



# Wine Pairing

Project 3 - Group 3:  
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# Table of Contents

- I. Title
- II. Table of Contents
- III. Welcome to Our Dashboard
- IV. Interesting Facts
- V. The Data
- VI. Mongodb
- VII. API & Database
- VIII. JavaScript
- IX. Our Wine Pairing Dashboard
  - a. Dropdown lists
  - b. Top5
  - c. Charts
- X. Conclusion
  - a. Limitations & Considerations
  - b. Future Uses
- XI. Visuals
  - a. Mongo
  - b. Flask
  - c. Java
  - d. Dashboard
- XII. Q&A
- XIII. Sources

# Welcome to Our Dashboard

Wine is a global industry with changing trends and markets, how can a buyer be more confident in their selection?

As a purveyor, providing clients with an interactive catalog can allow buyers to explore new products virtually

Our goal is to help the consumer discover new wines, focusing on their preferences

# Interesting Facts

- There are 10,000 varieties of wine grapes existing worldwide.
- Champagne and french fries are a match made in heaven
- For pairing in meals, heavier food goes well with a heavier wine. Red wine is usually served with red meat, while white wine is served with chicken or fish. When it comes to pairing wine with dessert, go for sweet wine

# The Data

We worked with data that includes over 1000 wines, to build a user dashboard that helps someone pair their dish to the best wine.

The main questions we will ask:

- What type of dish will you be eating?
- What varietal will you be choosing?

# API and Database

We used the wines API from Sample APIs

From this we were able to get a list of wines by name, type (Red, White, Rose, Sparkling, Dessert, Port), and rating reviews

We also created a pairing json which we used to generate outputs on our dashboard

We combined multiple tables from the API and the created json to make a Mongo Database which we connected to through a Flask app

From here we used JavaScript and JSON...

# Mongodb

## Wines

- country
- filteredWine
- finalWines
- pairing\_by\_varietal
- region
- region\_country
- varietal
- wine\_and\_type
- wine\_region
- wine\_type
- wine\_varietal
- wine\_winery
- winery

```
_id: ObjectId('643de819d70f49ef739a31e9')
id: "r0004"
winery: "Schrader"
wine: "Cabernet Sauvignon RBS Beckstoffer To Kalon Vineyard 2015"
image: "https://images.vivino.com/thumbs/GpcSXs2ERS6niDxoAsvESA_pb_x300.png"
wine type: "Red"
country: "United States"
region: "Oakville"
average rating: 4.9
review count: 72
varietal: "Cabernet Sauvignon"
```

# JavaScript and JSON

- We used javascript to populate a dropdown menu by sending a query for a particular dish to the pairings collection to get a JSON of corresponding varietals
- We then have the user select a varietal from the dropdown, which queries the wine collection to create a list of wines, sorted by average rating, as well as a table of the top wines of that varietal from the list.
- We also used javascript to display a Plotly bar chart of the countries of origin for our wines using country data from our dataset
- Our new javascript library was Chart.js, which we used to create a pie chart displaying the proportion of each wine type (red, white, rose, sparkling, dessert) in our dataset
- Cross Origin Resource Sharing!



# Our Wine Pairing Dashboard

## Wine Pairing Dashboard

Use our dashboard to help choose a wine for tonight's dinner!

