

A Connoisseur's Guide to: Alcoholic API Data Parsing & Analysis

By: Ashlee Pounds, Calvin Garland, Paul Bernert, Vincent Heningburg

CONCLUSIONS

DATA ANALYSIS

DATA CLEANING

HYPOTHESIS

Hypothesis

Using API Data can help form valuable business opinions, especially in the area of statistical analysis.

IF WE APPLY STATISTICAL ANALYSIS TO, FOR EXAMPLE, AN ALCOHOLIC API DATA SET, THEN WE CAN USE IT TO MAKE DETERMINATIONS ON RELEVANT QUESTIONS REGARDING THE ALCOHOLIC DRINKS BEING EXAMINED.

Question 1

Question 2

Question 3

Question 1

What is the most common
glass used in alcoholic drinks?

Question 2

What is the most common alcohol among cocktails?

Question 3

Is there a statistically important distinction between the complexity of alcoholic to non-alcoholic drinks?

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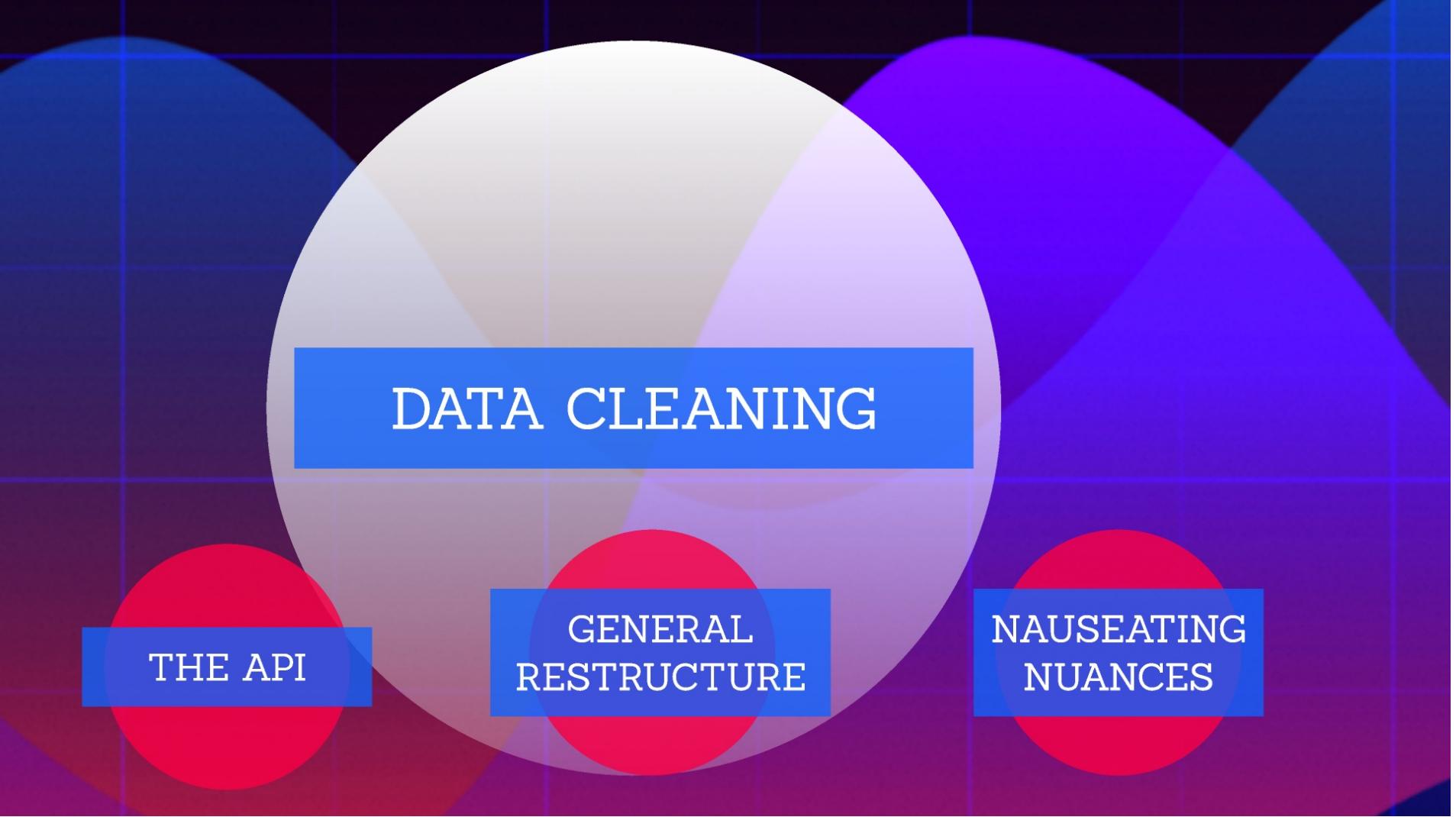
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THE API

