

Redshift for Raw Data Analysis @ QuizUp

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What is QuizUp?

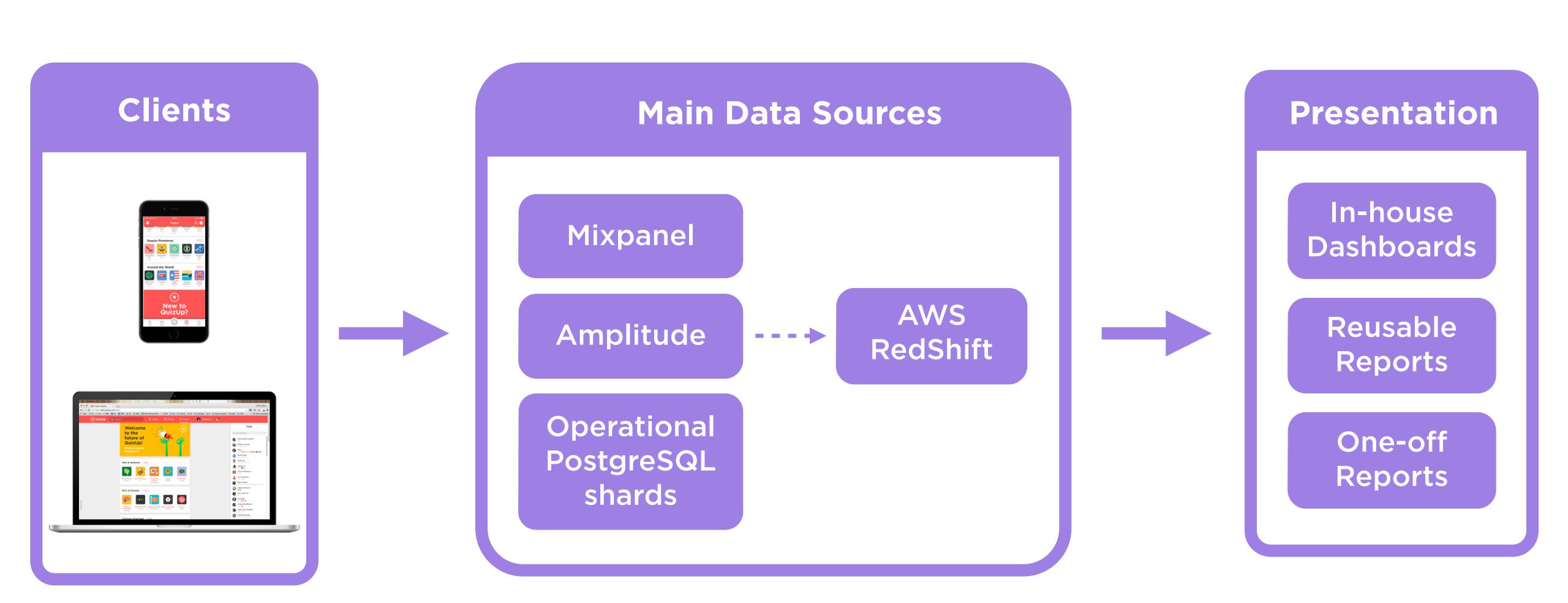
What is Quizup?

- The biggest trivia game in the world!
- · 1M registered members in first week
- 32M+ registered members
- 600K questions in 1000+ topics in 6 languages
- · 27 trillion (no joke) questions answered



Data Science @ QuizUp

Data Stack



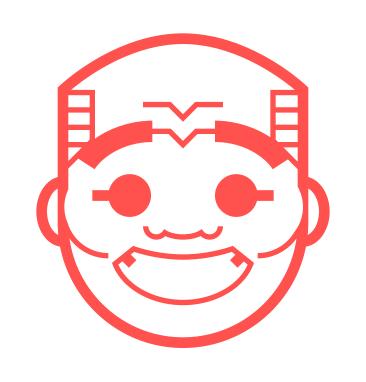
Tools & Data Sources

Tools / Data Storages

Python Python's Pandas PostgreSQL iPython Notebook RedShift bash

External tracking services

Mixpanel Fiksu Amplitude AppsFlyer AppAnnie Freshdesk HockeyApp Cloudwatch Twitter Jenkins Facebook **Flurry**



