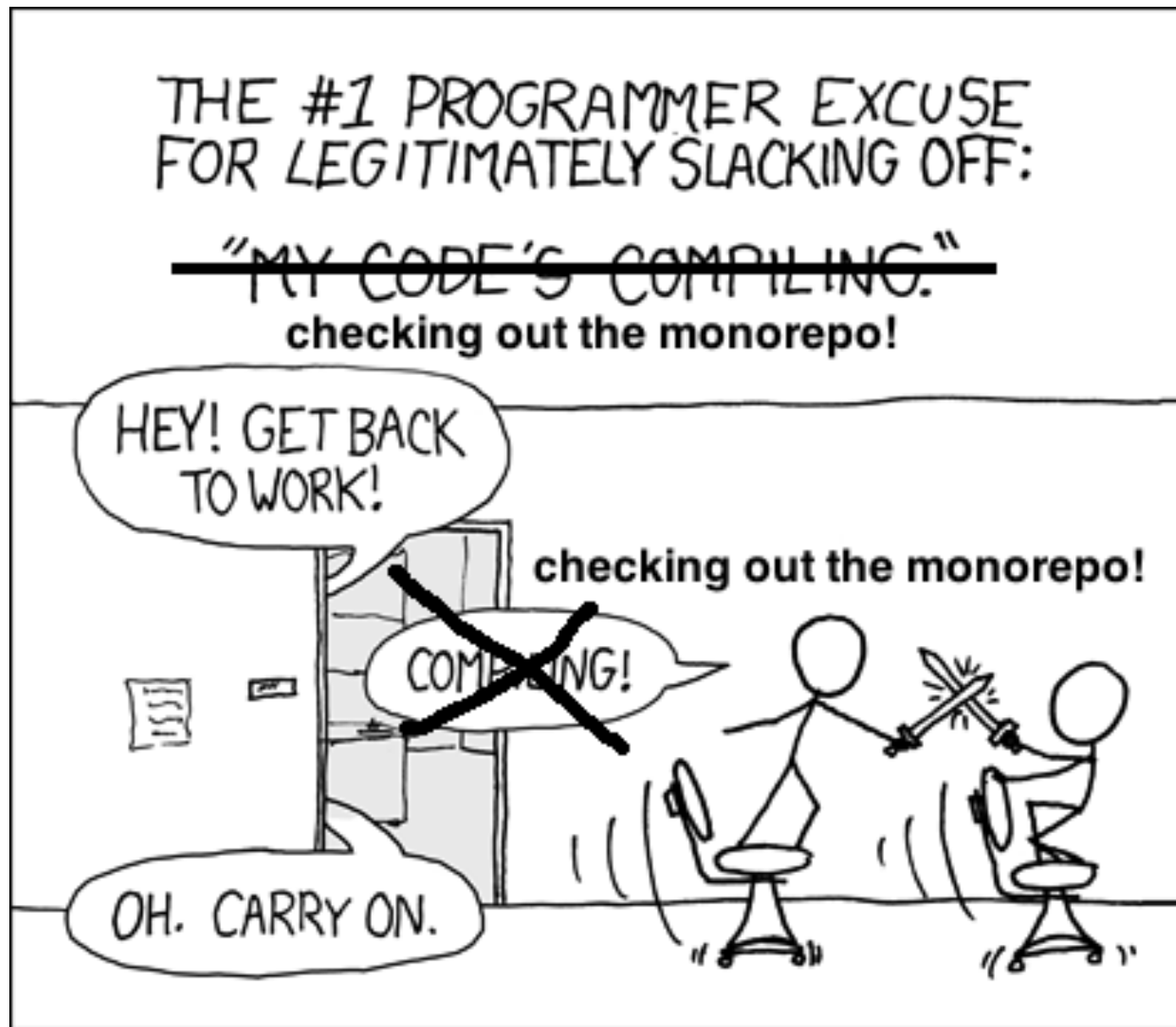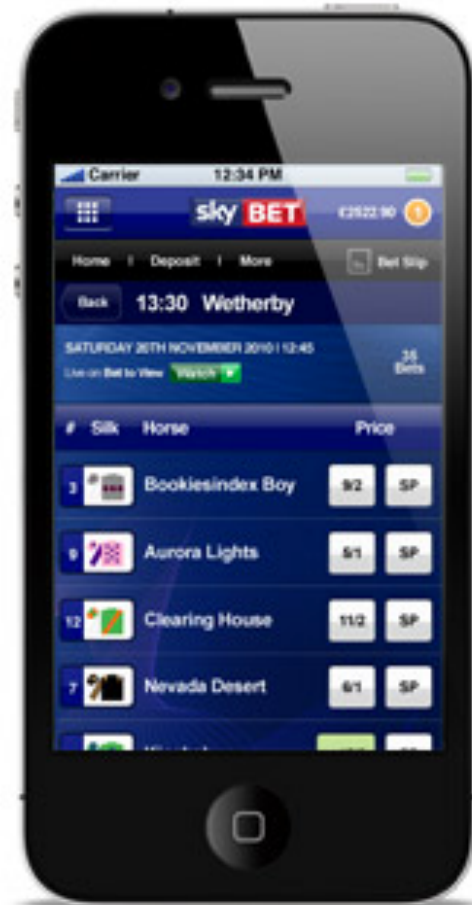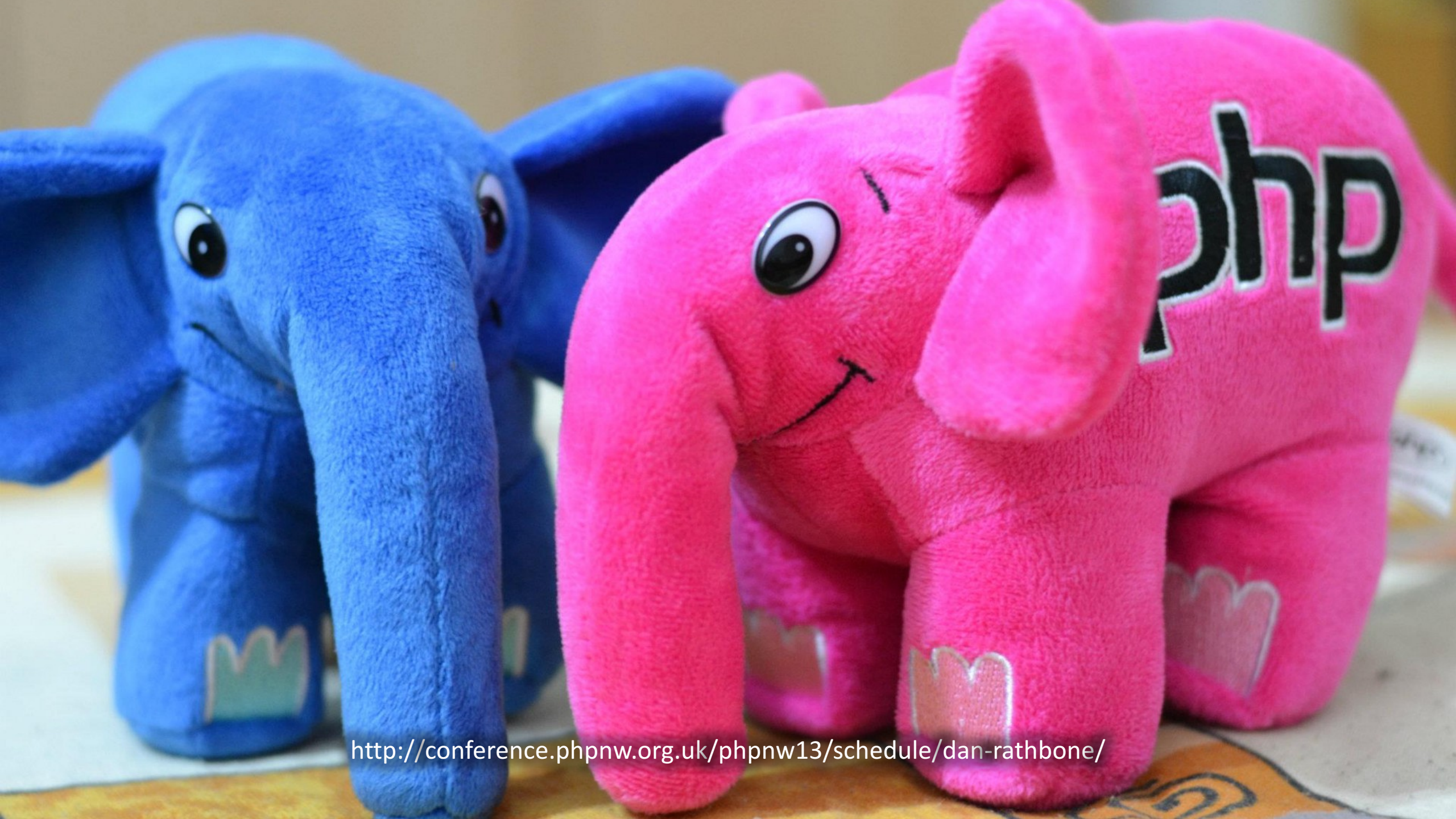
1   My Bet Slip   〉

Football

Featured   **Live**   Coupons   Competitions   S

VILLARREAL V LIVERPOOL
Firmino to score & win - 5/2   〉

↺ Go to Cash Out

↺ Football Live   ⌃

| 60' | Ural Sverdlovsk Oblast Reserves vs CSKA Moscow Reserves | 2-4 |

| Win **125/1** | Draw **28/1** | Win **1/66** |

| HT | UP Fighting Maroons vs UST Growling Tigers | 2-0 |

| Win **1/33** | Draw **16/1** | Win **66/1** |

| 27' | Binh Thuan FC vs Cong An Nhan Dan | 0-1 |

| Win **11/4** | Draw **9/4** | Win **10/11** |

| 19' | Szombathelyi Haladas FC U19 vs Grosics Akademia Gyula U19 | 2-0 |

1 **My Bet Slip** ›

Ural Sverdlovsk Oblast Reserves v CSKA Moscow Reserves

60:41

URA	2	4	CSK

1

Pitch view	Stats	Game info

CSK: Dangerous Attack
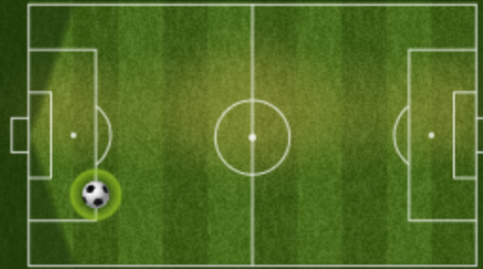
⟳ **Go to Cash Out**

⟳ Full Time Result ⌃

Win **125/1**	Draw **28/1**	Win **1/66**

Next Team To Score – 7th ⌄

2014

🏠 🔒 https://m.skybet.com/b 2 ⋮

Bet Tracker
Exclusive Feature Preview (find out more)

1 of 1 in play bets winning £14.00

In Play	Up Coming	Settled

Single 9/5 £5.00
Potential returns: £14.00

In play

🕐 England 9/5 ⌃
Full Time Result - Switzerland v England

Switzerland	0 - 1	England
home		away

ℹ Bet Details

📢 Leave us feedback

PLACE
A QUALIFYING
CASH OUT BET
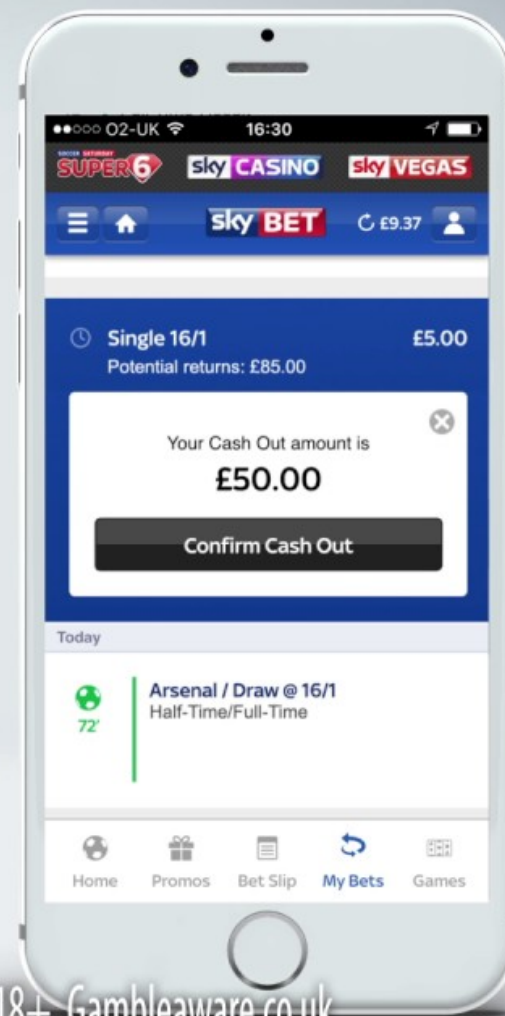
Max stake restrictions, eligibility restrictions, and T&Cs apply. 18+. Gambleaware.co.uk

sky BET

ⓘ Sky bet is currently unavailable as we are experiencing technical problems.

