

Database Management Final Project Report

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Project Report

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Introduction

Wine tasters undergo extensive training and spend years perfecting their palate. In this project, we will use data-driven analysis to identify reviewer bias in wines, how prices affect ratings of wine, and see if specific regions are preferred by reviewers.

Data Description

This project uses data from a 2017 Kaggle set of wine reviews from Wine Enthusiast Magazine (<https://www.kaggle.com/zynicide/wine-reviews#winemag-data-130k-v2.csv>). The original set contains 129,970 rows. This data set was too large to import to Apex Oracle however and needed to be shrunk somewhat. To reduce the set into a more manageable size, we chose to use 2000 of the reviews and eliminated the 2nd region column. We eliminated the 2nd region column because most records didn't have a 2nd region so it was not relevant to our analysis. Table 1 shows a description of the data fields.

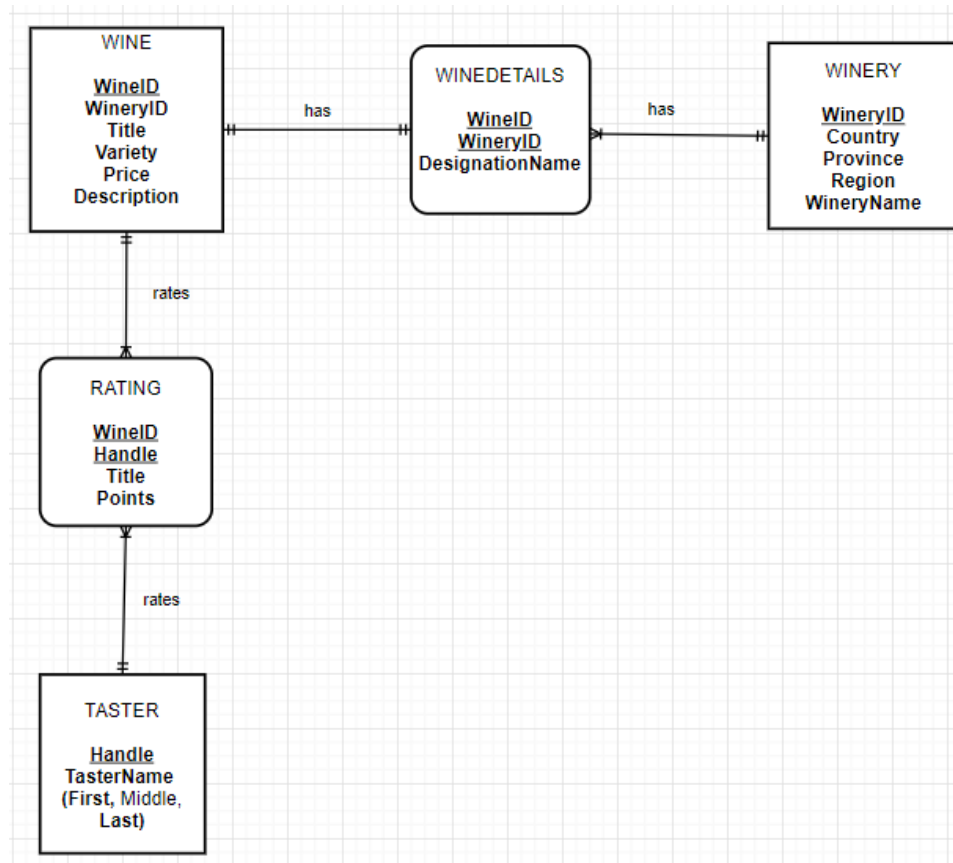
Table 1:

Field	Type	Description
Country	Text	Country the wine is from.
Description	Text	Wine taste description.
Designation	Text	Vineyard within the winery where the grapes that made the wine are from.
Points	Numeric	Number of points the WineEnthusiast rated the wine on a scale of 1-100.
Price	Numeric	Cost for a bottle of wine.
Province	Text	Province or state that wine is from.
Region	Text	Wine growing area in a province or state.
TasterFirstName	Text	First name of taster.
TasterMiddleName	Text	Middle name of taster.
TasterLastName	Text	Last name of taster.
Handle	Text	Twitter handle of taster that uniquely identifies each taster.
Title	Text	Title of the wine.
Variety	Text	Types of grapes used to make the wine.
WineID	Numeric	Unique ID for each wine.
Winery	Text	Winery that made the wine.
Winery	Numeric	Unique ID for each winery.