How is RedShift useful

Random Forest

Random Forest

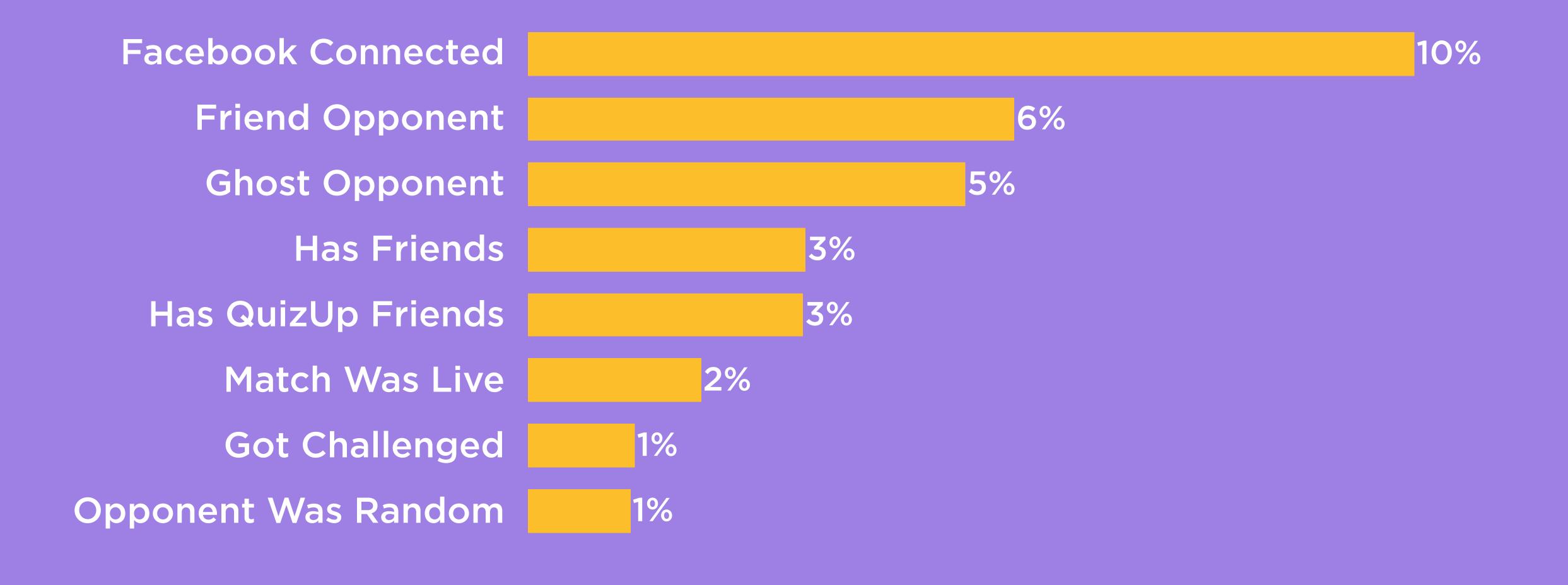
Utils:

- RedShift
- iPython Notebook server
- · Random Forest Classifier from scikit-learn

Method:

- Aggregate data into "helper" tables in RedShift
 - All first games and their properties
 - All retained users and their properties
- Transform user properties to boolean variables
- Run Classifier to identify key factors for Day 1 Retention