Find out more

Privacy | Terms | Help ❓

ALDERNEY
GAMBLING CONTROL COMMISSION   GAMCARE   18

Committed to **Responsible Gambling**
Licensed and regulated by the **AGCC**

🏠 Home   🎁 Promotions   📄 Bet Slip   📝 Join   👤 Log in

WHY DO WE CARE SO MUCH ABOUT MOBILE?

Because it makes up a huge proportion of our traffic, of which there is lots…

Page Views

25.5 M Mobile Bet (live)

6.94 M Desktop Bet (live)

Since 01 Feb 00:00 GMT until 28 Feb 23:59 GMT

103 M

Page Views

analytics.google.com

Jump To Ticket   Confluence   UX ⌄   DevOps ⌄   Dev ⌄   Design ⌄   SkyBet ⌄

Overview - Google...   Online Sports Betti...   rx   websockets/ws: `w...   Reactive-Extension...   RxJS/from.md at m...   rx-node/nodejs.md...   Grand National 201...

Google Analytics

Home   Reporting   Customization   Admin

ian.thomas@bskyb.com
http://www.skybet.com - http://www.sk...
Sky Bet [SSL]

Overview

Create Shortcut BETA

Search reports & help

Intelligence Events

Real-Time
Overview
Locations
Traffic Sources
Content
Events
Conversions

Audience
Overview
Active Users
Cohort Analysis BETA
▸ Demographics
▸ Interests
▸ Geo
▸ Behavior
▸ Technology
▾ Mobile
Overview
Devices
▸ Custom
▸ Benchmarking
Users Flow

Acquisition
Overview
▾ All Traffic
Channels
Treemaps

Right now

173436

active users on site

■ MOBILE ■ TABLET ■ DESKTOP

88%   7% 5%

Pageviews

Per minute

150,000

100,000

50,000

-26 min   -21 min   -16 min   -11 min   -6 min   -1

Per second

3,750

2,500

1,250

-60 sec   -45 sec   -30 sec   -15 sec

Top Referrals:

	Source	Active Users ↓
1.	paypal.com	1,573
2.	sportinglife.com	1,051
3.	skysports.com	909
4.	zitaair.club	615
5.	skyvegas.com	351

Top Social Traffic:

	Source	Active Users ↓
1.	Twitter	4
2.	Facebook	1

Top Keywords:

	Keyword	Active Users ↓
1.	(not provided)	7,019
2.	sky bet	460
3.	skybet	209
4.	https://m.skybet.com/	25
5.	sky bet login	22
6.	Skybet	10
7.	sky bet mobile	9
8.	super 6	6
9.	www.skybet.com	6
10.	skybet mobile	5

Top Active Pages:

	Active Page	Active Users ↓	
1.	/horse-racing/aintree/event/19140555	43,721	25.21%
2.	/bet-tracker	27,780	16.02%
3.	/?app=ios&location=(null),(null)&version=5.6	19,494	11.24%
4.	/	16,893	9.74%
5.	/betslip/get	13,539	7.81%
6.	/watch	6,567	3.79%
7.	/bet-tracker?dcmp=BetHistoryCashTracker	6,565	3.79%
8.	/horse-racing/aintree/event/19140555/time	5,754	3.32%
9.	/watch?app=ios&location=(null),(null)&version=5.6	4,540	2.62%
10.	/?app=android&version=1.2	4,072	2.35%

Top Locations:

Push Connected Clients
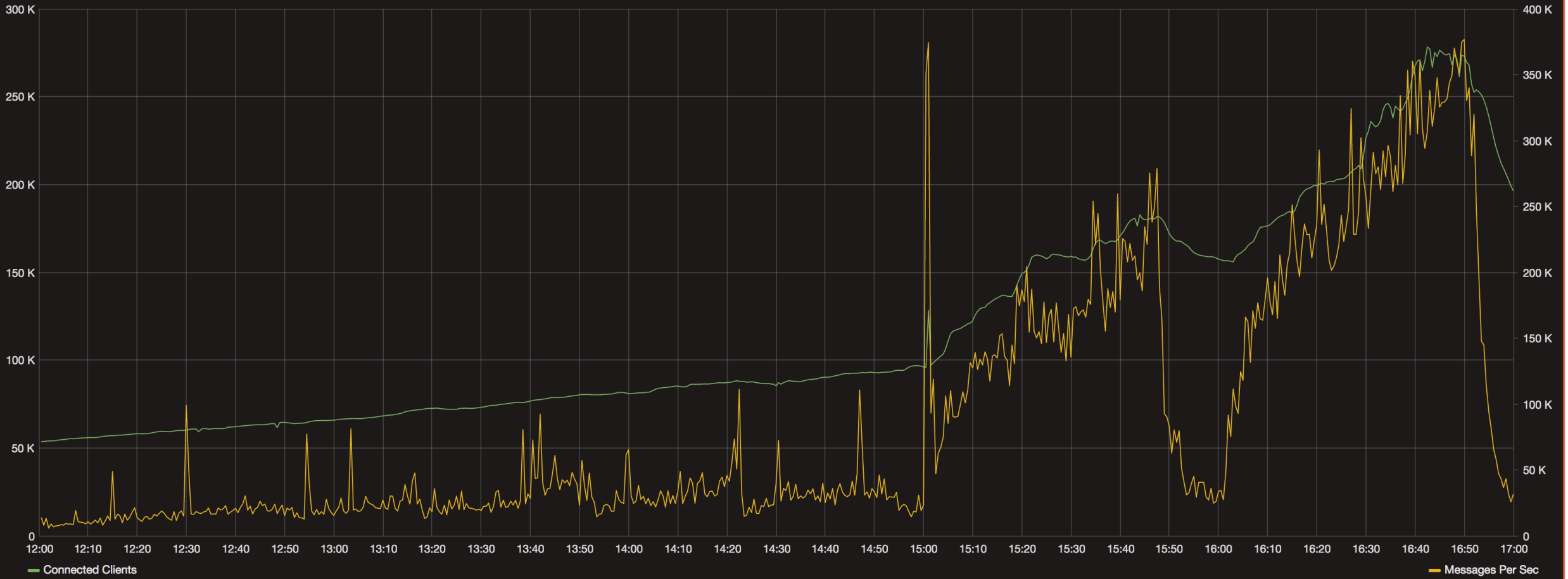
MOBILE IS GROWING AT A SCARY RATE TOO...

Weekly Uniques on Mobile
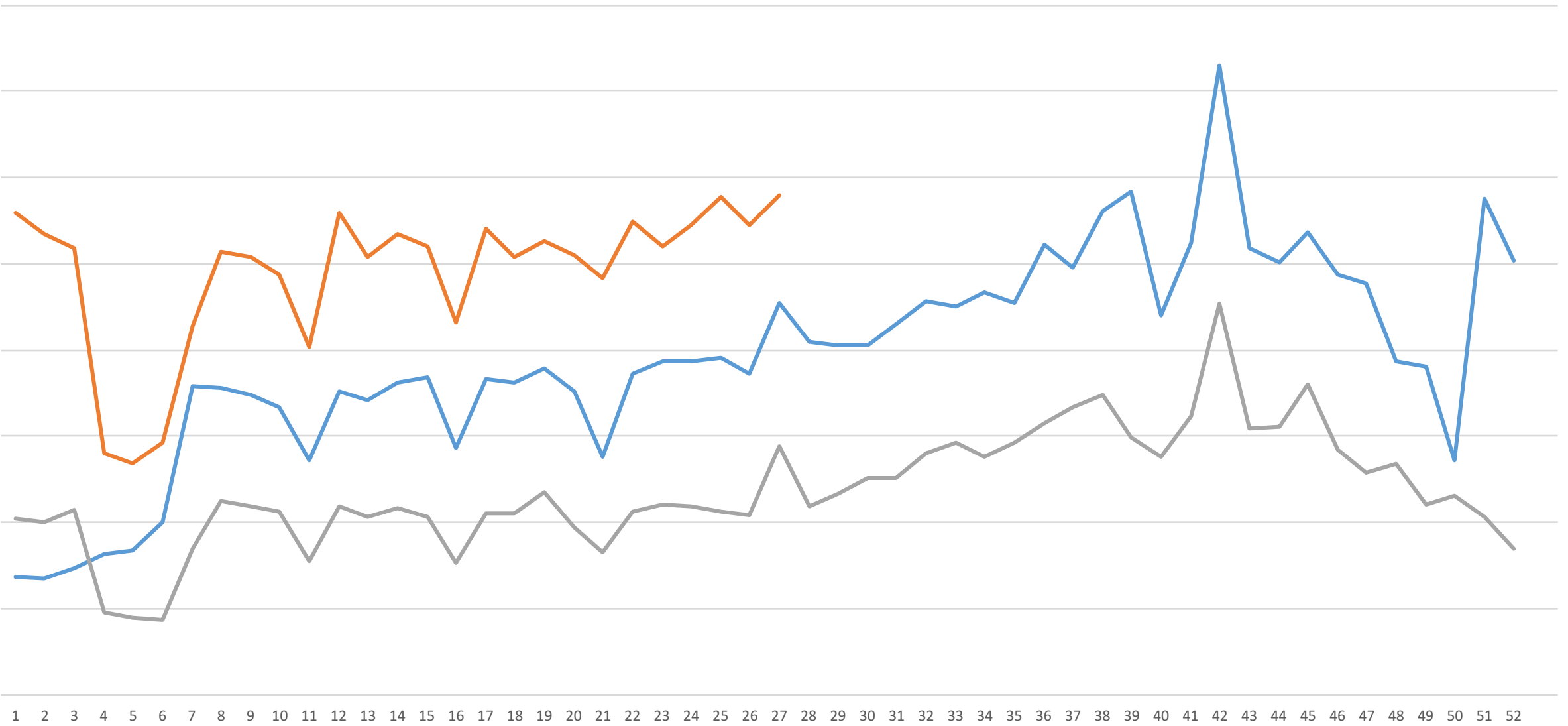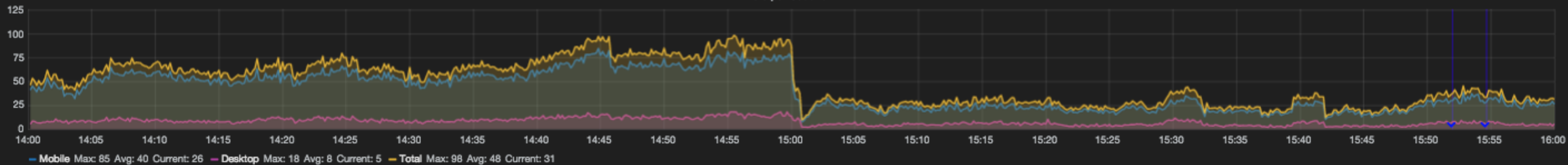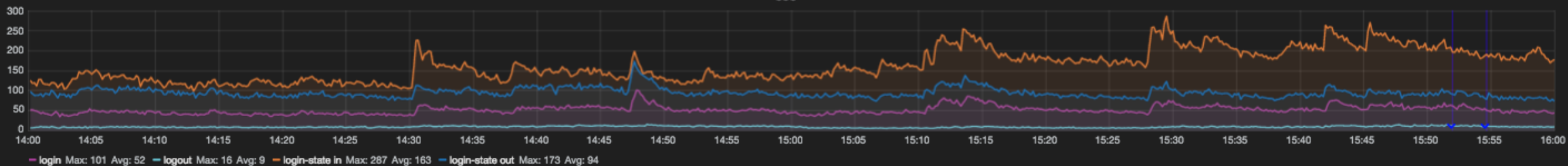
Bets per Second