Select a dish pairing: --Select a dish pairing-- ▾

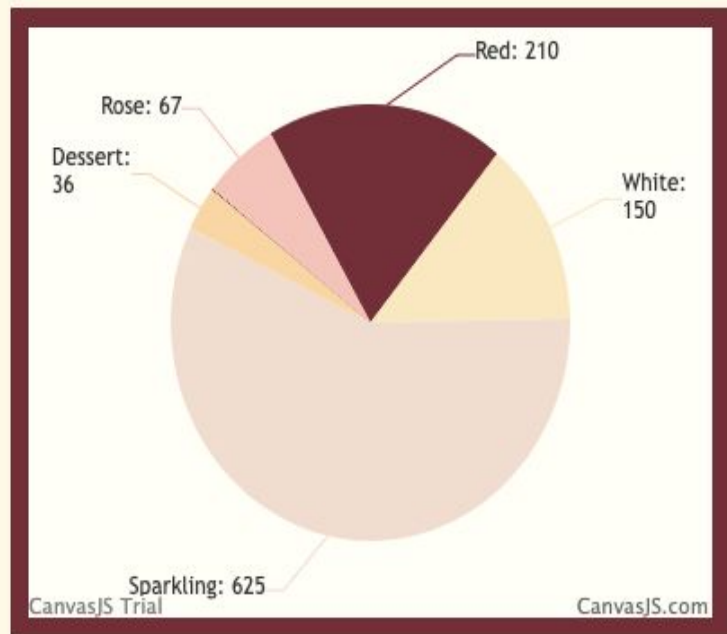
Select a wine varietal: --Select Varietal-- ▾

Our dashboard consists of:

- HTML Styling
  - Coloring
  - Sizing
  - Gifs
- Dropdown lists:
  - Dish Pairing
  - Wine Varietal
- Wine List based on varietal chosen
- Top 5

# Pie chart

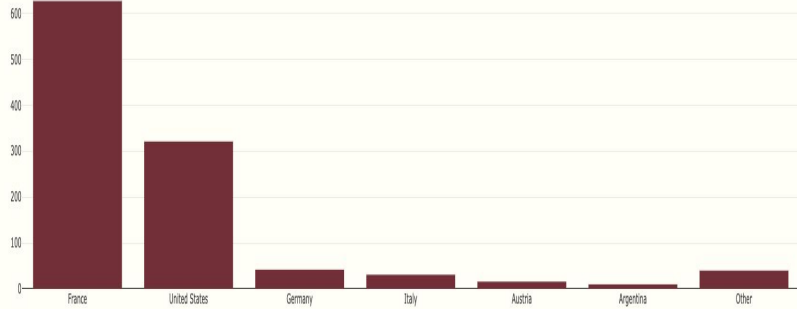
Wine Types



Our pie chart is a visualization on the types of wines that are produced to show what is most popular in the industry.

Sparkling out does every other wine following up with red, then white, rose, dessert, and port at 1 following in last.

# Bar Chart



The bar chart is another visualization, but showing the location of where the wines are produced. We wanted to show how much wine is produced in each country. We decided to show countries with 10+ wines.

# Map of Wineries



# Limitations and Considerations

Some of the limitations that we ran into during the process of this project were as follows:

- Really descriptive and informative APIs that we found were not cost friendly for a class project.
- Connecting our data to our html, and its respective chart, dropdown, or list.
- Having to make our own pairing json.
- No location data for wineries, we had to manually find the location data for the wineries that we have listed.

Some things to consider are:

- The data is skewed, and heavily biased towards red, white and sparkling wines.

# Future Uses

- This dashboard could be utilized by restaurants. Restaurants could tie their inventory data into our dashboard to show real time pairings for the customers choice of dish.
- In the future we could tie in liquor stores inventory and include prices, etc.
- To add to the dashboard we could add a information section that populates when click on a specific wine. It could give a brief description of the wine such as flavor profile, and the winery that it comes from.

# In Conclusion

In conclusion, creating this dashboard for wine pairing is be an excellent way to help wine enthusiasts and food lovers find the perfect wine to complement their meals. By combining our database of wine and food pairing recommendations with interactive visualization tools, such as charts, graphs, maps, etc. the dashboard can provide users with a user-friendly and informative way to explore and learn about wine and food pairing.



A Walkthrough...



Q&A



# Sources

- <https://www.newsweek.com/amplify/30-fascinating-facts-about-wine-that-you-never-knew>
- <https://api.sampleapis.com/wines/reds>
- <https://api.sampleapis.com/wines/whites>
- <https://api.sampleapis.com/wines/rose>
- <https://api.sampleapis.com/wines/sparkling>
- <https://api.sampleapis.com/wines/dessert>
- <https://api.sampleapis.com/wines/port>