The primary entity in this database is WINE, which is identified by Title. The raw data is relatively flat, with no multivalued data but some composite data identified in Title. A solution is to add a Wine ID and break apart Title into (Brand, Year). In our ERD there are several optional tabs that that are not representative of the data, all locations have wineries in this data, all wineries have bottled wine, but

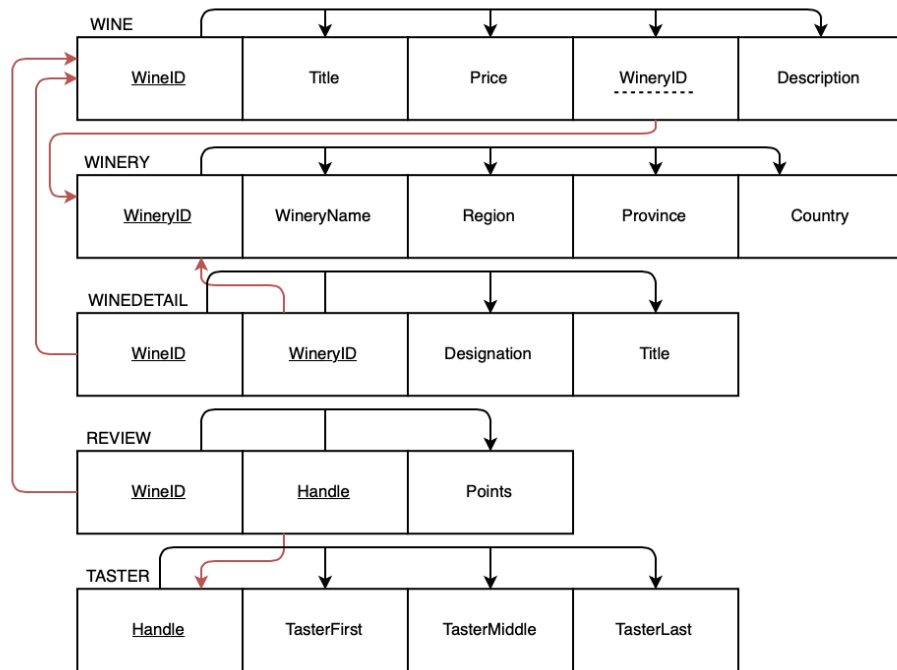
not all wine has been reviewed by a reviewer. Some rows are missing data and will be dropped. Figure 1 displays the ERD model for our data.

Figure 1: Entity Relationship Diagram (ERD)



Based on the ERD, we normalized the data and created a relational schema with 5 tables. Figure 2 displays the graphical relational schema for the wine data. We have 3 unique ID representing our data which are WineID, WineryID, and Handle.

Figure 2. Graphical Relational Schema



Database Implementation

To implement the database in APEX, we wrote a CREATE TABLE command for each table in the relational schema. Tables WINERY, WINE, and TASTER were entered first due to WINEDETAIL and REVIEW using data from the first three primary tables. Instead of using insert queries, data was uploaded directly to Apex Oracle through the uploading data tool.

The table WINERY is the winery where each wine is produced at and its location.

WINERY

```
CREATE TABLE WINERY (  
  WineryID NUMBER(7,0) NOT NULL,  
  Country VARCHAR2(20) NOT NULL,  
  Province VARCHAR2(50) NOT NULL,  
  Region VARCHAR2(100) NOT NULL,  
  WineryName VARCHAR2(100) NOT NULL,  
  CONSTRAINT WINERY_PK PRIMARY KEY (WineryID));  
  
INSERT INTO WINERY VALUES (2003000, 'France', 'Alsace', 'Alsace', 'Test Winery')
```

The table WINE is to show the information on what wines were made where, cost, variety, title, and their description information.