Mobile Max: 85 Avg: 40 Current: 26 — Desktop Max: 18 Avg: 8 Current: 5 — Total Max: 98 Avg: 48 Current: 31

SSO

login Max: 101 Avg: 52 — logout Max: 16 Avg: 9 — login-state in Max: 287 Avg: 163 — login-state out Max: 173 Avg: 94

View Worker Queue Size

view-worker-q-events-3 — view-worker-q-events-4 — view-worker-q-footballhome — view-worker-q-betandwatch — view-worker-q-events-7
view-worker-q-events-9 — view-worker-q-homepage — view-worker-q-events-2 — view-worker-q-events-8 — view-worker-q-hrsearch
view-worker-q-priceboost — view-worker-q-classhome — view-worker-q-events-1 — view-worker-q-azindex — view-worker-q-bettracker
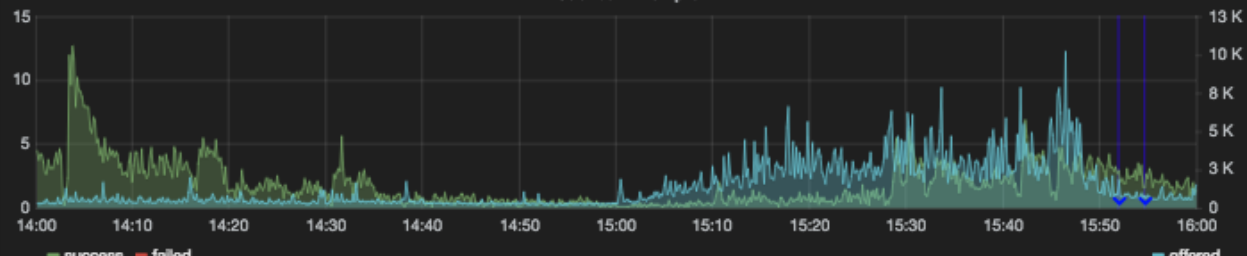view-worker-q-coupons — view-worker-q-events-0 — view-worker-q-events-6 — view-worker-q-events-5 — view-worker-q-navigation-calendar
view-worker-q-typehome

View Workers Mean Lifetime

view_worker_events_1 — view_worker_priceboost — view_worker_typehome — view_worker_azindex — view_worker_coupons — view_worker_events_3
view_worker_events_6 — view_worker_hrsearch — view_worker_events_5 — view_worker_bettracker — view_worker_events_2 — view_worker_events_8
view_worker_footballhome — view_worker_homepage — view_worker_navigation_calendar — view_worker_betandwatch — view_worker_classhome
view_worker_events_7 — view_worker_events_9 — view_worker_events_0 — view_worker_events_4

Bet Tracker Views

Cashout Attempts
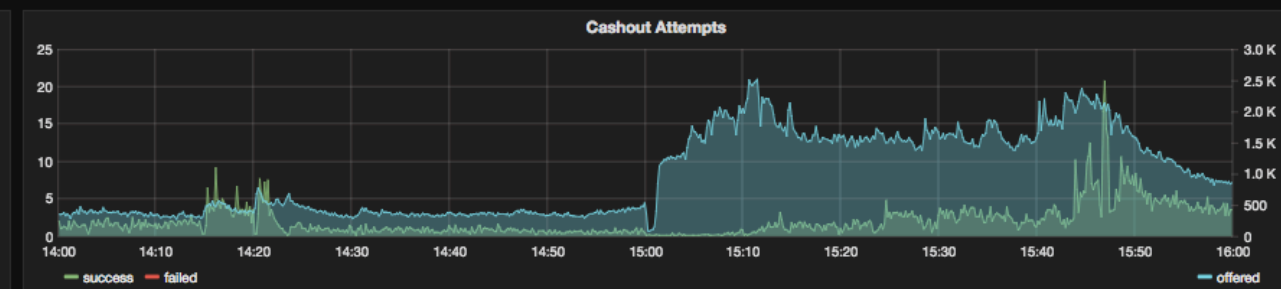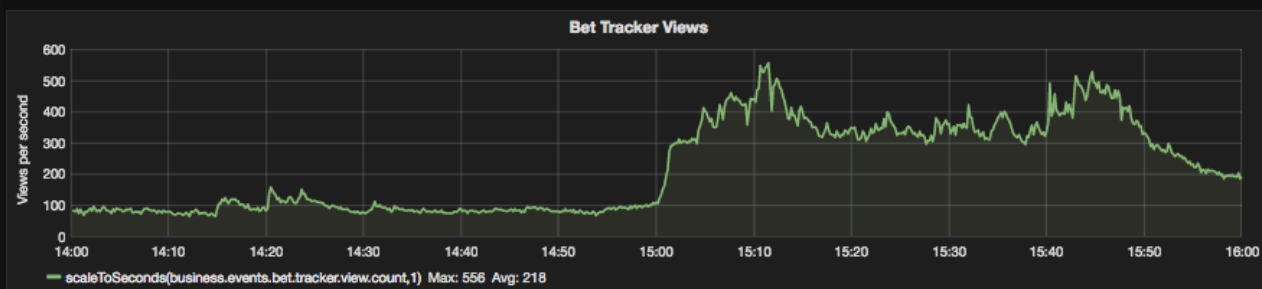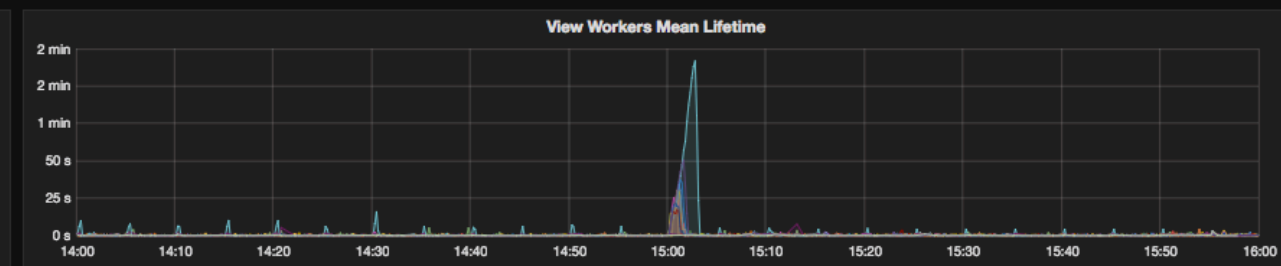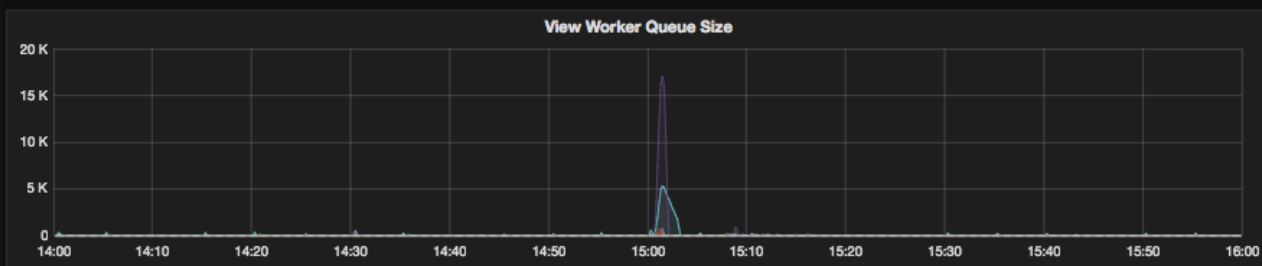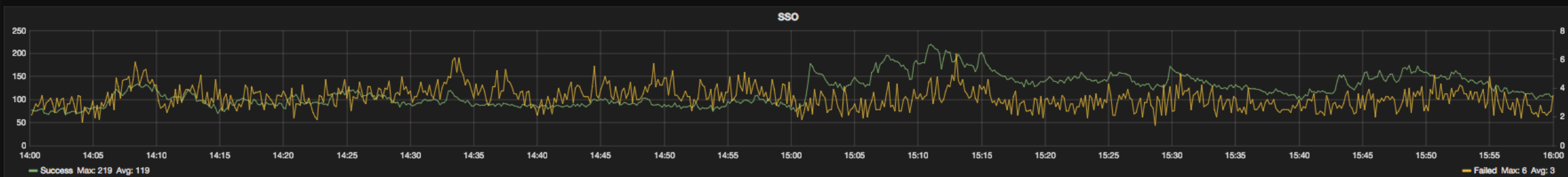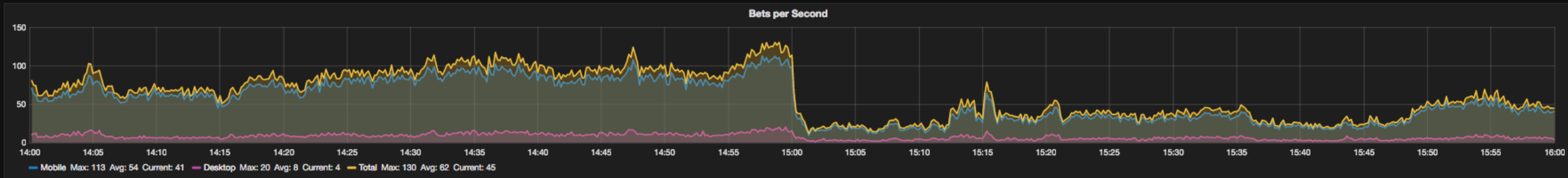
BACK TO THE TECH