GENERAL
RESTRUCTURE

NAUSEATING
NUANCES

API pulled from GitHub

-makes a request with the base URL and loops through the alphabet and a list of special characters

<https://www.thecocktailedb.com/api/json/v1/1/search.php?f=>

- The data was parsed and appended to a set of lists.
- Those lists were made into a data frame.
- The data frame contains strings and lists (ingredients and measurements are lists but only associated to one row/drink)

	Drink ID	Name	Category	Alcoholic	Glass	Ingredients	Measure
0	17222	A1	Cocktail	True	Cocktail glass	[Gin, Grand Marnier, Lemon Juice, Grenadine]	[1 3/4 shot , 1 Shot , 1/4 Shot, 1/8 Shot]
1	13501	ABC	Shot	True	Shot glass	[Amaretto, Baileys irish cream, Cognac]	[1/3 , 1/3 , 1/3]
2	17225	Ace	Cocktail	True	Martini Glass	[Gin, Grenadine, Heavy cream, Milk, Egg White]	[2 shots , 1/2 shot , 1/2 shot , 1/2 shot, 1/2...]
3	17837	Adam	Ordinary Drink	True	Cocktail glass	[Dark rum, Lemon juice, Grenadine]	[2 oz , 1 oz , 1 tsp]
4	13938	AT&T	Ordinary Drink	True	Highball Glass	[Absolut Vodka, Gin, Tonic water]	[1 oz , 1 oz , 4 oz]
5	14610	ACID	Shot	True	Shot glass	[151 proof rum, Wild Turkey]	[1 oz Bacardi , 1 oz]
6	17833	A. J.	Ordinary Drink	True	Cocktail glass	[Applejack, Grapefruit juice]	[1 1/2 oz , 1 oz]
7	17839	Affair	Ordinary Drink	True	Highball glass	[Strawberry schnapps, Orange juice, Cranberry ...]	[2 oz , 2 oz , 2 oz , None]
8	15106	Apello	Other/Unknown	False	Collins Glass	[Orange juice, Grapefruit juice, Apple juice, ...]	[4 cl , 3 cl , 1 cl , 1]
9	15266	Avalon	Ordinary Drink	True	Highball glass	[Vodka, Pisang Ambon, Apple juice, Lemon juice...]	[3 parts, 1 part , 6 parts , 1 1/2 part , None]

NAUSEATING NUANCES

- Categorization of alcohol types
- Over 350+ ingredients needed hand sorting through this process