WINE

```

CREATE TABLE WINE (
    WineryID NUMBER(7,0) NOT NULL,
    Title VARCHAR2(500) NOT NULL,
    Variety VARCHAR2(50) NOT NULL,
    Price NUMBER(3, 0) NOT NULL,
    Description VARCHAR(700) NOT NULL,
    WineID NUMBER(7,0) NOT NULL,
    CONSTRAINT WINE_PK PRIMARY KEY (WineID),
    CONSTRAINT WINE_FK FOREIGN KEY (WineryID) REFERENCES WINERY (WineryID));

```

```

INSERT INTO WINE VALUES (2003000, 'Test Wine', 'Riesling', 9, 'Test wine description', 3004000)

```

Taster table has information on the wine reviewer including their name and twitter handle as a primary key.

TASTER

```

CREATE TABLE TASTER (
    Handle VARCHAR2(50) NOT NULL,
    TasterFirstName VARCHAR2(50) NOT NULL,
    TasterMiddleName VARCHAR2(10),
    TasterLastName VARCHAR2(50) NOT NULL,
    CONSTRAINT TASTER_PK PRIMARY KEY (Handle));

```

```

INSERT INTO TASTER (Handle, TasterFirstName, TasterLastName) VALUES ('@TestTaster', 'Test', 'Taster')

```

WINEDETAIL is in the schema to separate wines from each other that share a designation, this is due to some designations having the same name even though they are at different wineries. The purpose was to retain 3rd normal form.

WINEDETAIL

```

CREATE TABLE WINEDETAIL (
    WineryID NUMBER(7,0) NOT NULL,
    WineID NUMBER(7,0) NOT NULL,
    DesignationName VARCHAR2(300) NOT NULL,
    CONSTRAINT DETAIL_PK PRIMARY KEY (WineID, WineryID));

```

```

INSERT INTO WINEDETAIL VALUES (2003000, 3004000, 'Test Designation')

```

Finally, REVIEW combines the taster table and the WINE table to allow us to query the scores that each reviewer gave each wine.

REVIEW

CREATE TABLE RATING (

Title VARCHAR2(500) NOT NULL,
Handle VARCHAR2(50) NOT NULL,
Points NUMBER(3,0) NOT NULL,
WineID NUMBER(7,0) NOT NULL,

CONSTRAINT RATING_PK PRIMARY KEY (WineID, Handle));

INSERT INTO RATING VALUES ('Test Wine', '@TestTaster', 83, 3004000)

Proposed Analysis

Our analysis is to help new wine connoisseurs in college learn basic information on what experienced wine tasters look for in wine, where better quality wines come from, and if it is reasonable that a student on a budget can afford particular wine.

Question 1: Wine Tasters

What are the names of the 5 most experienced wine tasters and the count of wines they have tasted?

To answer this question, we composed a simple query that counts the ratings for each wine taster, ranked it by a descending order and fetched the first 5 rows to show us the top 5 most experienced wine tasters.

```
SELECT Distinct(TasterFirstName || ' ' || TasterLastName) AS Name, COUNT(RATING.Handle) AS  
Count  
FROM RATING JOIN TASTER ON RATING.Handle = TASTER.Handle  
GROUP BY TasterFirstName, TasterLastName  
Order BY Count DESC  
FETCH FIRST 5 ROWS ONLY;
```

The results from this query are shown in Figure 3 below. Out of all the wine tasters, Roger had the highest amount wines tasted with 331. The next most experienced was Michael with 330, followed by Virginie Boone with 273, Kerin with 268 and Paul with 248 wines tasted.

NAME	COUNT
Roger Voss	331
Michael Schachner	330
Virginie Boone	273
Kerin O'Keefe	268
Paul Gregutt	248

Figure 3: Top 5 Wine Tasters

Question 2: Ratings Based on Geography

Which geographic locations (countries) tend to have higher wine ratings? Do these areas tend to have more wineries?

We composed a subquery to answer this question. The inside query determines the top 5 countries based on their average rating. The outside query uses the countries from the inside query to count the number of wineries in that country.

```
SELECT Country, COUNT(WINE.WineryID) AS Count
FROM WINERY JOIN WINE ON WINERY.WineryID = WINE.WineryID
WHERE Country IN (
    SELECT Country
    FROM WINERY JOIN WINE ON WINERY.WineryID = WINE.WineryID JOIN RATING ON
    WINE.WineID = RATING.WineID
    GROUP BY Country
    ORDER BY AVG(Points) DESC
    FETCH FIRST 5 ROWS ONLY)
GROUP BY Country
ORDER BY Count(WINE.WineryID) DESC;
```

The results from this query are shown below in Figure 4. The graph showing these results can be found in Figure 14.