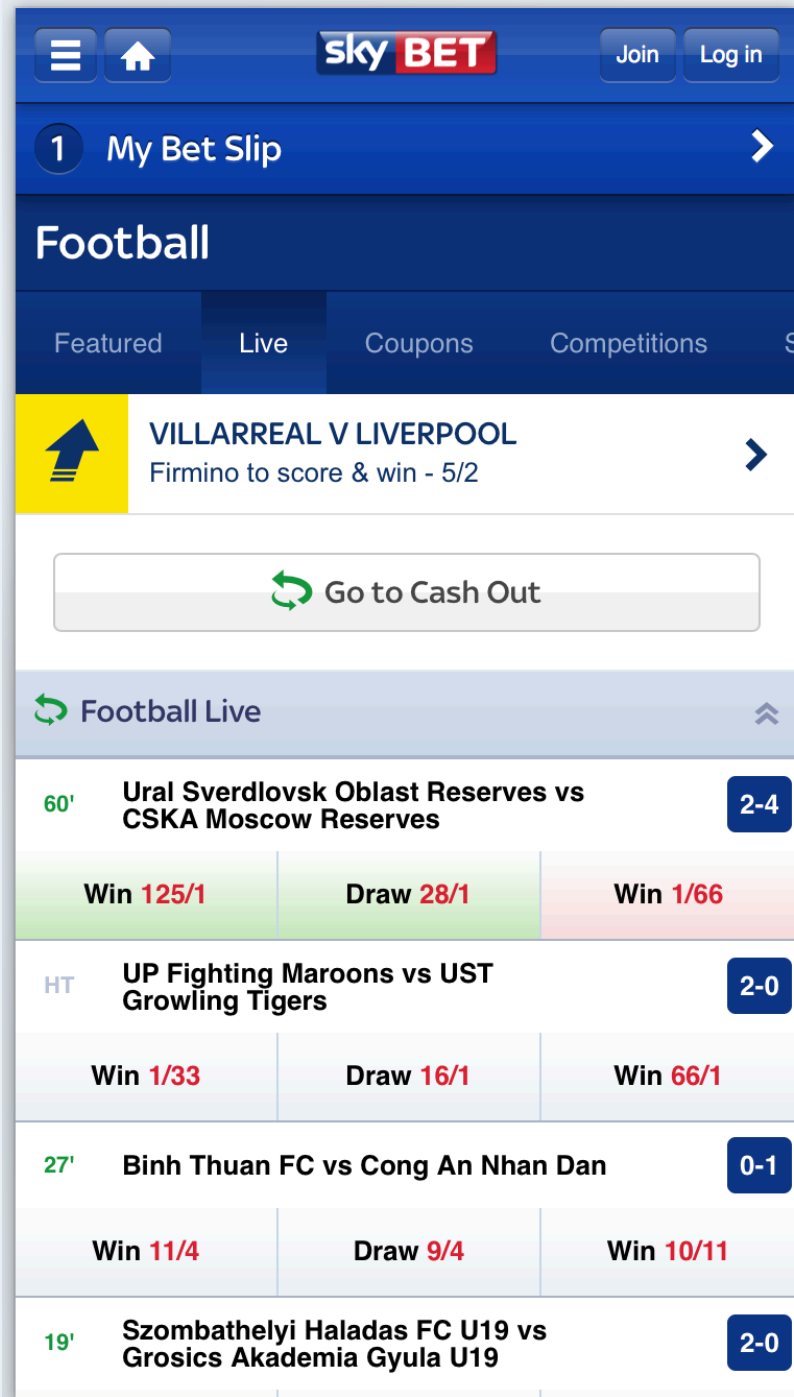What are the challenges we were facing?

Create a more engaging customer experience
Increase the resilience of our core features
Scale our product
Scale our teams

Nothing rendered by JavaScript

State stored in data attributes in the DOM

Increasingly real-time and interactive product demands
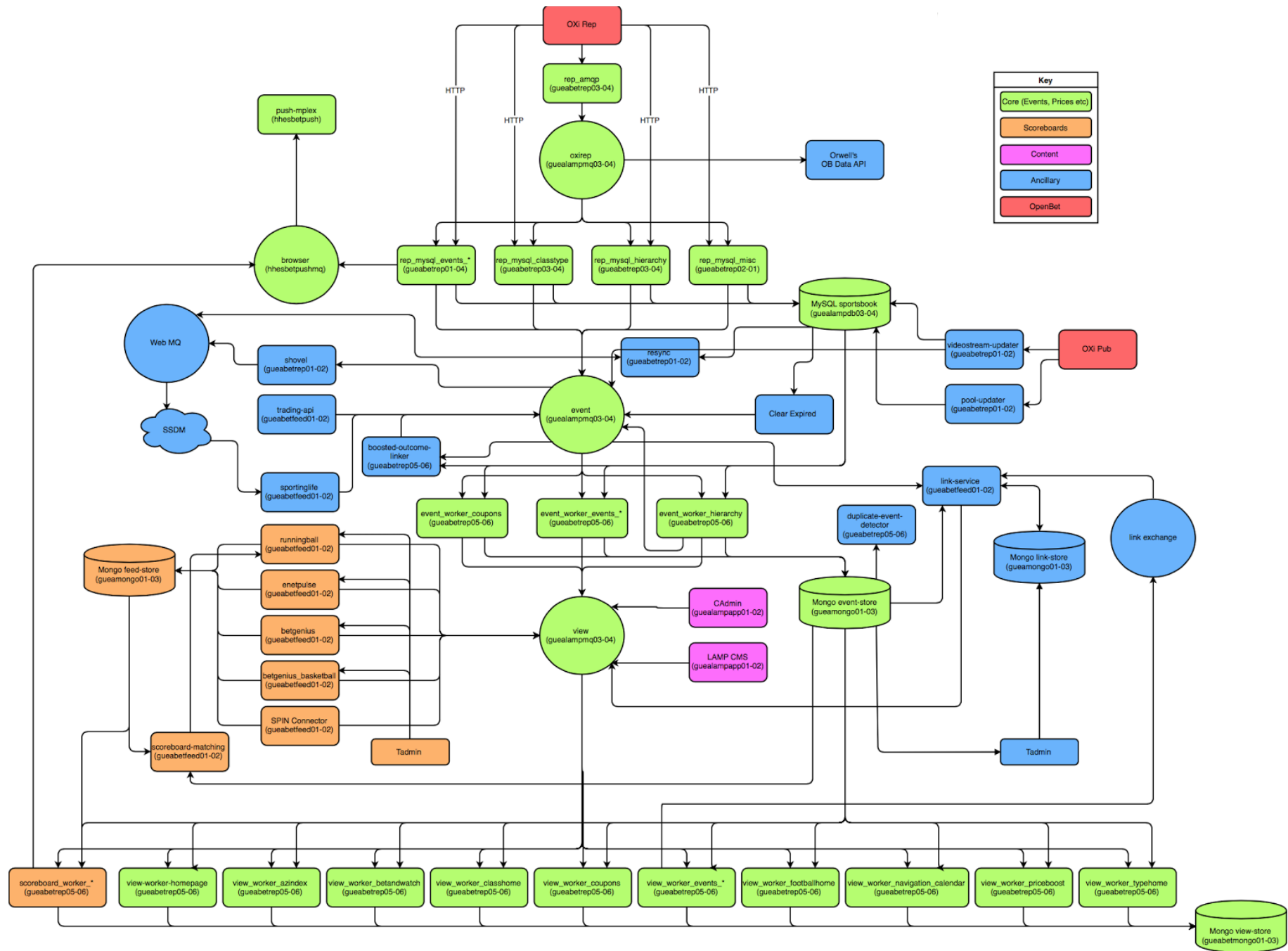
No knowledge of routing in client

Spaghetti OO style JavaScript reliant on directly bound event listeners

```javascript
Receipt.prototype.init = function() {
    bindEvents.call(this);
    var el = Ess('#receipt-data');
    if (el) {
        this.cashStakes = parseMoneyStringToNumber(el.getAttribute('data-cashstakes'));
        this.freeStakes = parseMoneyStringToNumber(el.getAttribute('data-freestakes'));
        this.betCount = parseFloat(el.getAttribute('data-betcount'));
        this.notifications = JSON.parse(el.getAttribute('data-notifications'));
        this.bets = getBetsFromDOM(Ess('.bet-slip-receipt__bet'));
        this.returns = this.bets.reduce(function(t,b) { return t + b.returns;}, 0);
        this.emit('receipt', {
            cashStakes:     this.cashStakes,
            freeStakes:     this.freeStakes,
            betCount:       this.betCount,
            returns:        this.returns,
            notifications:  this.notifications,
            bets:           this.bets
        })

        if (Ess('#recommended-bets', this.element)) {
            this.emit('recommendedBetsSeen');
        }
    }
};
```

```javascript
this.betslip.on('receipt', function(data) {
    var numberOfSingles = 0,
        numberOfAccumulators = 0;
    data.bets.forEach(function(bet) {
        if (bet.selections.length > 1) {
            numberOfAccumulators++;
        } else {
            numberOfSingles++;
        }
    });
    var products = {
        betsPlaced:      null, //@todo: what's the point of this then?
        numberOfSingleBets: numberOfSingles,
        numberOfAccumulatorBets: numberOfAccumulators,
        betCashStakes: data.cashStakes,
        betFreeStakes: data.freeStakes,
        betCount:       data.betCount,
    };
```

Key
- Core (Events, Prices etc)
- Scoreboards
- Content
- Ancillary
- OpenBet

Key
- Core (Events, Prices etc)
- Scoreboards
- Content
- Ancillary
- OpenBet

OXi Rep

rep_amqp (gueabetrep03-04)

push-mplex (hhesbetpush)

oxirep (guealampmq03-04)

Orwell's OB Data API

HTTP — HTTP — HTTP — HTTP

browser (hhesbetpushmq)

rep_mysql_events_* (gueabetrep01-04)
rep_mysql_classtype (gueabetrep03-04)
rep_mysql_hierarchy (gueabetrep03-04)
rep_mysql_misc (gueabetrep02-01)

MySQL sportsbook (guealampdb03-04)

Web MQ

shovel (gueabetrep01-02)

resync (gueabetrep01-02)

videostream-updater (gueabetrep01-02)

OXi Pub

SSDM

trading-api (gueabetfeed01-02)

event (guealampmq03-04)

Clear Expired

pool-updater (gueabetrep01-02)

boosted-outcome-linker (gueabetrep05-06)

sportinglife (gueabetfeed01-02)

event_worker_coupons (gueabetrep05-06)
event_worker_events_* (gueabetrep05-06)
event_worker_hierarchy (gueabetrep05-06)

link-service (gueabetfeed01-02)

duplicate-event-detector (gueabetrep05-06)

Mongo link-store (gueabetmongo01-03)

link exchange

runningball (gueabetfeed01-02)

Mongo feed-store (gueamongo01-03)

enetpulse (gueabetfeed01-02)

betgenius (gueabetfeed01-02)

betgenius_basketball (gueabetfeed01-02)

SPIN Connector (gueabetfeed01-02)

view (guealampmq03-04)

CAdmin (guealampapp01-02)

Mongo event-store (gueamongo01-03)

LAMP CMS (guealampapp01-02)

scoreboard-matching (gueabetfeed01-02)

Tadmin

Tadmin

scoreboard_worker_* (gueabetrep05-06)
view-worker-homepage (gueabetrep05-06)
view_worker_azindex (gueabetrep05-06)
view_worker_betandwatch (gueabetrep05-06)
view_worker_classhome (gueabetrep05-06)
view_worker_coupons (gueabetrep05-06)
view_worker_events_* (gueabetrep05-06)
view_worker_footballhome (gueabetrep05-06)
view_worker_navigation_calendar (gueabetrep05-06)
view_worker_priceboost (gueabetrep05-06)

Mongo view-store (gueabetmongo01-03)