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DATA ANALYSIS

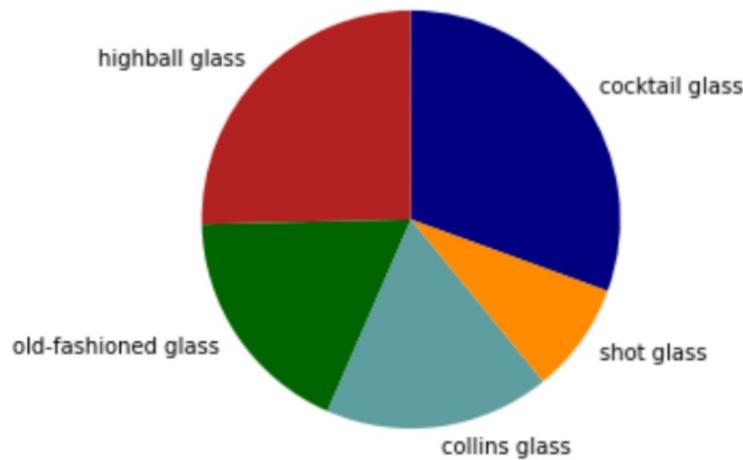
Q1

Q2

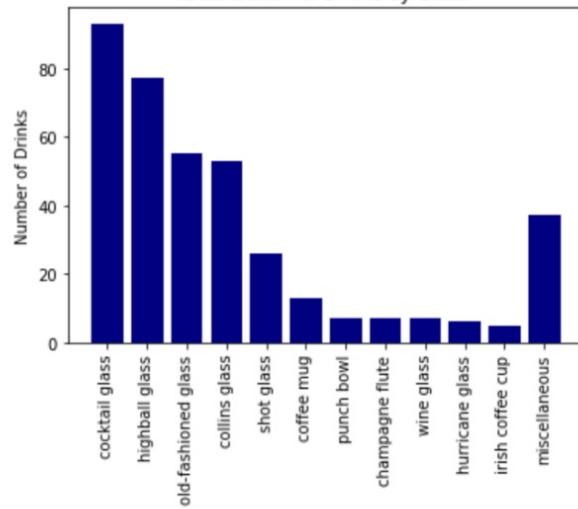
Q3

GLASSES ANALYSIS

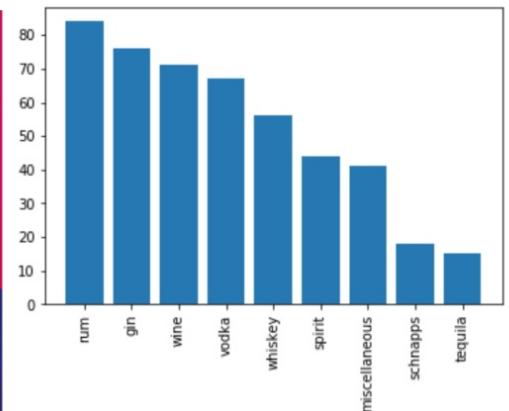
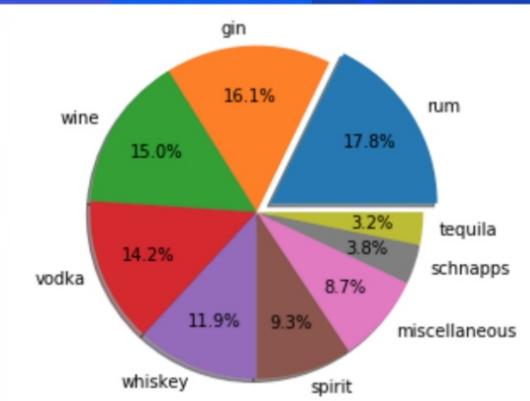
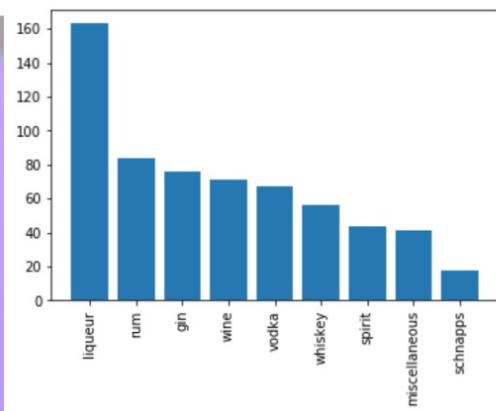
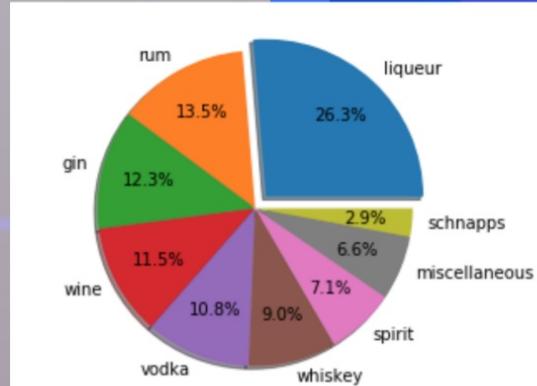
Top 5 Drink Glass Proportion of Total