COUNTRY	COUNT
US	932
France	377
Italy	281
Australia	70
Canada	2

Figure 4: Top 5 Countries with Higher Wine Rating

Question 3: Highest Wine Prices Based on Province

Which provinces have the highest wine prices?

To find out which provinces have the highest wine prices, we created a simple query. This query finds the max price of each province and only shows the provinces with the 10 highest prices.

```
SELECT Province, Max(Price) AS Max_Price
FROM WINERY JOIN WINE ON WINERY.WineryID = WINE.WineryID
GROUP BY Province
ORDER BY Max(Price) DESC
FETCH FIRST 10 ROWS ONLY;
```

PROVINCE	MAXPRICE
Burgundy	630
Tuscany	400
Victoria	350
Northern Spain	300
California	260
Piedmont	225
South Australia	225
Mendoza Province	215
Rh�ne Valley	180
Bordeaux	170

Figure 5: Top 10 Province with Highest Wine Price

When comparing wine price by province we find the specific locations that wine will be sourced from quality input and processes. Burgundy produces the highest priced wines, so it seems unwise to buy wine from them as a beginner.

Question 4: Comparing Price to Rating

Is the cost of a bottle directly related to the rating it receives?

In we use a join query to find if there is a correlation between high wine ratings and wine price.

```
SELECT TO_CHAR(Price, '$999,999') AS Price, ROUND(AVG(Points),1) AS AveragePoints,
WINE.TITLE
FROM WINE JOIN RATING ON WINE.WineID = RATING.WineID
GROUP BY Price, Wine.Title
ORDER BY Price DESC;
```

PRICE	AVERAGEPOINTS	TITLE
\$630	96	Louis Latour 2014 Le Montrachet (Montrachet)
\$400	90	Tua Rita 2013 Redigaffi Merlot (Toscana)
\$350	95	Ch�teau de la Tour 2013 Vieilles Vignes (Clos de Vougeot)
\$350	100	Chambers Rosewood Vineyards NV Rare Muscat (Rutherglen)
\$350	98	Chambers Rosewood Vineyards NV Rare Muscadelle (Rutherglen)
\$300	95	Artadi 2011 Vi�a El Pison (Rioja)
\$260	94	Domaine Leflaive 2009 Les Pucelles Premier Cru (Puligny-Montrachet)
\$260	92	Stag's Leap Wine Cellars 2013 Cask 23 Estate Cabernet Sauvignon (Napa Valley)
\$225	95	Giacomo Conterno 2011 Francia (Barolo)
\$225	97	Torbreck 2012 RunRig Shiraz-Viognier (Barossa)

Figure 6: Relationship between Price and Average Rating

Figure 6 shows a cluster of similarly priced wines receiving scores above 90%, though we are descending our group by clause by price, there is a non-linear connection in points. Either

way, it is unlikely that wines at the highest price ranges will be noticeably better after the \$200 mark.

Question 5: Top 5 Varieties by Average Rating

What are the top 5 varieties of wine by their average rating? Are these wines typically red or white?

To find the 5 varieties with the highest average rating, we created a simple query. This query pulls the points from each rating and groups that by variety to get the average rating by variety.

```
SELECT Variety, ROUND(AVG(Points), 1) AS AveragePoints
FROM WINE JOIN RATING ON WINE.WineID = RATING.WineID
GROUP BY Variety
ORDER BY AVG(Points) DESC
FETCH FIRST 5 ROWS ONLY;
```

Figure 7 shows the top 5 varieties with their average rating.

VARIETY	AVERAGEPOINTS
Muscadelle	98
Muscat	95.7
Shiraz-Viognier	95
Cabernet Sauvignon-Syrah	94.5
Cabernet Sauvignon-Malbec	94

Figure 7: Top 5 Varieties by Average Rating

Figure 7 shows that there is a preference for white wines over red wines in the top percentages of wine ratings. This suggests that if a new wine taster wants to start with typically higher rated wines, they should begin with one of these five varieties.