"From a people and culture point of view, we're very focused on maintaining the things that made Sky Bet great as we scale up the internal team – we doubled the number of employees last year."
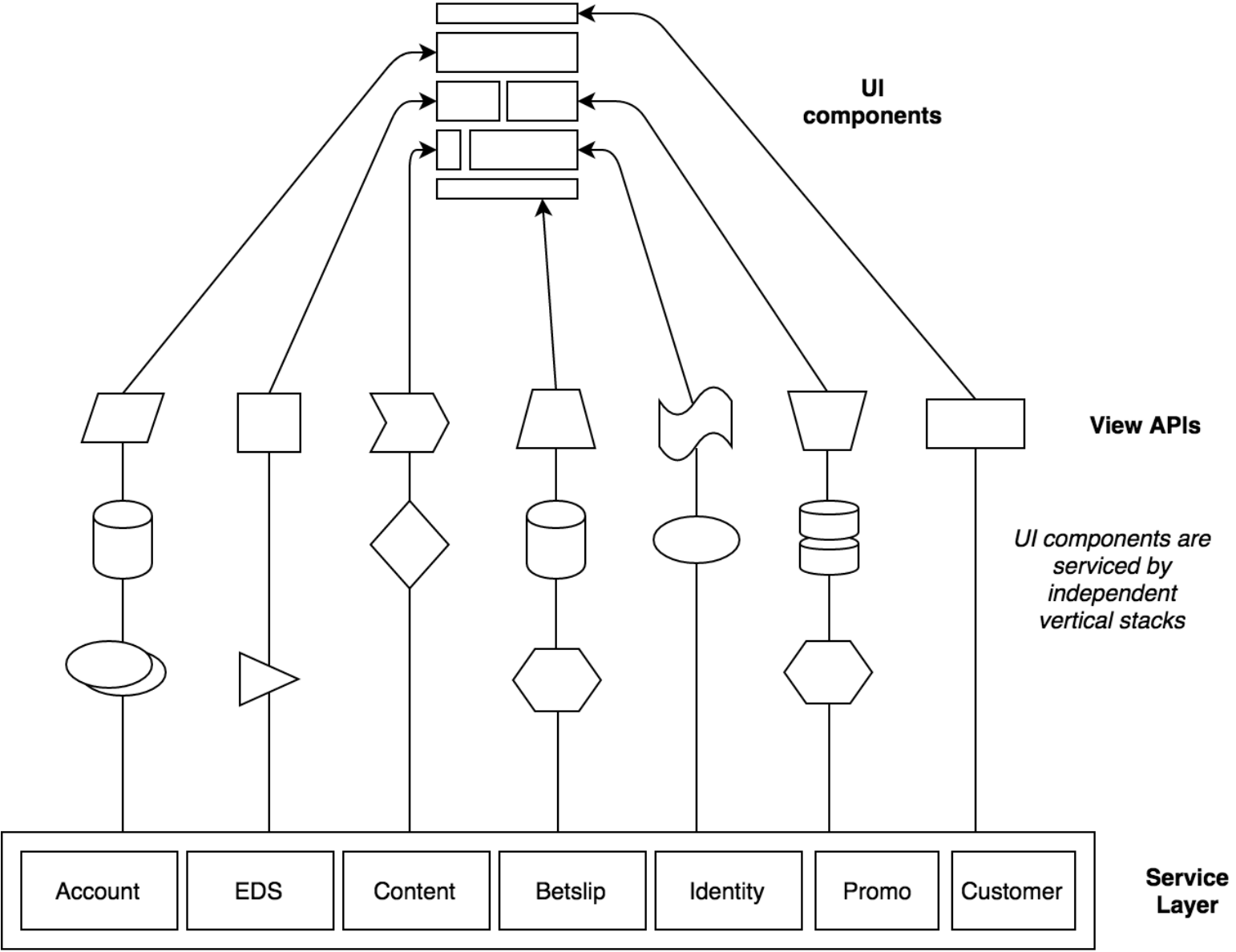
http://www.silicon.co.uk/cloud/it-life-andy-burton-cto-sky-bet-197113

WHOLLY OWNED, VERTICAL SLICES

"Favor object composition over class inheritance...

...You should be able to get all the functionality you need just by assembling existing components through object composition."

Gamma et al, 1994

UI components

View APIs

UI components are serviced by independent vertical stacks

Service Layer

| Account | EDS | Content | Betslip | Identity | Promo | Customer |

Services in the Service Layer are authoritative sources of data

Common business logic resides in one place

Services adhere to the Service Blueprint

CHOOSING THE TECH STACK

"Don't Rewrite, React"