Factors Impacting Return Day After First Game



Custom Aggregations

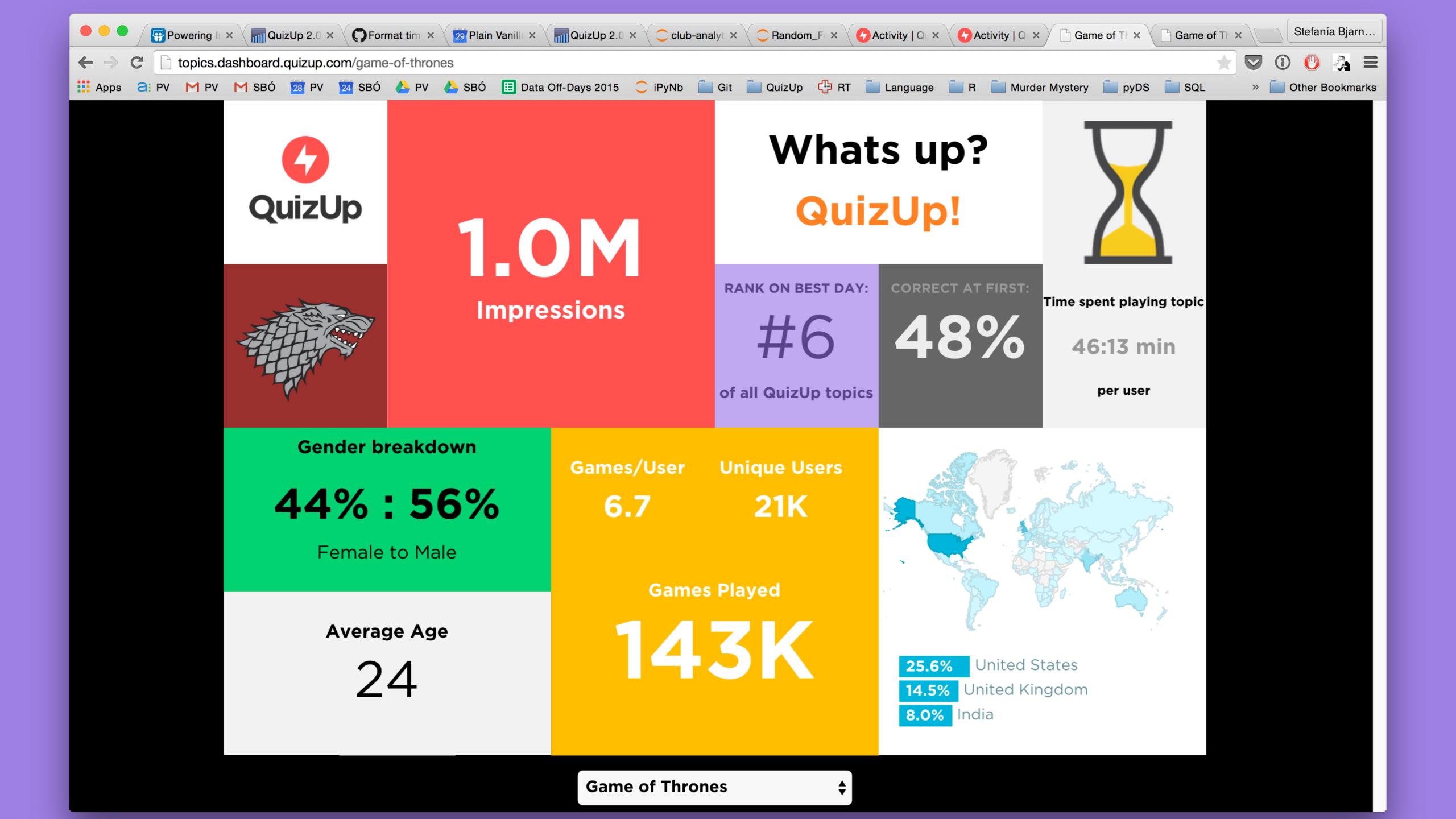
Quick Access to game / user details

- Game table
 - Join game_started with game_ended
 - Add useful stats to each game entry
 - E.g. number of chats until given game
- Player table
 - Chats
 - Posts
 - Games
 - Follows
 - •

Dedicated Members - BFFs

- Experimented with "Four-by-Four"
 - User is active "daily" if she visits four days a week for four consecutive weeks
 - · ... try a bunch of period sizes / minimum counts
- Do Random Forrest Classification for Four-by-Four users

Topics Dashboards



All Stats - All Topics - 12 Minutes

- Stats for <100M games in 1200 topics last 30 days
 - Countries
 - Gender
 - •
 - Time in game



Ask me anything!