Question 6: College-Friendly Wines

What wines are college friendly (price less than 20)?

In this query, there is a TO_CHAR in order to specify that our “price” column should be represented in dollars. There is also a case clause to simplify the answer if a wine is college friendly (when <\$20)

```
SELECT title, TO_CHAR(price, '$999,999') as price, country,
CASE
WHEN price < 20 THEN 'College Friendly'
ELSE 'Not College Friendly'
END as Friendly
```

FROM winery JOIN wine
ON WINERY.WineryID = WINE.WineryID
ORDER BY Friendly, Price;

TITLE	PRICE	COUNTRY	FRIENDLY
Felix Solis 2013 Flirty Bird Syrah (Vino de la Tierra de Castilla)	\$4	Spain	College Friendly
Don Cristobal 1492 2010 1492 Red (Mendoza)	\$7	Argentina	College Friendly
Dominio de Eguren 2011 Protocolo Ros./© (Vino de la Tierra de Castilla)	\$7	Spain	College Friendly
Dominio de Eguren 2010 Protocolo Blanco White (Vino de la Tierra de Castilla)	\$7	Spain	College Friendly
Vi./±a Albali 2012 Smooth Red Tempranillo (Valdepe./±as)	\$8	Spain	College Friendly
Marqu./@s de C./°ceres 2006 Blanco Fermentado en Barrica White (Rioja)	\$8	Spain	College Friendly
Vieil Armand 2013 Tradition Pinot Blanc (Alsace)	\$8	France	College Friendly
Bodegas Fontana 2010 Mesta Tempranillo (Ucl./@s)	\$8	Spain	College Friendly
Vicente Gandia 2010 Organic Cabernet Sauvignon (Spain)	\$8	Spain	College Friendly

Figure 8: College-Friendly Wines

The data shown in figure 8 shows that there are many wines within the price range of a college student and there are several countries to choose from. Meaning that it is viable that a college student can have a varied palate without breaking the bank,

Web Design

<https://apex.oracle.com/pls/apex/f?p=117109:1:708219334313961>

The application design has several features of note; there is a home page that displays a several bottles of wine and a navigation bar on the side of the page. The navigation bar has 3 icons; a house for the home screen, three bars for the data tables, and 9 squares for our queries for differentiation purposes. There is an icon in the top left corner to replace the White lettering that said, “wine reviews” because it did not fit the color scheme. We also elected to create a custom color scheme based on the picture of wine bottles on our home page, giving the application a look that is both more mature and softer on the eyes than the blue and white default coloring.

Home Page

The home page contains a short introduction of our project, a navigation menu, and an image of wines (<https://www.self.com/gallery/amazing-red-wines-under-20-dollars>). Figure 9 shows the screenshot of the home page.