Ryan Florence, React Europe 2015
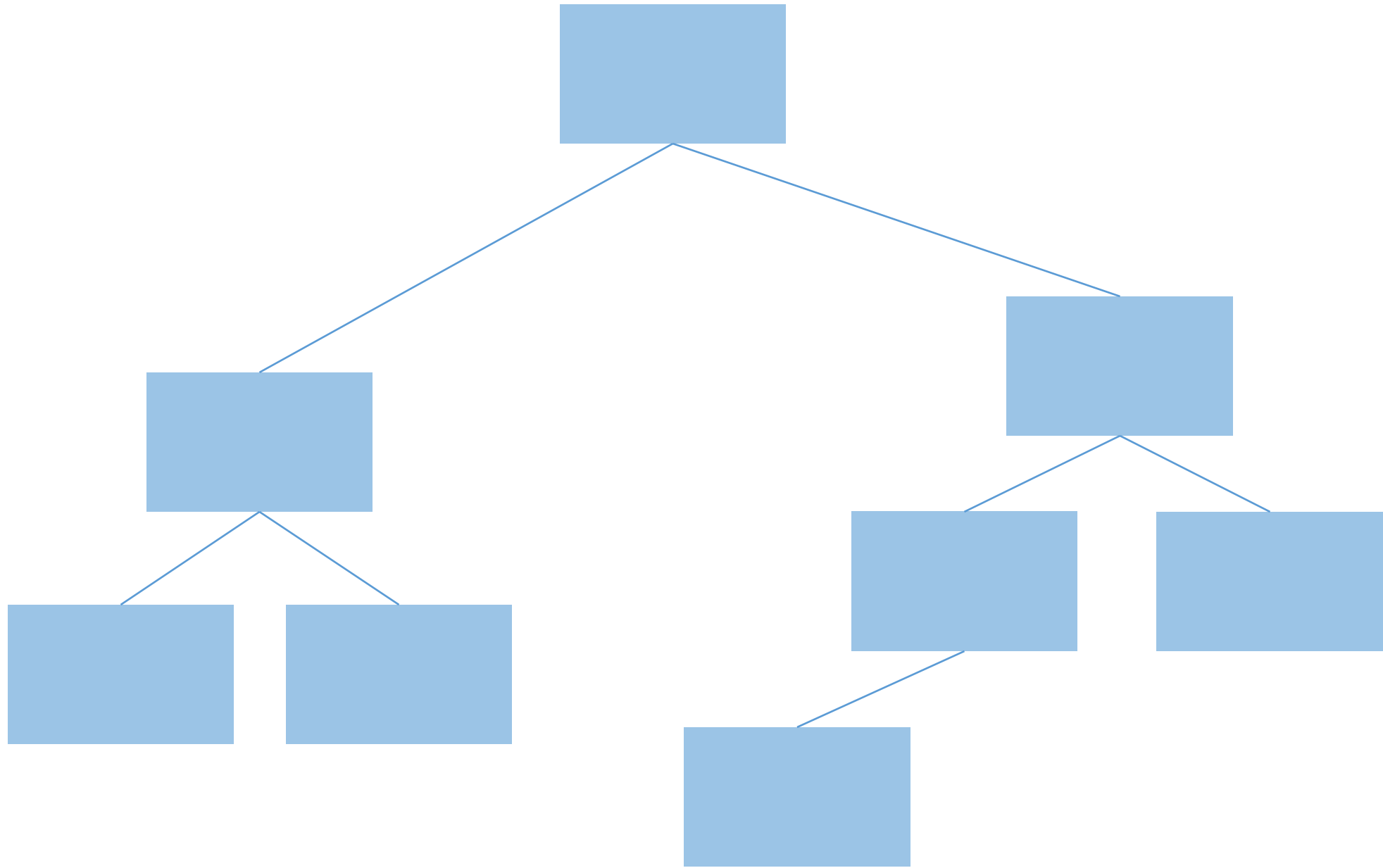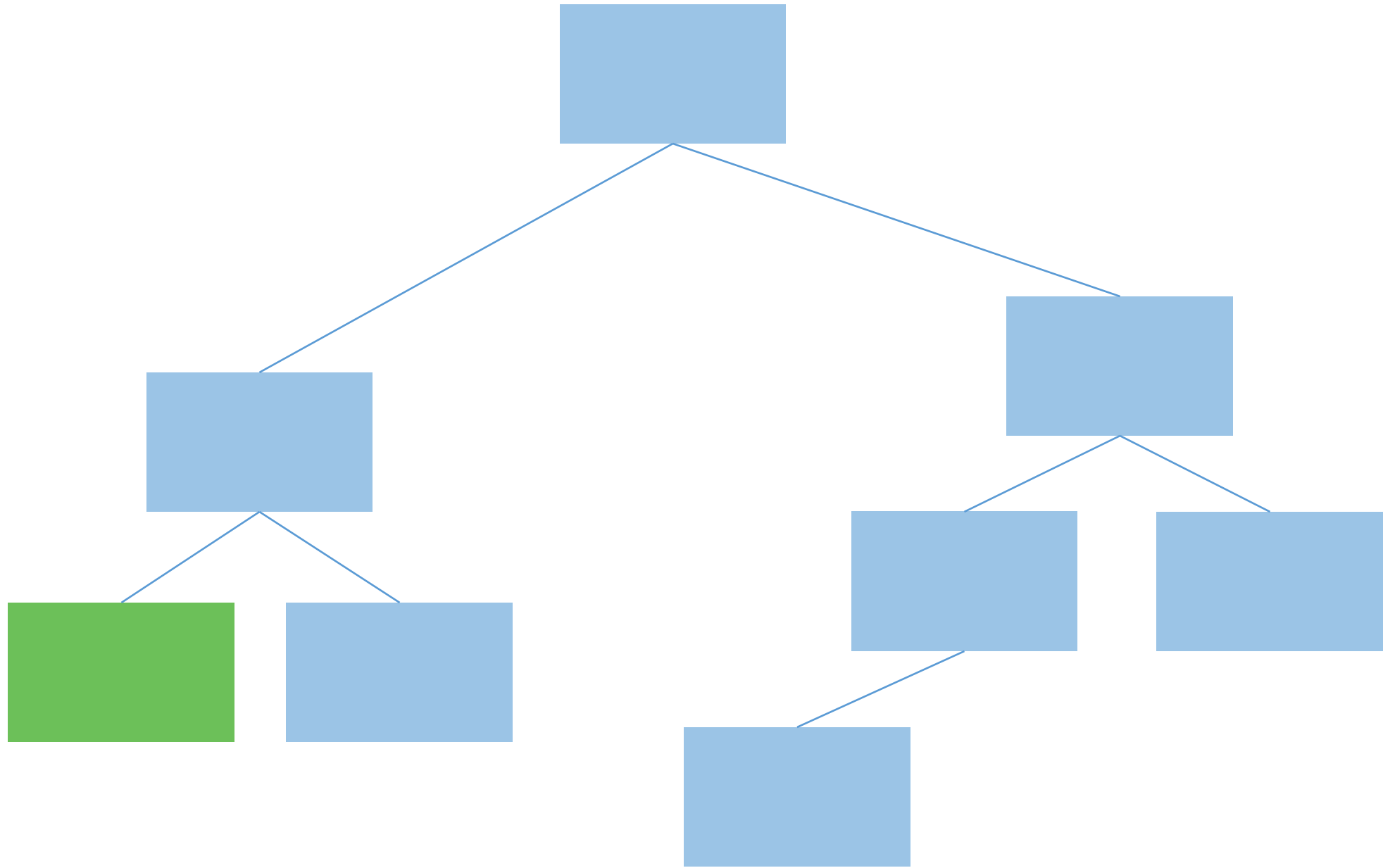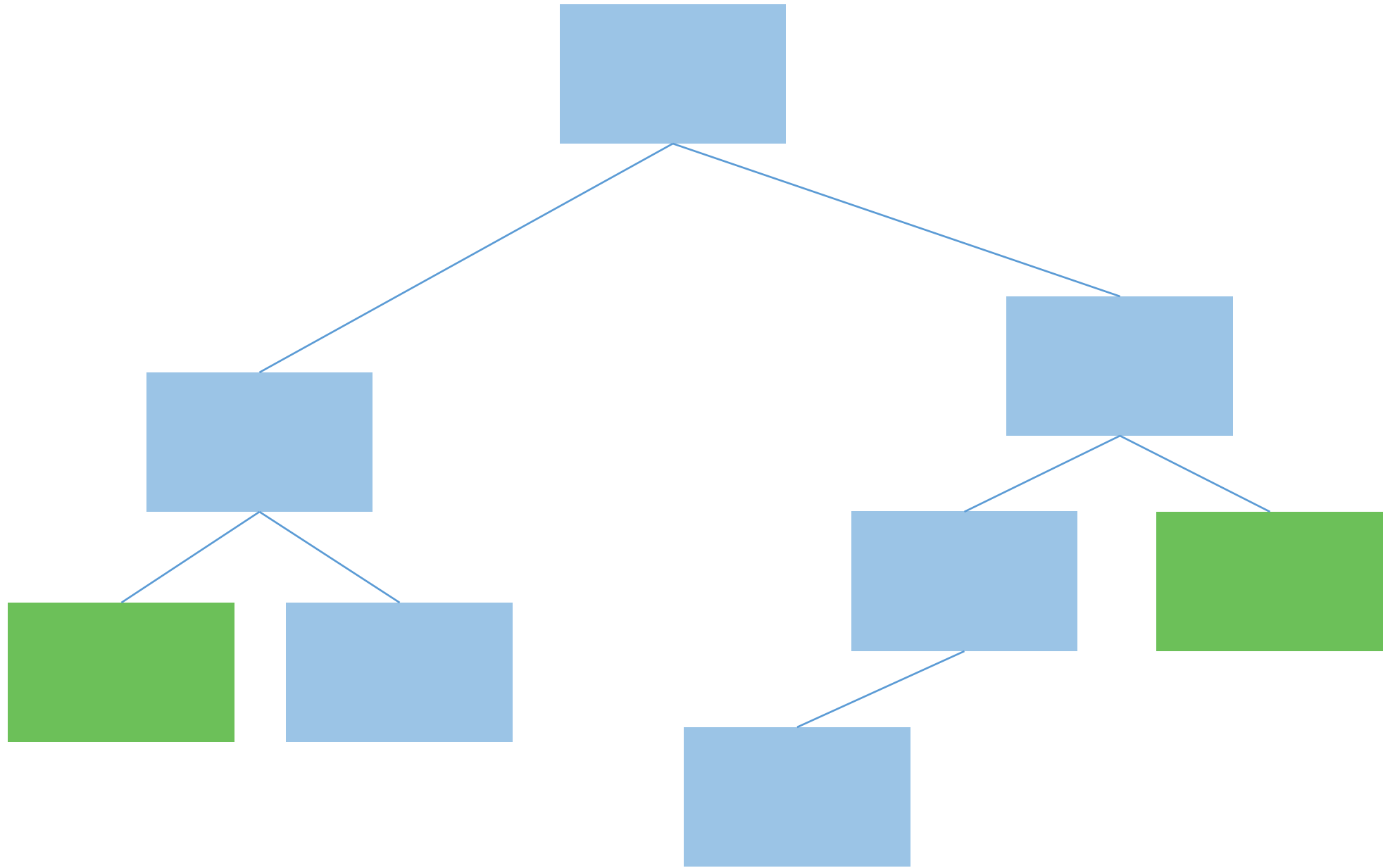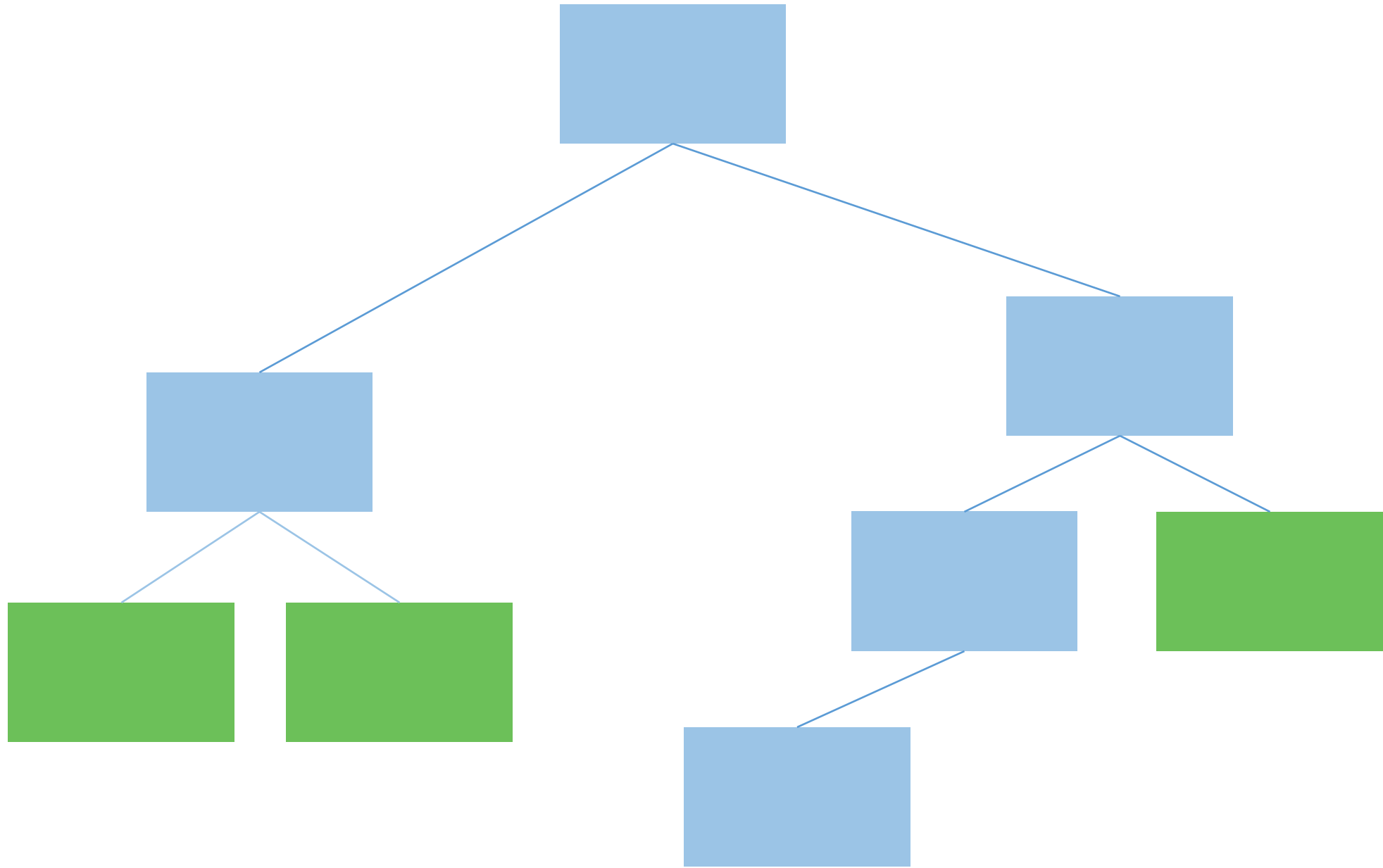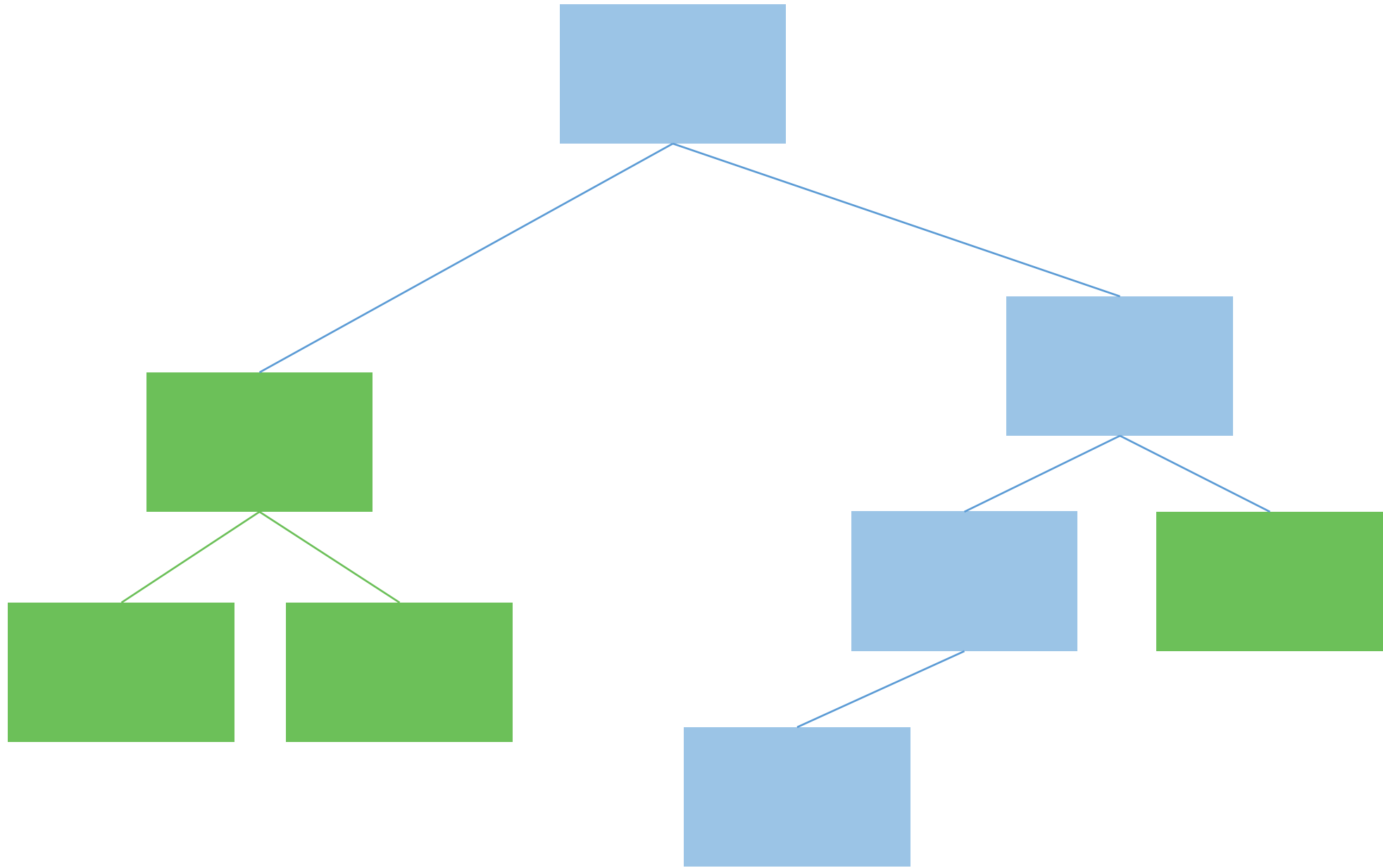
IN PRACTICE IT'S NEVER THAT SIMPLE

