



Starwatch Metrics & Analytics

Natalie Podrazik & David Jacobs for CocoaHeads NYC

February 2012

Mixel by Puili Nantanat

29th Street Publishing

- ❖ Services and products (prototypes, for now) while we figure it out.
- ❖ We love to partner with other companies & clients
- ❖ We've brought some publishing relationships from past work...
- ❖ and that's a complicated landscape. Revenue, ownership, distribution models are all being tested, and privacy issues are in the center of that discussion.

The screenshot shows a TechCrunch article from February 13, 2012, by Josh Constance. The article discusses mobile app usage during the Super Bowl. Key data points include:

- App Usage During Super Bowl:** 96 million.
- Super Bowl TV Audience:** 111 million.

The article includes a line graph titled "App Sessions Started per Second in U.S. During Super Bowl" showing usage spikes during commercial breaks and dips during game play. It also lists popular posts and trending topics related to the Super Bowl.

This kind of post is not helpful - we're interested in creating a great user experience, not aggregate behavior across apps.

How do people read, and why?

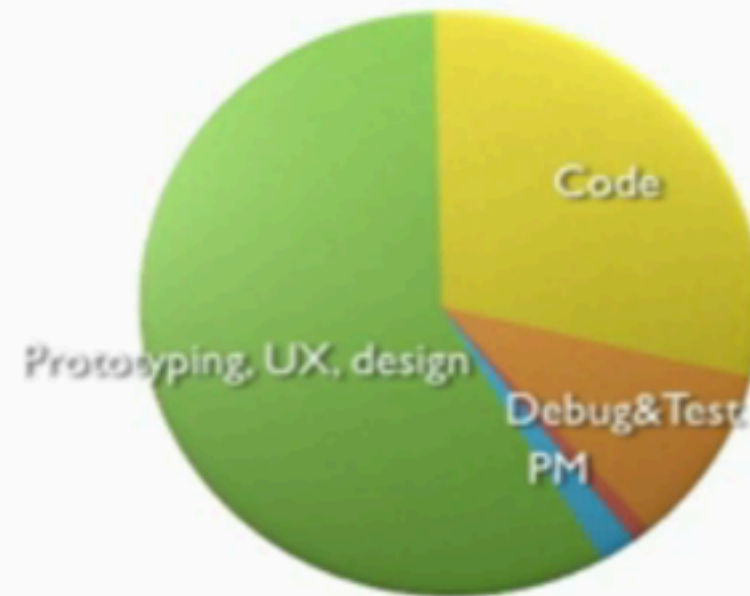
“Aggregate” data isn’t useful

Development vs. Design

Traditional



Mobile



SkillsMatter January 2012 Slide 6 Hello24 Ltd. (c) 2012

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skillsmatter.com
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How do apps get made?

As prototyping & development takes more and more of our time, we should focus more on on how early testers actually use our products.

Requirements

- ❖ As Developers, we care about:
 - ❖ Real-time access to quality reports
 - ❖ Users should be anonymous and have near-nil UX overhead
 - ❖ Easily extended and human-readable data & platform

These slides would be better with multiple mixels on these slides. Next time.

