

# Exploratory Data Analysis

Workshop





Understanding the Data Distribution



- Understanding the Data Distribution
- Identifying Patterns and Relationships



- Understanding the Data Distribution
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  - Data Cleaning and Preprocessing



- Understanding the Data Distribution
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  - Data Cleaning and Preprocessing
    - Hypothesis Generation



https://flavorsofcacao.com/chocolate\_database.html





## Questions

1. What is the origin of the best cocoa beans



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- 2. What are the flavors that makes the best chocolate



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- 1. What is the origin of the best cocoa beans
- 2. What are the flavors that makes the best chocolate
- 3. What ingredients go into the best chocolate

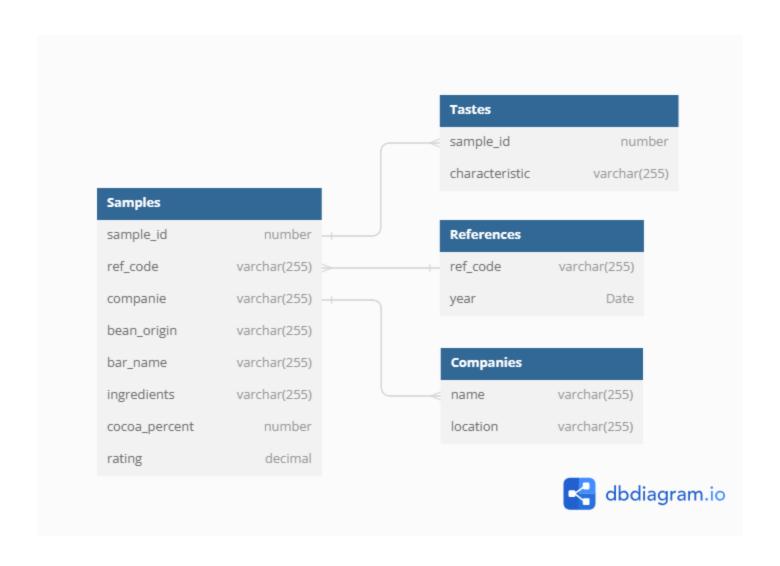


#### Hands-on

Open eda-workshop/src/eda\_cocoa.ipynb



#### Data schema





# Cacao origins

Best	Worst
Tobago	Bali
China	Puerto Rico
Sao Tome & Principe	France
Solomon Islands	Principe
Congo	Martinique



#### Cacao Flavors

Best	Worst
rounded	this is not chocolate
robust cocoa	strong off flavor
unripened fruit	very bitter
tart citrus	klingy
homey	unpleasant



# Cacao Ingredients

ingredient	t_statistic	p_value	significant	
beans			FALSE	
sugar	4.38	3.23E-05	FALSE	
sweetener	-4.02	1.29E-04	FALSE	
cocoa butter	-0.64	5.24E-01	TRUE	
vanilla	-6.80	3.50E-11	FALSE	
lecithin	-2.43	1.55E-02	TRUE	
salt	-2.22	3.29E-02	TRUE	



# Bye

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