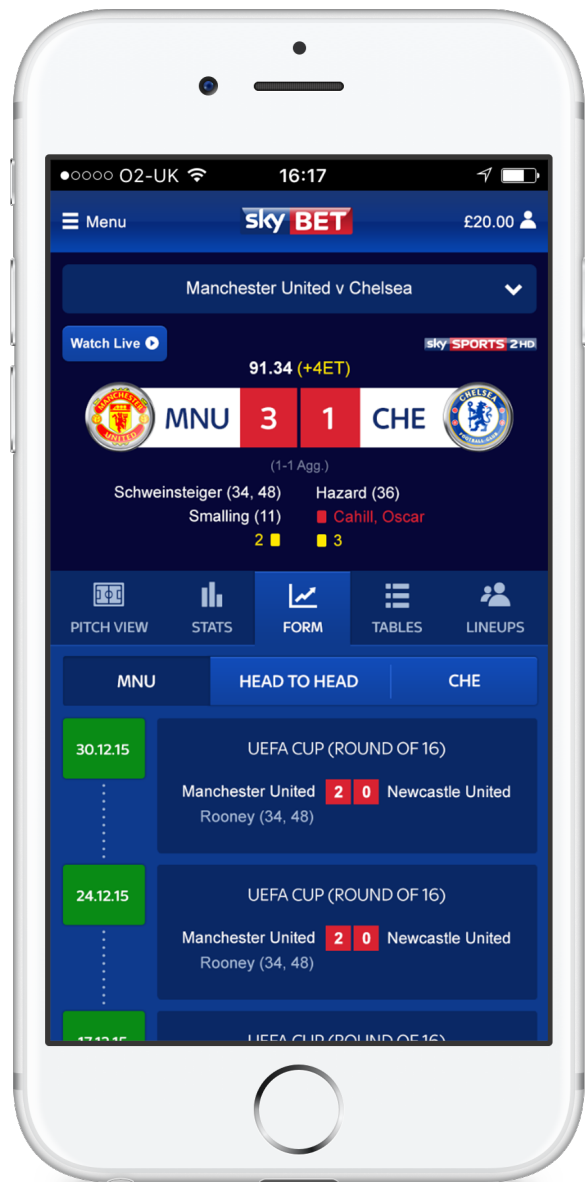Independent components may share data requirements
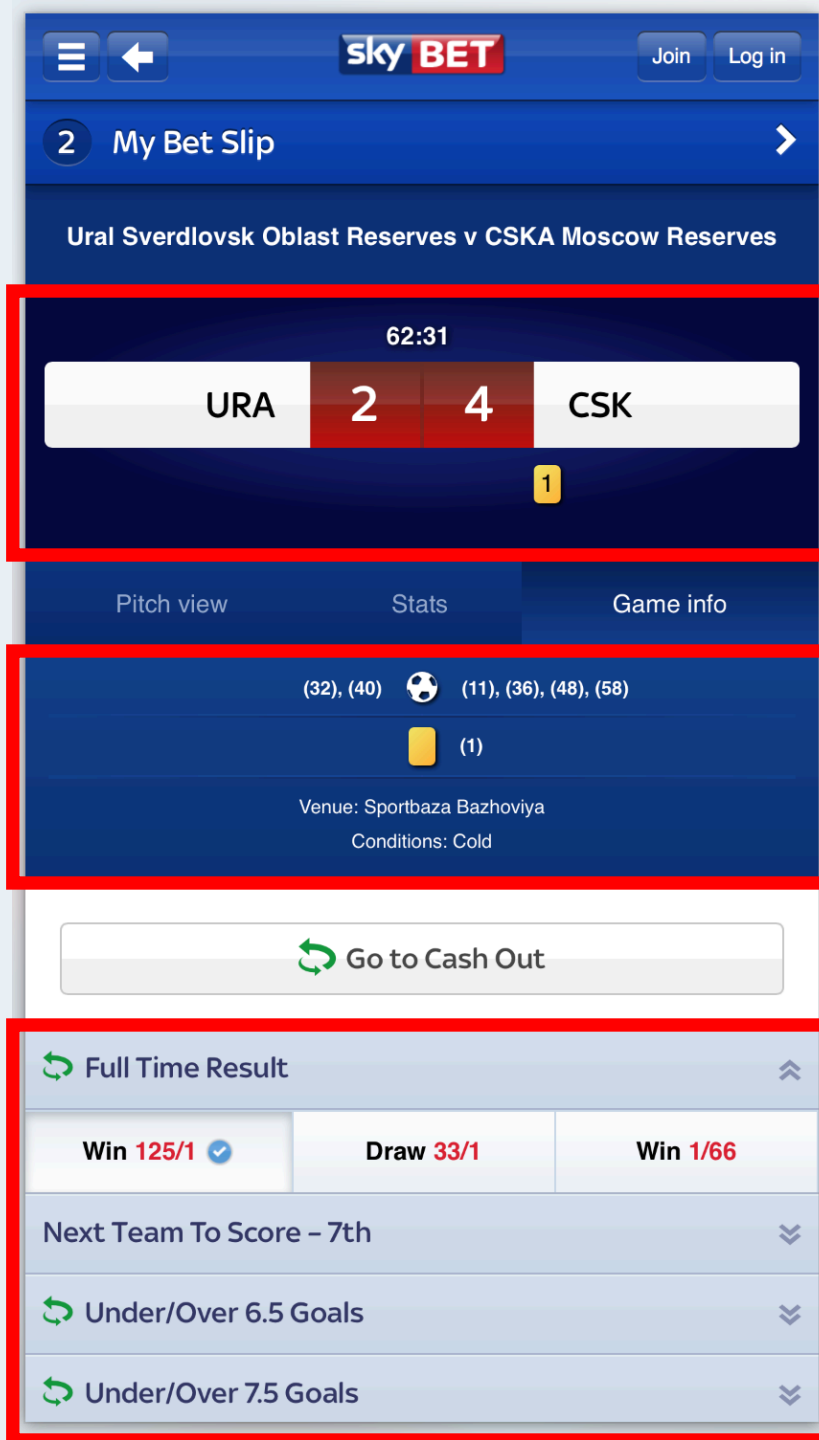
Apps may share code dependencies (i.e. Ramda)

Real-time updates need to happen simultaneously to ensure consistent experience

How do we instantiate these things?

IT GETS HARDER AS THE PRODUCT REQUIREMENTS GROW MORE DETAILED
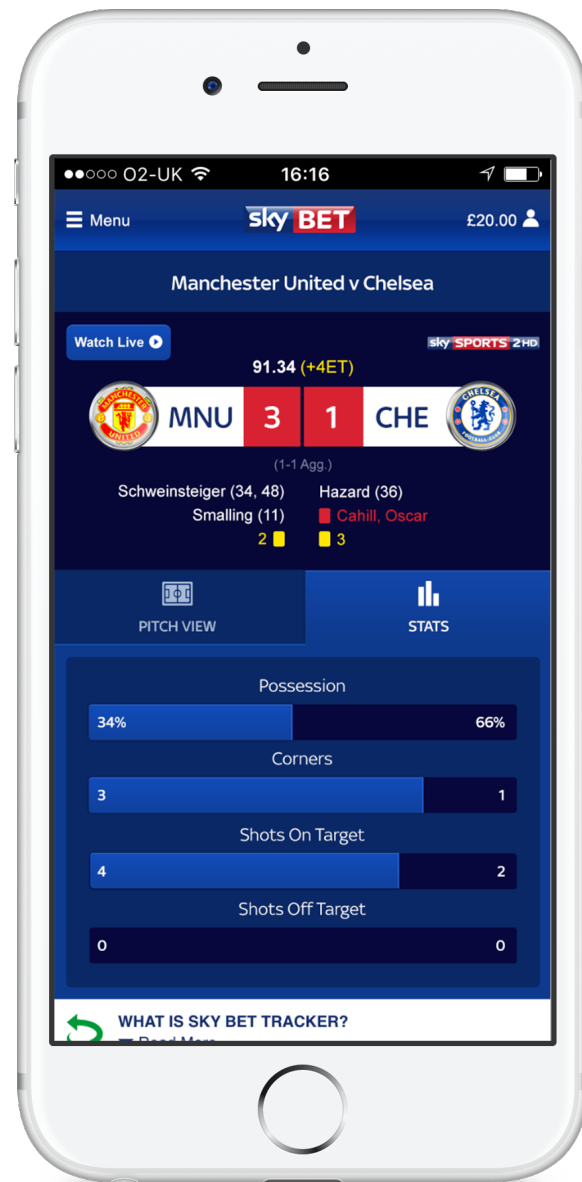
WORKING WITH COMPONENTS

Bayern Munich v Arsenal

Champions League

Wednesday 15th February 2017 19:45

BT Sport 2

In-Play betting will be available

PUNDITS' PREDICTIONS
Charlie Nicholas is tipping Lewandowski to score first and Bayern to win 2-1

Read more

Show me:

Goals	⌄

Total Goals, Corners Taken & Booking Pts

ⓘ • Yellow = 10, Red = 25, 2 Yellow & 1 Red With Dismissal = 35

Over 1.5 Goals, Over 8.5 Corners And Over 25 Bookings Points	5/6
Over 2.5 Goals, Over 10.5 Corners And Over 35 Bookings Points	7/2
Over 3.5 Goals, Over 12.5 Corners And Over 45 Bookings Points	16/1
↺ Under/Over 2.5 Goals	⌄

Show me:

✓	**All Markets**
	RequestABet™ Markets
	Cash Out Markets
	Goals Markets
	Player Markets
	Team Markets
	Corners Markets
	Cards Markets
	Half & Minutes Markets

Ahmed Musa to score the 2nd goal	11/2	**13/2**
Bradley Johnson to score in 90 mins	9/2	**13/2**

RequestABet Live	⌄
Player To Be Carded	⌄
Winner Of Tie Live	⌄
Player To Be Sent Off	⌄
↺ How Will The Tie Be Decided	⌄

↺ Go to Cash Out

Show me:

RequestABet™	⌄

15 RequestABets™   **Filter** ⌃

Filter by Market   Clear

Team to win	☐	Both Teams To Score	☐
Player to score	☐	Over/Under Goals	☐
Player carded	☑	Bookings	☐
Correct Score	☐	Corners	☐

RequestABet Live (15)

Andy King & Bradley Johnson to be carded	28/1
Yohan Benalouane & Marcin Wasilewski to be carded	28/1

```jsx
const App = (props) => <div>
    {props.showRabBar &&
     <Sticky enabled={props.rabModeEnabled} innerZ={8} bottomBoundary="#page-content">
         <RequestABet
             onToggle={props.rabOnToggleClick}
             onRequestAPrice={props.rabOnRequestAPrice}
             priceFormatter={props.priceFormatter}
             onRemoveSelection={props.rabOnRemoveSelection}
             onAddToBetSlip={props.rabOnAddToBetSlip}
             onReset={props.rabOnReset}
         />
     </Sticky>}
    {props.rabModeEnabled
        ? props.showRabMarkets && <RabMarkets onRabClick={props.onRabClick}/>
        : <FootballMarkets
             onOutcomeClick={props.onOutcomeClick}
             priceFormatter={props.priceFormatter}
             showMyRabs={props.showRabBar}
         />}
</div>;
```

FUNCTIONAL COMPOSITION

"It is better to have 100 functions operate on one data structure than 10 functions on 10 data structures.."