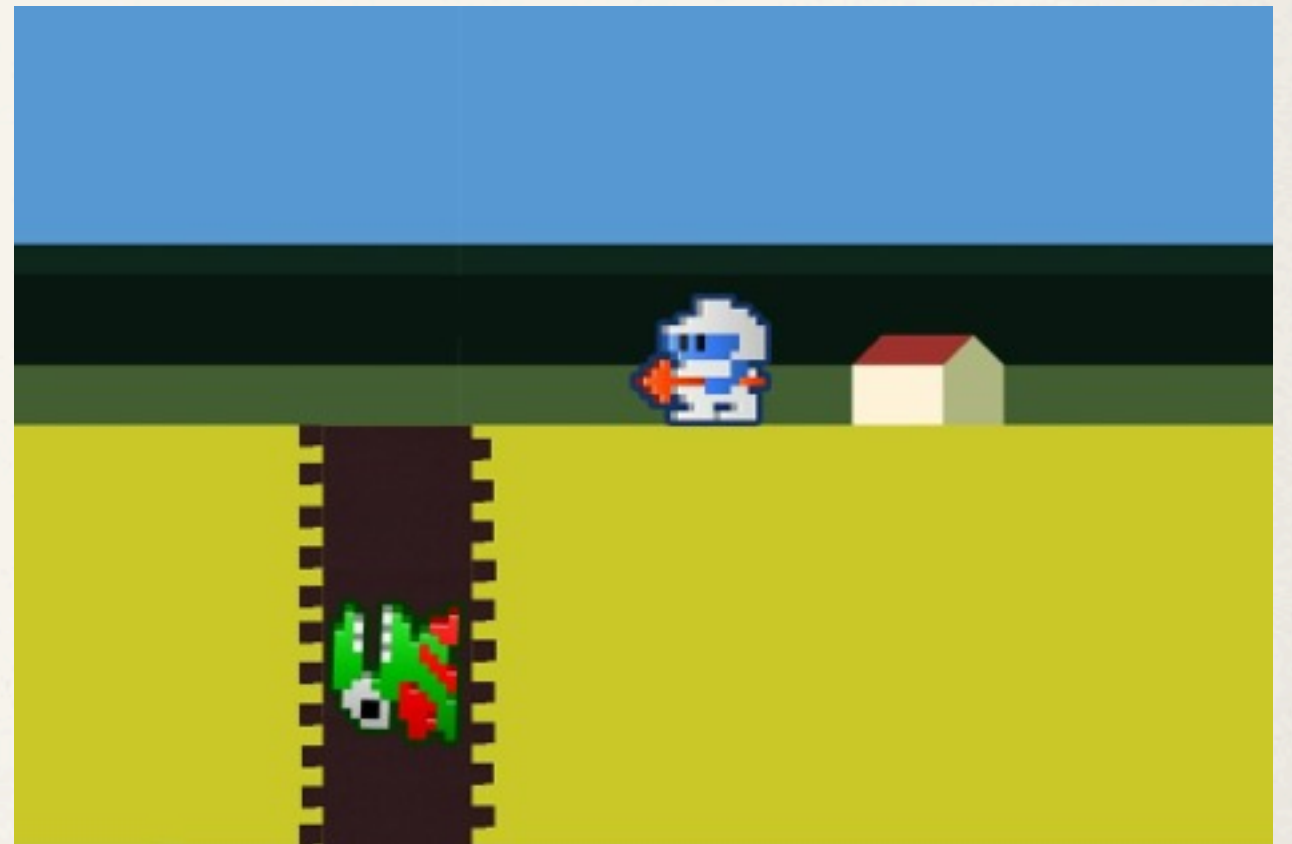


Mixel by David Jacobs

... other prior art

We probably recommend using custom events in Google Analytics' new ios tools, but haven't played enough with it. We love statsd but don't need all of that yet.

- ❖ Google Analytics has a new iOS module
- ❖ Etsy's statsd
- ❖ Flurry
- ❖ Omniture
- ❖ Apigee / Usergrid
- ❖ (many others...)



Mixel by Matt Walker

Remote Data

We chose MongoLab, but we may switch to Dynamo.

- ❖ MongoLab
 - ❖ Easy, but scales
 - ❖ Cheap, but supported
 - ❖ Fast, but flexible
 - ❖ Cons: data sent in the clear (for now), connection limit of 20K at once
- ❖ Dynamo
 - ❖ Guaranteed low latency
 - ❖ Cons: Requires TVM, not supported, odd API



Come visit anytime, we'll give you the same demo.

