**Why…**

Many are former teachers, meaning they can quickly interpret results and find actionable insights once the data processed, but lack the technical knowledge to develop a basic ETL (extract-transform-load) process to speed up data loading. For an R learning group, I wanted to provide a tool that streamlined work and also provided a template for new R users to learn more about interactive tools.

**What this tool does…**

Thousands of schools across the country administer NWEA’s Measure of Academic Progress assessment each year, and they all receive results in a CSV export available through their admin login.

This proof-of-concept tool (developed with Shiny, styled with bootstrap) models how to:

* Use R to develop a basic ETL process that outputs CSV outputs
* Create reusable PNG visualizations that area ready to communicate high level results to executive audiences.

**How to use it…**

Use the example CSV file to try it out how the tool works. All code available Github <https://github.com/grahampicard/shinydashboard-map>

View NWEA Assessment Tool on shinyapps.io

**Why…**

Companies like Spotify have amassed an unbelievable amount of data on nearly every component of digital music. Many features of the data are made available to the public through APIs. After gaining access to a few APIs (Spotify and Songkick), I created simple web-app that makes this data digestible to non-technical audiences while learning the ins and outs of a few APIs and JavaScript visualization libraries.

**What this tool does…**

This site provides:

* An overview of all the Audio Features (like tempo, duration, loudness) for each track on an album
* A snapshot of the last 50 concerts that the artist/group has performed.

**How to use it…**

Type in an artist’s name and click “search”. All code available Github <https://github.com/grahampicard/spotify-album-vizualizer>

https://grahampicard.shinyapps.io/artist-analyzer/

<h4>Why…</h4><p> Companies like Spotify have amassed an unbelievable amount of data on nearly every component of digital music. Many features of the data are made available to the public through APIs. After gaining access to a few APIs (Spotify and Songkick), I created simple web-app that makes this data digestible to non-technical audiences while learning the ins and outs of a few APIs and JavaScript visualization libraries. </p><h4>What this tool does…</h4><p>This site provdes:</p><ol><li> An overview of all the Audio Features (like tempo, duration, loudness) for each track on an album.</li><li> A snapshot of the last 50 concerts that the artist/group has performed.</li></ol><h4>How to use it…</h4><p> Type in an artist’s name and click “search”. All code available on <a href='https://github.com/grahampicard/spotify-album-vizualizer'>Github</a></p><a href='https://grahampicard.shinyapps.io/artist-analyzer/' target='\_blank '>View NWEA Assessment Tool on shinyapps.io</a>

**Why…**

Every four years, the World Baseball Classic takes over the MLB offseason. It’s a rare opportunity where sabermetricians and stats fans can compare the parity of international leagues.

**What this tool does…**

In this project, you can view <a href='https://twitter.com/TravisRPetersen?lang=en'>Travis Petersen</a>’s forecasted odds over the course of the tournament and compare the simulated performance of individual players.</p>

**Attributions**

<p>Calculations, projections, and data collection by Travis Petersen. Visualizations and front end development by me.</p>

<p>All code available Github <https://github.com/grahampicard/spotify-album-vizualizer></p>

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**Why…**

For 3,600 person event, there were ~150 sessions all sharing the same survey template. SurveyMonkey’s out-of-the-box reporting left didn’t quite allow the granularity to allow us to cut the data in all the ways that we desired. To drive a Tableau dashboard that allowed our organization to monitor results in near real-time, I wrote a short wrapper to pull data directly from SurveyMonkey’s API once a session ends.

**What this tool does…**

This wrapper performs two main tasks:

1. Pull survey design details for a given survey
2. Pull all responses for a given survey

All results are outputted in a pandas data format.

**How to use it…**

1. Register for a SurveyMonkey Premium account
2. Create an application and get a bearer token

View on github