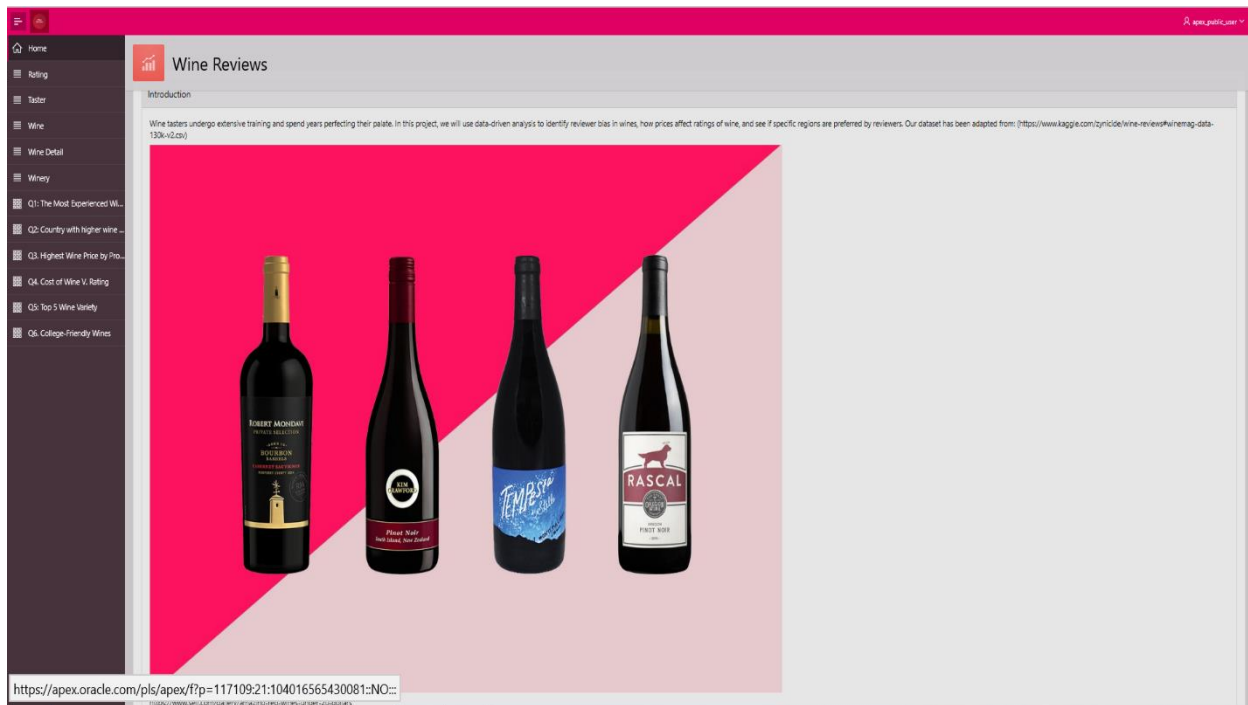


Figure 9: Home Page

Tables

We created an interactive report for each table in our data set. Users can easily search and filter results. (Figure 10 – Figure 14)

<input type="text" value="Q"/> <input type="button" value="Go"/> <input type="button" value="Actions"/>			
Title	Handle	Points	Wineid
:Nota Bene 2011 Ciel du Cheval Red (Red Mountain)	@wawinereport	86	2000001
:Nota Bene 2011 Verhey Vineyard Malbec (Yakima Valley)	@wawinereport	87	2000002
:Nota Bene 2013 Ciel du Cheval Vineyard Merlot (Red Mountain)	@wawinereport	88	2000003
✓*Maurice 2010 Gamache Vineyard Malbec (Columbia Valley (WA))	@paulgwine~†	90	2000004
✓*Maurice 2013 Fred Estate Syrah (Walla Walla Valley (WA))	@wawinereport	89	2000005
✓*Maurice 2014 Boushey Vineyard Marsanne-Viognier (Yakima Valley)	@wawinereport	89	2000006
✓*Maurice 2014 Boushey Vineyard Syrah (Yakima Valley)	@wawinereport	89	2000007
✓âcluse 2014 Rendition Red (Paso Robles)	@mattkettmann	90	2000008
✓Ânima Negra 2004 ✓Ân Red (Vi de la Terra Illes Balears)	@wineschach	89	2000009
✓Árido 2013 Sustainably Farmed Moscato (Mendoza)	@wineschach	84	2000010
14 Hands 2011 The Reserve Merlot (Horse Heaven Hills)	@wawinereport	90	2000011
14 Hands 2013 Hot to Trot Red (Columbia Valley (WA))	@wawinereport	88	2000012
14 Hands 2013 Reserve M-S-G-V Red (Horse Heaven Hills)	@wawinereport	89	2000013
3Fools 2009 Del Rio Red Red (Oregon)	@paulgwine~†	82	2000014
Abbazia di Novacella 2012 Praepositus Passito Kerner (Alto Adige Valle Isarco)	@kerinokeefe	93	2000015
Abbona Marziano 2010 Pressenda (Barolo)	@kerinokeefe	87	2000016