DEMO
TIME

Mixel by David Jacobs

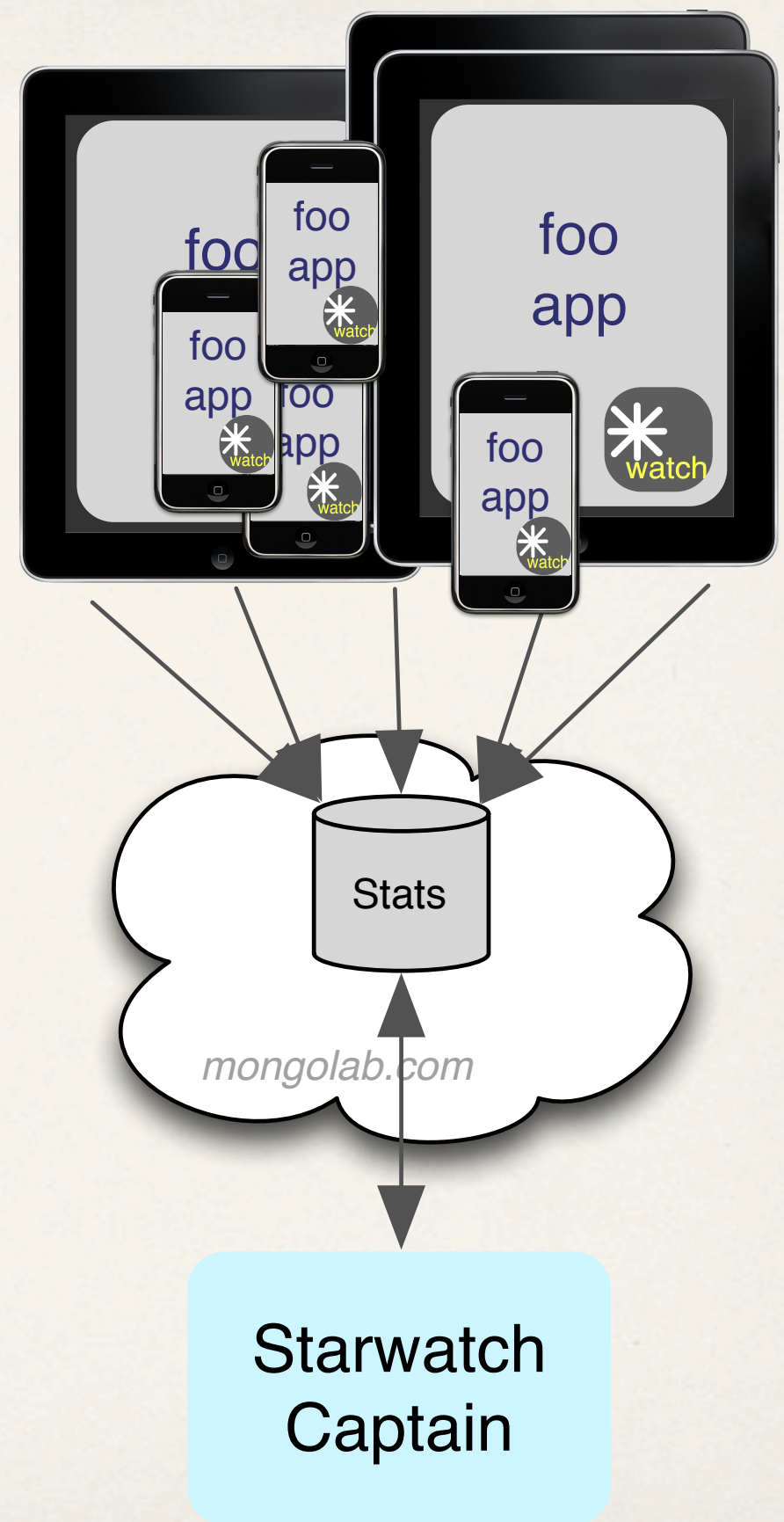
Architecture

Deployment

Client Side Submission & Collection

Server Side Data Processing

Console Display & Visualization



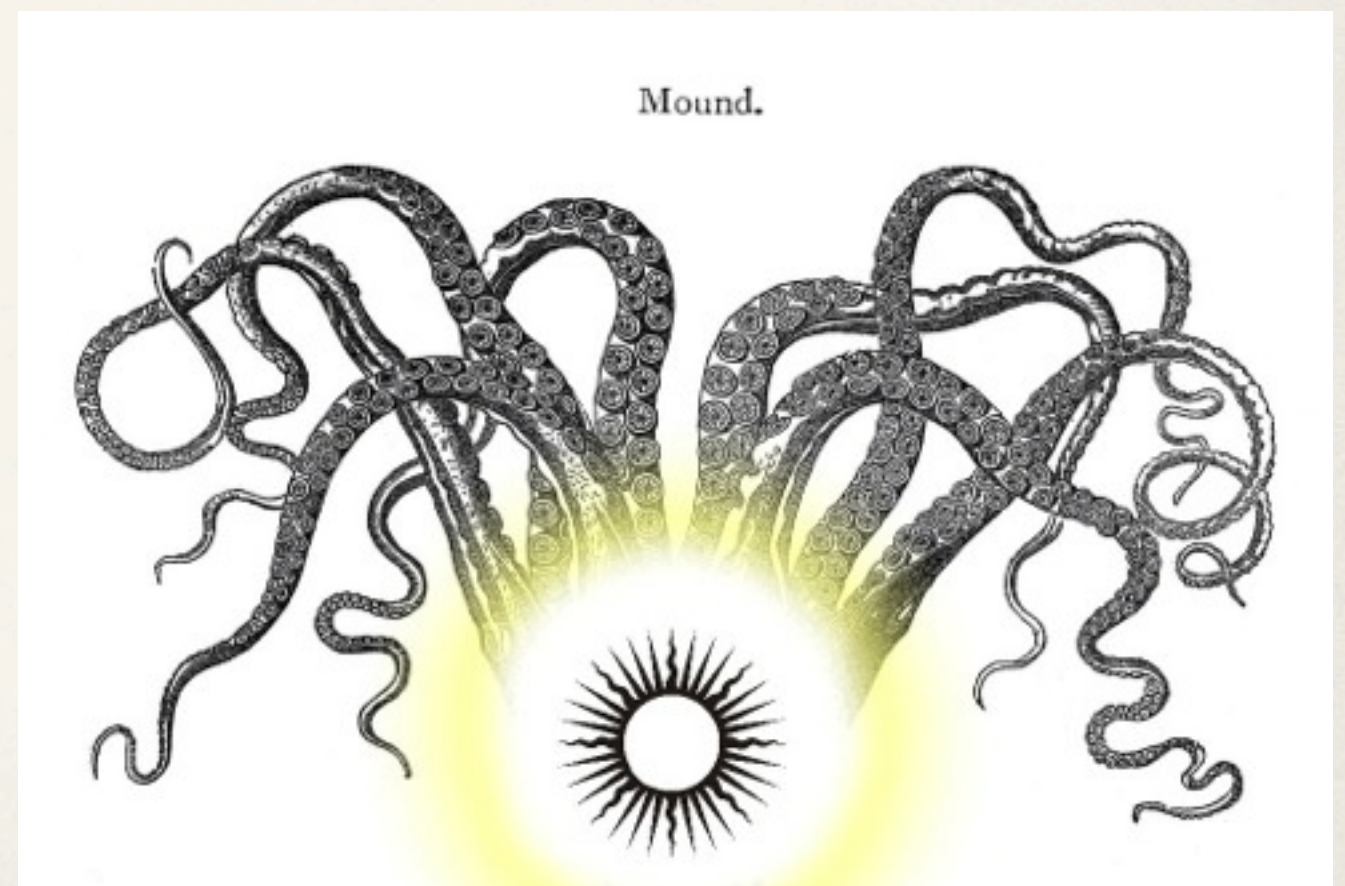
Graffle by Natalie Podrazik

Deployment & Code Profile

- ❖ Dependencies: FMDB, Mongo-C-driver, JSONKit, CFNetwork, libsqlite 3 (not Core Data)
- ❖ Utility Files:
StarWatchDatastore,
SWCUtility, SQLite schema
- ❖ Collectors: SWCViewController, SWCUIButton
- ❖ Sender: SWSender
- ❖ Service is running on Django, will be deployed w/ Tornado & Nginx

Collection

- ❖ Subclass of UIView & UIButton to capture every view change (and other custom events) from the session
- ❖ Easily extendable (through a category)
- ❖ Stores n (currently 10) rows of data before transmitting from local sqlite collection to server



Mixel by Ariel Aberg-Riger

Data Submission

- ❖ The iPad app makes direct calls to Mongolab in background
- ❖ Mongolab credentials are stored in Configuration plist



Mixel by William Bee

Data Processing

- ❖ Collection & processing app currently served by vanilla Django
- ❖ Server-side sorting of view actions by session & device
- ❖ We're not (yet) using the aggregation pipeline, we will definitely play with it
- ❖ Amazon Elastic Mapreduce will also work with Dynamo



Mixel by Murgatroyd Kiltron

View

- ❖ Twitter Bootstrap for CSS
- ❖ Protovis (nee D3.js) for graphs
- ❖ Thanks Liz Lettieri



Mixel by Jorge Colombo

Open Questions

- ❖ Some View Controllers explicitly respond to touch events and call `touchresponder` and then `super` instead of simply `[super]`
- ❖ Better distribution of DB credentials (and other secrets)
- ❖ What kind of data collection policy should we have?

- ❖ Best mechanisms for Open Source support?



Mixel by Joelle Alcaidinho

T H A N K
Y O U

Seriously, come visit, we're
at 134 w. 29th St. Email or
@message us first.

@djacobs
@nataliepo

[http://github.com/](http://github.com/29thStPublishing)
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Mixel

Mixel by David Jacobs, thank you Mixel!!