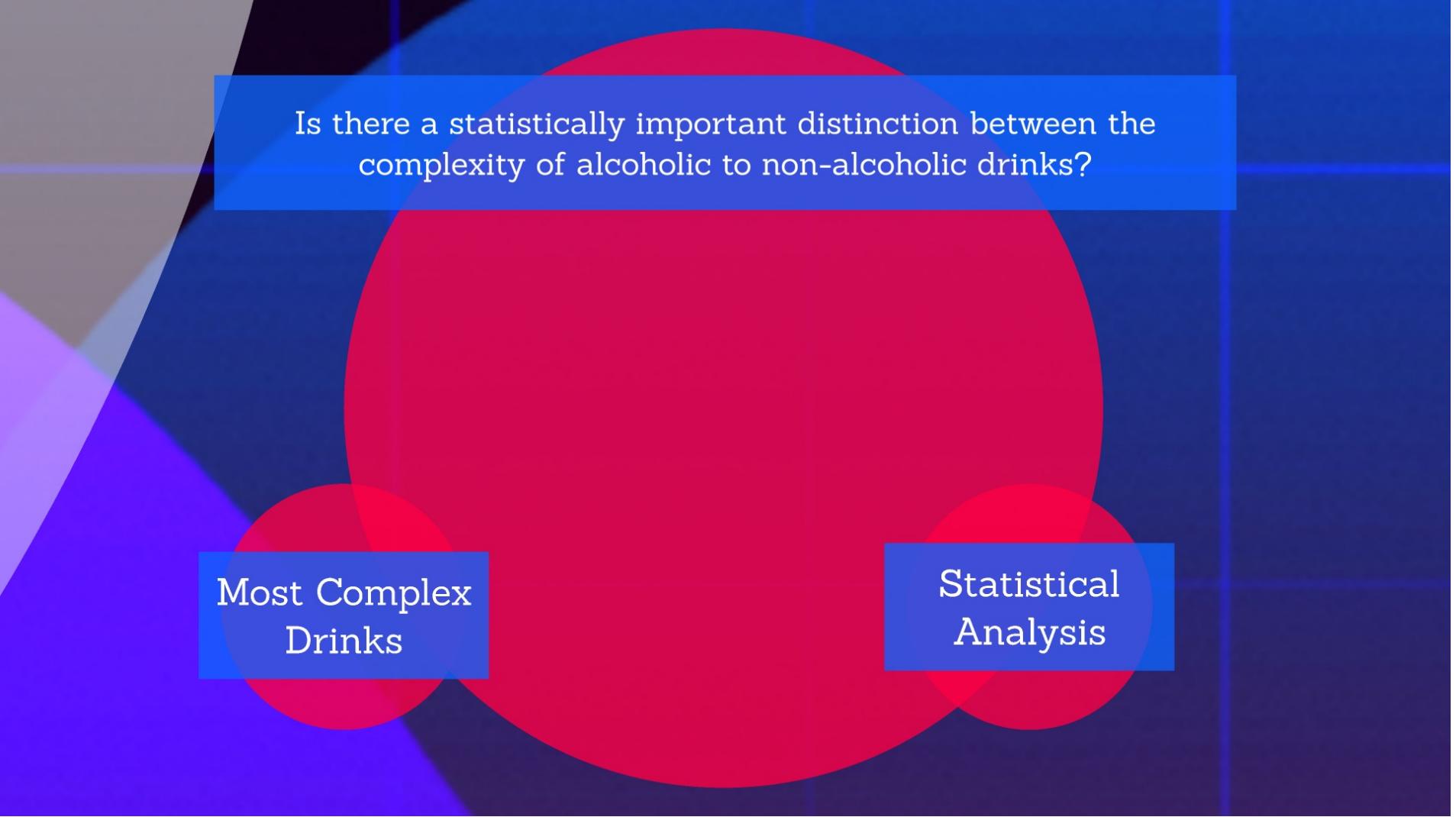


Distribution of Drinks by Glass



What is the most common alcohol among cocktails?



