Gamification and Fake News: A Thriller about the Challenges of Developing an In-house Quiz App

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IASSIST 2018: Once Upon A Data Point: Sustaining Our Data Storytellers

30 May 2018
Where did it all start?

- [#EULifeAppChallenge](#EULifeAppChallenge) developer contest
- Design by Tomek Kwiatkowski, a young developer from Poland
- Uses *openly* available data and demonstrates stats are fun
- Targeted at 14-18 year olds
Why did it all start?

- Majority' of Remainers switch to backing hard Brexit
- Numbers of smokers rocketed during 2017
- Sadiq Khan gets reprimanded by the Queen
- Pizzagate conspiracy theory
Why did it all start?

• What better way to combat Fake News than through *universal truths*?

Why an app?

• *Purposed-focused*

• *Respectable security*

• *Offline access*

• *Efficient*

• *Fun*
The BackEnd

UKDS Data Quiz Project

Cristina Magder
System Admin

NEW QUIZ

Showing 1 - 40 of 40 quizzes

**APP CONTENT**

**APP QUIZZES**

**HELP**

**NEW QUIZ**

**Pets**

Check your knowledge

- **QUESTIONS COUNT**: 15
- **FEATURED**: No
- **MODIFICATION TIME**: 2017-09-21 21:40:48 Cristina Magder

**Disability Awareness**

Check your knowledge

- **QUESTIONS COUNT**: 15
- **FEATURED**: No
- **MODIFICATION TIME**: 2017-12-05 12:55:18
The FrontEnd

1. How did the % of people agreeing air travel harms the environment change between 2008 and 2014?

   A. No change
   B. Decreased
   C. Increased

5. In Wales, what % of people report recycling products they would otherwise have to throw away?

   A. 10%
   B. 16%
   C. 38%
Project Management

Divide et Impera

- Creative Power
- Tech Power
- Stats Power
Version Control

- **Track changes**
- **Single source of Truth**

- **Readily available**
- **Branching**

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Version Control
**API** (acronym for Application Programming Interface) is “a set of functions and procedures that allow the creation of applications which access the features or data of an operating system, application, or other service”

API Hurdles

- Original API worked well but lacked suitable endpoints
  - Either provides too much data (Over fetching) or too little data (Under fetching)
    - *Over Fetching* wastes data usage and space
    - *Under Fetching* wastes time, as more API requests have to be sent
What we’ve got:

What we want:
A **RESTful API** is an application program interface (API) that uses HTTP requests to **GET, PUT, POST** and **DELETE** data.

A RESTful API breaks down a transaction to create a series of small modules.

- **Cleaner**
- **Easier**
- **Ease for synchronization**
Databases

- **Core tool** of the API

- Database originally in *MySQL*
  - was based on a previous project (part of something bigger)
  - a little rough around the edges

- Remade to work with *MsSQL* (Microsoft SQL Server)
  - fresh structure
  - standardized formats, fields and names
  - formalized table relationships
Publishing Apps

Varies by platform

- Google Play store is very permissive

- Apple App store is very restrictive
  - Apple requires a D-U-N-S Number to set up an organization's account
  - Communication issue between parties delays publishing
Obstacles Encountered and What We’ve Learnt

- No commit history
- Lite documentation
- Deprecated code
- Skills and upskilling
Future of the UKDS Quiz App

• Improved storage (cloud)
• Web-based version of the app
• Multi-answer questions
• Multi player mode
Questions