PROJECT: UNCOVERING THE WORLD'S OLDEST BUSINESSES





Staffelter Hof Winery is Germany's oldest business, established in 862 under the Carolingian dynasty. It has continued to serve customers through dramatic changes in Europe, such as the Holy Roman Empire, the Ottoman Empire, and both world wars. What characteristics enable a business to stand the test of time?

To help answer this question, BusinessFinancing.co.uk researched the oldest company still in business in almost every country and compiled the results into several CSV files. This dataset has been cleaned.

Having useful information in different files is a common problem. While it's better to keep different types of data separate for data storage, you'll want all the data in one place for analysis. You'll use joining and data manipulation to work with this data and better understand the world's oldest businesses.

## The Data

businesses and new\_businesses

Column	Description
business	Name of the business (varchar)
year_founded	Year the business was founded (int)
category_code	Code for the business category (varchar)
country_code	ISO 3166-1 three-letter country code (char)

## countries

Column	Description
country_code	ISO 3166-1 three-letter country code (varchar)
country	Name of the country (varchar)
continent	Name of the continent the country exists in (varchar)

## categories

Column	Description	
category_code	Code for the business category (varchar)	
category	Description of the business category (varchar)	

```
Projects Data
                  DataFrame as oldest_business_continent
-- 1. What is the oldest business on each continent?
SELECT
    c.continent,
    c.country,
    b.business,
    b.year_founded
FROM
    businesses b
    INNER JOIN countries c ON b.country_code = c.country_code
WHERE
    b.year_founded = (
        SELECT MIN(b2.year_founded)
        FROM businesses b2
        INNER JOIN countries c2 ON b2.country_code = c2.country_code
        WHERE c2.continent = c.continent
    );
index
             ··· ↑ continent
                                                                                    business
                                                                                                                  ••• ↑↓ year_found... ••• ↑↓
                                                     ••• ↑ country
                  0 Africa
                                                                                    Mauritius Post
                                                                                                                                         1772
                                                              Mauritius
                                                                                    Kongō Gumi
                  1 Asia
                                                              Japan
                                                                                                                                          578
                                                                                    St. Peter Stifts Kulinarium
                                                                                                                                          803
                  2 Europe
                                                              Austria
                  3 North America
                                                              Mexico
                                                                                    La Casa de Moneda de México
                                                                                                                                         1534
                  4 South America
                                                              Peru
                                                                                     Casa Nacional de Moneda
                                                                                                                                         1565
                                                                                     Australia Post
                  5 Oceania
                                                              Australia
                                                                                                                                         1809
Rows: 6
                                                                                                                                                                                    Expand
```

Write Python code or <u>tell our AI what to do</u>

```
Projects Data DataFrame as count_missing

-- 2. How many countries per continent lack data on the oldest businesses

SELECT c.continent, COUNT(c.country_code) AS countries_without_businesses

FROM countries as c

LEFT JOIN

(SELECT *

FROM businesses

UNION ALL

SELECT *

FROM new_businesses) b

ON c.country_code=b.country_code

WHERE b.business IS NULL

GROUP BY c.continent
```

-- Does including the `new\_businesses` data change this?

in ↑↓	continent ··· ↑↓	countries_without_businesses ••• $\uparrow_{\downarrow}$
0	Africa	3
1	Asia	7
2	Europe	2
3	North America	5
4	Oceania	10
5	South America	3

Rows: 6

Projects Data DataFrame as oldest\_by\_continent\_category

-- 3. Which business categories are best suited to last over the course of centuries? SELECT continent, category, MIN(year\_founded) AS year\_founded

FROM businesses b

INNER JOIN categories cat ON b.category\_code = cat.category\_code

INNER JOIN countries c ON b.country\_code = c.country\_code

GROUP BY c.continent, cat.category

ORDER BY c.continent, cat.category

in ••• ↑↓	continent ··· ↑↓	category ··· ↑↓	year_founded ··· ↑↓
0	Africa	Agriculture	1947
1	Africa	Aviation & Transport	1854
2	Africa	Banking & Finance	1892
3	Africa	Distillers, Vintners, & Breweries	1933
4	Africa	Energy	1968
5	Africa	Food & Beverages	1878
6	Africa	Manufacturing & Production	1820
7	Africa	Media	1943
8	Africa	Mining	1962
9	Africa	Postal Service	1772
10	Asia	Agriculture	1930
11	Asia	Aviation & Transport	1858
12	Asia	Banking & Finance	1830
13	Asia	Cafés, Restaurants & Bars	1153
14	Asia	Conglomerate	1841
15	Asia	Construction	578

Rows: 56