Alan Perlis

```
const cardsMarketRegExp = new RegExp(cardsMarketRegexs.join("|"), "i");
const playerMarketRegExp = new RegExp(playerMarketRegexs.join("|"), "i");
const teamMarketRegExp = new RegExp(teamMarketRegExs.join("|"), "i");
const periodMarketRegExp = new RegExp(periodMarketRegexs.join("|"), "i");


// Predicates :: Market → Boolean
export const isBoost: (Market) ⇒ boolean = propSatisfies(test(/boost/gi), "name");
export const isActive: (Market) ⇒ boolean = propEq("displayStatus", "active");
export const isSuspended: (Market) ⇒ boolean = propEq("displayStatus", "suspended");
export const isRequestABet: (Market) ⇒ boolean = propEq("type", "request-a-bet");
export const isActiveOrSuspended: (Market) ⇒ boolean = anyPass([isActive, isSuspended]);
export const isCashoutable: (Market) ⇒ boolean = propEq("cashoutable", true);
export const isGoalMarket: (Market) ⇒ boolean = propSatisfies(test(/\bgoals?\b/i), "name");
export const isPlayerMarket: (Market) ⇒ boolean = propSatisfies(test(playerMarketRegExp), "name");
export const isPeriodMarket: (Market) ⇒ boolean = propSatisfies(test(periodMarketRegExp), "name");
export const isCardsMarket: (Market) ⇒ boolean = propSatisfies(test(cardsMarketRegExp), "name");
export const isTeamMarket: (Market) ⇒ boolean = propSatisfies(test(teamMarketRegExp), "name");
export const isCornerMarket: (Market) ⇒ boolean = propSatisfies(test(/\bcorners?\b/i), "name");
```

ENCAPSULATE CSS

```
title: {
    margin: 0,
    textShadow: "0 1px rgba(0, 0, 0, 0.1)",
    fontWeight: "normal",
    fontFamily: "SkyMedium",
    fontSize: Size.LARGE_ICON,
    textTransform: "capitalize",
    paddingLeft: Size.INNER_SPACING
},

titlePrefix: {
    display: "none",

    "@media (min-width: 390px)": {
        display: "inline-block"
    }
},
```

EXTRACT LOW LEVEL DESIGN LANGUAGE

sky BET

UI Library

Atoms

Global

Accordion

Buttons

Dividers

Glyphs

List

OutcomeTitle

PriceboostBadge

PriceSpacer

Tabs

TickBox

Toggle

Molecules

Price

MarketHeader

NoteEssential

NotePromotional

Selector

Organisms

StandardMarket

PriceboostMarket

<Buttons />

Buttons

Primary

Secondary

Confirm

Info

Disabled
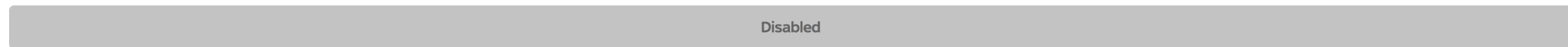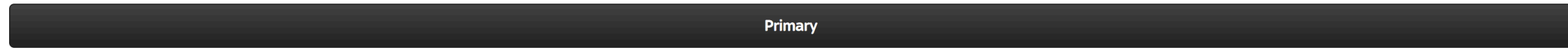
Inline buttons

| Primary | Secondary |

Click handlers

Disabled - no click handler

Click me!
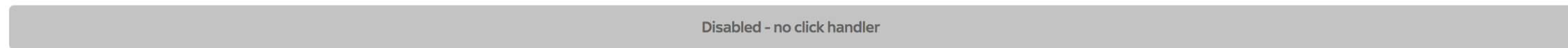
You've clicked the button 9 times

```
<Button type="primary" href="foo.com">Jump to foo</Button>
```

Overview

These are our buttons, use them wisely.

PropTypes

SKY BET

UI Library

Atoms

Global

Accordion

Buttons

Dividers

Glyphs

List

OutcomeTitle

PriceboostBadge

PriceSpacer

Tabs

TickBox

Toggle

Molecules

Price

MarketHeader

NoteEssential

NotePromotional

Selector

Organisms

StandardMarket

PriceboostMarket

\<Buttons />

Buttons

Primary

Secondary

Confirm

Info

Disabled

Inline buttons
Click handlers

| Primary | Secondary |

Disabled - no click handler

Click me!

Sheesh, don't you think you've done enough clicking?

```
<Button type="primary" href="foo.com">Jump to foo</Button>
```

Overview

These are our buttons, use them wisely.

PropTypes

THE ELEVENTH HOUR CURVE BALL

SKY BET

PREMIER LEAGUE REQUEST-A-BET

ANY PREM LEAGUE TEAM TO WIN EUROPEAN TROPHY	2/1
ARSENAL & TOTTENHAM BOTH TO FINISH OUTSIDE TOP 4	3/1
ALL 3 PROMOTED TEAMS TO STAY UP	9/1
MAN UTD TO WIN PREM LEAGUE & SUNDERLAND RELEGATED	14/1

DELIVER A MARKET LEADING REQUESTABET™ PRODUCT FOR THE START OF THE PREMIER LEAGUE SEASON

(That gave us less than six weeks)

```jsx
const App = (props) => <div>
    {props.showRabBar &&

        <RequestABet
            onToggle={props.rabOnToggleClick}
            onRequestAPrice={props.rabOnRequestAPrice}
            priceFormatter={props.priceFormatter}
            onRemoveSelection={props.rabOnRemoveSelection}
            onAddToBetSlip={props.rabOnAddToBetSlip}
            onReset={props.rabOnReset}
        />

    {props.rabModeEnabled
        ? props.showRabMarkets && <RabMarkets onRabClick={props.onRabClick}/>
        : <FootballMarkets
            onOutcomeClick={props.onOutcomeClick}
            priceFormatter={props.priceFormatter}
            showMyRabs={props.showRabBar}
        />}
</div>;
```

Allow customers to request a bet consisting of outcomes from the same event

Request the bet – if it can be priced immediately you'll see the result in real-time, otherwise it will be sent to the trading team

Select outcomes from a curated list of markets and add them to your request cart

Your requests are stored locally and a push notification is sent to the device to notify when the trading team have stopped pricing requests

When a selection is added we calculate suggestions using a web worker

When a request is submitted, we can use the pre-built suggestions list to show you highly related options

Web worker runs in separate JavaScript thread to minimise performance overhead

RequestABet™

i What is this?

Here's your RequestABet™, good luck!

Orlando City to win, BTTS, 12+ match corners and 60+ match booking pts

Add to Betslip at 19.00

Related RequestABets™

New York City FC to win, BTTS, 12+ match corners and 60+ match booking pts	29.00
12+ match corners and 60+ match booking pts	6.50
BTTS, 4+ corners each team and 20+ booking pts each team	5.50
Orlando City to win, BTTS - No and 5+ corners each team	13.00

Request Again

Cheltenham First Race Special

WORKING WITH REACT AND THE CLIENT-SIDE COMPONENT APPROACH ALLOWED US TO DEVELOP THE FEATURE IN PARALLEL TO THE EXISTING ROADMAP

CUSTOMERS LOVE THE FEATURE

(And we delivered it with a week to spare)

Conor Fussell
@Fuss1991

I bloody love #RequestABet. #BettingBetter with @SkyBet

Last 14 days

Single @ 125/1   Stake: £10.00

🏆 You won £1,260.00 (inc. stake)

✓ **Kane to score, Tottenham 4-0, 12+ match corners and Wanyama to be carded @ 125/1**
RequestABet Specials 80/1 and above Tottenham v Stoke

Event: Football
                Premier League

Event date: 13:30 26th Feb 2017

Resulted: Yes

RETWEETS   LIKES
2   13
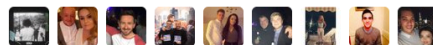
3:29 PM - 26 Feb 2017

2   2   13

When you have 40p left in your sky bet account so stick it on a random #RequestABet 😂 @Oddschanger

Single @ 100/1	Stake: £0.40

🏆 You won £40.40 (inc. stake)

✓ **Ibrahimovic to score 2+ goals and Stephens & Romeu to be carded @ 100/1**
RequestABet Specials 80/1 and above
Manchester Utd v Southampton

Event:	Football
	EFL Cup
Event date:	16:30 26th Feb 2017
Resulted:	Yes

i Bet details   sky BET   15:32 26th Feb 2017

RETWEET   LIKES
1   9

7:16 PM - 26 Feb 2017

OVER 1 MILLION UNIQUE USERS SINCE LAUNCH AND ROUGHLY 1.7 MILLION UNIQUE REQUESTS RECEIVED BY TRADERS

THE BITS THAT DIDN'T GO SO WELL

BUILT COMPONENTS IN THE UI-LIBRARY TOO SOON

SERVER RENDERING

SOME FUNCTIONAL TECHNIQUES CAME WITH A STEEP LEARNING CURVE

TEAM NAMES MATTER MORE THAN YOU THINK

HAVE WELL DOCUMENTED ENGINEERING PRINCIPLES WHICH ARE ACTIVELY DISCUSSED

Technical Approach

As a team we primarily work with JavaScript and have chosen to embrace the following as best-practice:

- Test Driven Development (Uncle Bob's three laws with a side order of Kent Beck's two rules)
  - Unit tests should be runnable on the devices our customers will use (we've chosen Karma as our test runner)
  - Unit tests should avoid mocks wherever possible
  - Factories should be used to ensure fixtures are kept up to date with the data contracts in the actual application
- Embrace functional programming techniques
  - Immutability and side-effect free functions
  - Functional libraries such as Ramda.js
  - Fantasyland specification
  - Folktale data structures (Maybe, Either, Validation, Task, etc.)
- Performance is a feature
- Static analysis and type safety are important (see Flow and ESlint)
- Understand that JavaScript is now largely a compiled language
  - The code you write is not necessarily the code executed by the runtime
  - Use module bundlers to enable optimisation and better application structure
  - Use transpilers and core.js polyfills to ensure interoperability between supported browsers and devices

TDD, PAIRING AND CODE REVIEW KEEP THE QUALITY BAR HIGH

WHAT'S NEXT?

Neftchi Fargona v Metalourg Bekabad

33:15

NEF	0	3	MET

⚽ Player (15), Player (19), Player (24)

🟥 Player (31)

🟨 (9)

Pitch	Stats	**Scores**

Premier League ⌄

75'

0	Chelsea	⌄
5	Middlesbrough	

75'

| 1 | West Ham | ⌄ |

75'

1	Manchester United	⌄
0	Hull	

75'

4	Manchester City	⌄
0	Liverpool	

75'

0	Swansea	⌄
0	Everton	

75'

3	Leicester	⌄
0	Sunderland	

All Markets   📑 RequestABets   Cash Out

🔄 **Full Time Result** ⌃

Win **22/1**	Draw **8/1**	Win **1/10**

Next Team To Score - 3rd ⌄

Create a more engaging customer experience
Increase the resilience of our core features
Scale our product
Scale our teams

THANK YOU

Ian Thomas – Principal Engineer, Sky Betting & Gaming

@anatomic