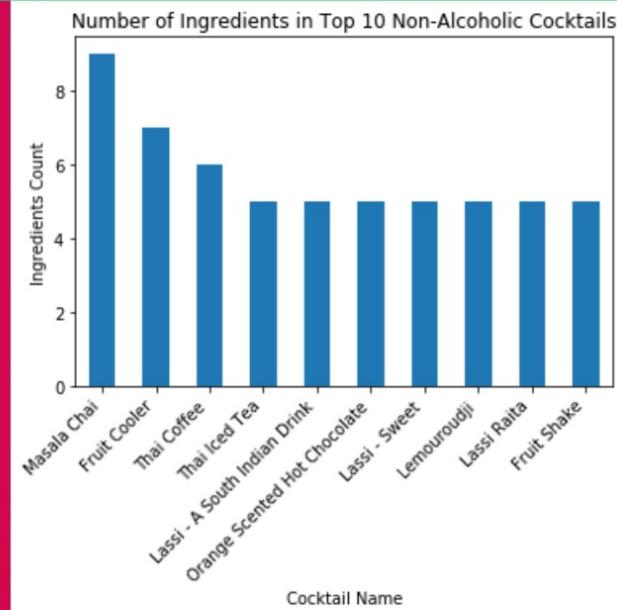
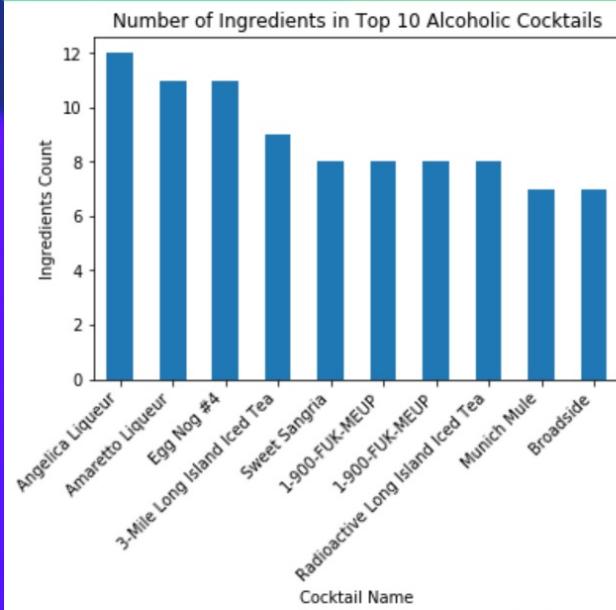


Is there a statistically important distinction between the complexity of alcoholic to non-alcoholic drinks?

