**Main Page Section 1 Assignment 2**

**Objectives**

* Understand the kinds of data used in sports analytics and within the music industry
* Understand the sources of data that can be used to gain information for decision making
* Think about how this data can be used to answer questions or learn more information about an artist or player

**Main Learning Goal**

People have said that "data is the new oil" meaning that mining or extracting data to answer questions or make predictions can make people rich.  Finding and examining the sources and type of data that is used is important to companies as the decisions and predictions are only as good as the data taken in.

**Focus Question**

Why is data so important to companies to identify new talent?

**Elicit**

watch this video from Spotify that tells Artists about what data they can collect and use to understand who is listening to their music.

[The Journey of a Listener: Segments in Spotify for Artists (youtube.com)](https://www.youtube.com/watch?v=U-y_qmt7w_0)

**Develop**

**"Data is the new oil"**

Read this excerpt from this article which was written for Forbes Magazine.  The article is titled "*Data as The New Oil Is Not Enough: Four Principles For Avoiding Data Fires"* by Nisha Talagala, Mar 2, 2022.

**The notion that “Data is the New Oil” has been around for quite some time. Generally credited to mathematician Clive Humby:**

***Data is the new oil. Like oil, data is valuable, but if unrefined it cannot really be used. It has to be changed into gas, plastic, chemicals, etc. to create a valuable entity that drives profitable activity. so, must data be broken down, analyzed for it to have value.***

**Data is the new oil because data can be used to derive insights. Depending on what a company does, insights can drive customer retention, upselling, new revenue models, advertising, etc. If data is the new oil, insights are the new money**

**Due to advances in computing, internet of things, machine generated data and more, data volumes are now exploding. So, we are awash in oil. How do we prevent oil fires, or data related fires - to be more precise, and get good insights?**

Talk with your table partners - What kind of data did the video tell you would an Artist use to tell how well songs are doing on Spotify?  What other data could you find in  [Spotify.](https://open.spotify.com/) That you know about that could be useful to an Artist to know? What other websites, apps, or social media platforms would potentially have helpful data for an artist to look at to see how well their music is doing?

API's

Much of the data housed on sports league or entertainment site is free for use by the public. This makes it really nice to use for analysis.  Up until a few years ago, you had to download all this data as a spreadsheet, like Excel, and work with it in a spreadsheet program.

Now you can API directly into data sets and just pull the data you want? **What is an API and how does it work?**

API stands for “application programming interface.” An API is a set of rules that govern how two machines talk to each other.They let computers talk to other computers to take or share data from them. When you login to Spotify or Instragram through a computer or cell phone, you are having your device talk to their computer, using several APIs if any data is being shared or collected.

Computer programs that developers use to create apps, can use APIs to call data in from other sources. This is something you will learn to do in MatLab Programming. APIs are useful as they allow the program to pull data and directly analyze it.

**Deploy**

TO DO:

Use the worksheet for your answers

1.Look at this website called [On3.com.](https://www.on3.com/nil/rankings/player/nil-100/) They rank sports players values for Name Image and Likeness (NIL). Do you recognize any players they have? Look at their values, some are worth a lot of money? How do they get to that value? What data do they use?

2. Read this [webpage](https://www.on3.com/nil/news/about-on3-nil-valuation-per-post-value/) by On3, where they talk about how they value the NIL of different players. Where do you think they get that data from?

3. Look at some websites for data (some given, some you find) that can be used to inform for entertainment or sports. What kind of data is found at these sites? How do you download the information? Can the information be accessed through an API?

**Refine**

Share your findings with a partner, what sites did they come up with different than your sites? Make a class list of possible data sources for the whole class to use later on in the programming section.

References:

1. [https://www.forbes.com/sites/nishatalagala/2022/03/02/data-as-the-new-oil-is-not-enough-four-principles-for-avoiding-data-fires/?sh=9345d1c208baLinks to an external site.](https://www.forbes.com/sites/nishatalagala/2022/03/02/data-as-the-new-oil-is-not-enough-four-principles-for-avoiding-data-fires/?sh=9345d1c208ba)

2. [https://support.spotify.com/us/article/understanding-my-data/Links to an external site.](https://support.spotify.com/us/article/understanding-my-data/)