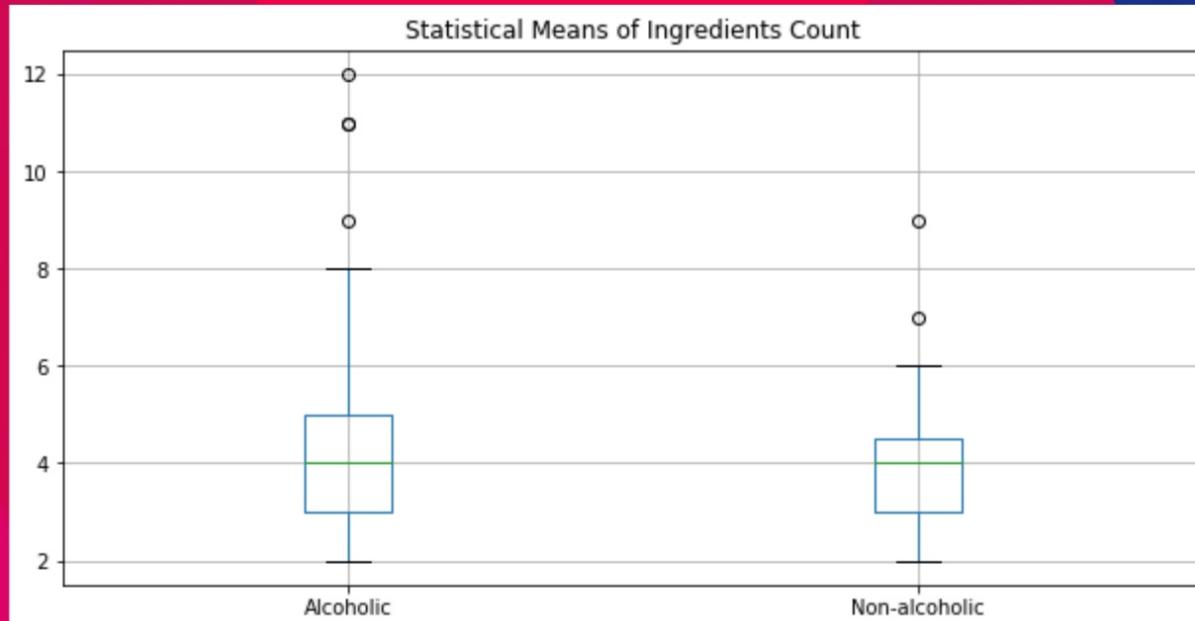
Most Complex
Drinks

Statistical
Analysis

- Separated cocktails based on alcoholic content
- Created a count for each cocktail based on number of ingredients

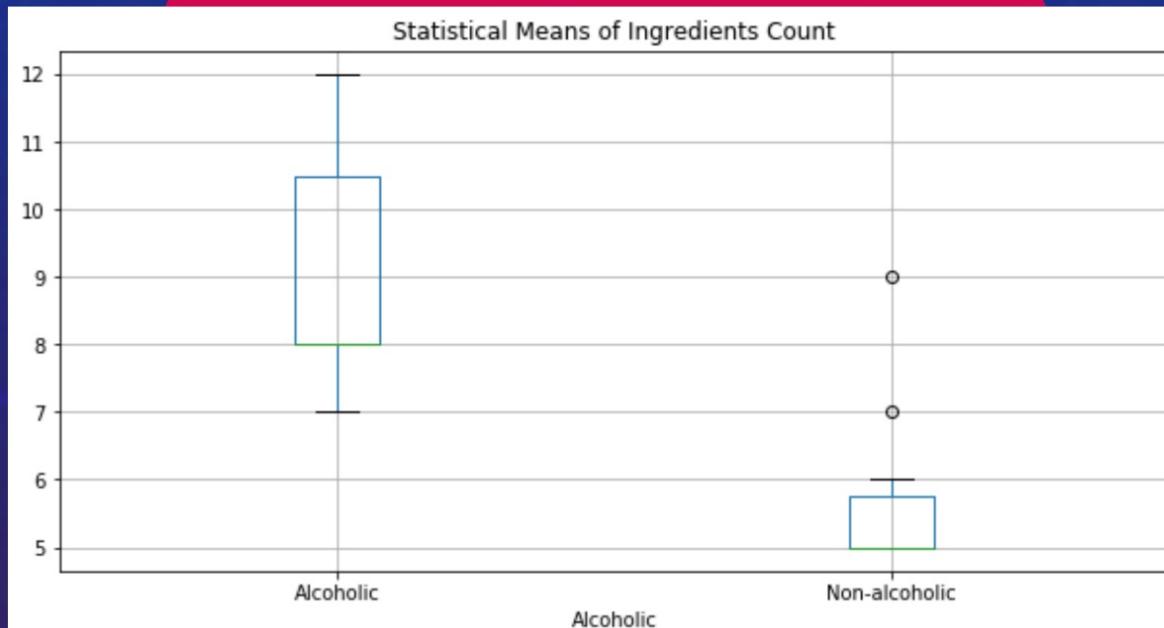


- Determined the statistical difference between the ingredient counts of the different types of cocktails



```
F_onewayResult(statistic=0.014269847328811067, pvalue=0.904963396704295)
```

- Determined the statistical difference between the most complex cocktails from each group



```
F_onewayResult(statistic=20.480000000000008, pvalue=0.0002618655396325768)
```

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- Concluded that the cocktail glass is the most common.
- Rum is the most common category of alcoholic ingredients (excluding the catch all of liqueur).
- On average, there is no difference between the number of ingredients of alcoholic and non-alcoholic drinks, but the most complex drinks are alcoholic.

QUESTIONS?



QUESTIONS 4 US?

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