Figure 10: Rating Table

Q ▾		Go	Actions ▾
Handle	Tasterfirstname	Tastermiddlename	Tasterlastname
@wawinereport	Sean	P.	Sullivan
@paulgwine~†	Paul	-	Gregutt
@wineschach	Michael	-	Schachner
@kerinokeefe	Kerin	-	O,Ã&Keefe
@vossroger	Roger	-	Voss
@vboone	Virginie	-	Boone
@mattkettmann	Matt	-	Kettmann
@JoeCz	Joe	-	Czerwinski
@gordone_cellars	Jim	-	Gordon
@AnnelnVino	Anne	-	Krebiehl~†MW
@suskostrzewa	Susan	-	Kostrzewa
@laurbuzz	Lauren	-	Buzzeo

1 - 12

Figure 11: Taster Table

<div>Q ▾</div>			Go	Actions ▾	
Wineryid	Title	Variety	Price	Description	Wineid
1000369	Antonio Mas 2011 Roll Fermentor Malbec (Tupungato)	Malbec	175	This Malbec is a collection of disparate parts that doesn't justify its price. Reduced plum and grapy berry aromas come with woody notes of menthol and cola. Highly herbal, saucy, savory flavors are more oaky than fruity, while this finishes with muscular tannins and savory, grapy notes.	2000085
1000360	Antucura 2011 Calcura Red (Vista Flores)	Bordeaux-style Red Blend	20	Leathery aromas of horseradish and stewed berries lead to a rooty, syrupy palate. Flavors of cola, chocolate and raisin are creamy as a whole. This tastes ripe on the finish, with raisin and oxidized notes. This Merlot-Cabernet-Malbec blend has its strong points but comes across baked and raisiny.	2000086
1000360	Antucura 2011 Grand Vin Red (Vista Flores)	Bordeaux-style Red Blend	30	Flat in color, with a dull luster, this smells mulchy and earthy, with dampness to the nose. A thick, medicinal palate is dealing severe tannins embedded into a syrupy texture. Flavors of fig, raisin and earth are a little spent.	2000087
1000541	Apriori 2014 Hicks Family Vineyard Pinot Noir (Santa Cruz Mountains)	Pinot Noir	48	Cola, black cherry and crushed purple flowers show on the nose of this bottling, one of the first reds to emerge from the 2014 vintage. It's light and energetic on the palate, with tangy cranberry juice and a touch of licorice.	2000088
1001132	Arat,/'s 2011 Shake Ridge Ranch Petite Sirah (Amador County)	Petite Sirah	45	This full-bodied wine has a big impact on the palate due to smoky, meaty flavors, very firm tannins and an overall huge personality. It starts with aromas of charcoal and charred oak, goes to ripe, rich but not sweet fruit flavors, and finishes with all that grip as well as lingering smoky nuances.	2000089
1000798	Arbor Crest 2006 Conner Lee Vineyard Chardonnay (Columbia Valley (WA))	Chardonnay	18	This big, buttery Chardonnay will especially appeal to those who like California-style flavors; here enhanced with the firm acids characteristic of Washington State. There is a generous streak of vanilla cream, a soft and very buttery mouthfeel, yet the fruit has enough precision and focus that the wine does not lose definition. Delicious now, this is a wine to drink over the next three or four years.	2000090

Figure 12: Wine Table

Q ▾			Go	Actions ▾
Wineryid	Wineid	Designationname		
1000372	2000433	Tradition		
1000226	2000434	Château Jean de Bel Air		
1001616	2000435	Old Vine		
1000907	2000436	Cuvée Aliénor		
1001273	2000437	Brut		
1001216	2000438	Barrel Sample		
1000553	2000439	Terre des Anges		
1001498	2000440	Grand Cru		
1000402	2000441	Vieilles Vignes		
1000402	2000442	Marjolaine		
1000374	2000443	Vieilles Vignes		
1000987	2000444	Prieuré de Cujac		
1000801	2000445	Saint-Pierre Rosé Brut		
1000373	2000446	Vieilles Vignes		
1001625	2000447	Castelnau de Suduiraut		
1000720	2000448	Cuvée des Contis		

Figure 13: Wine Detail Table

Q ▾					Go	Actions ▾
Wineryid	Country	Province	Region	Wineryname		
1000001	US	Oregon	Willamette Valley	Sweet Cheeks		
1000002	Spain	Northern Spain	Navarra	Tandem		
1000003	Italy	Sicily & Sardinia	Vittoria	Terre di Giurfo		
1000004	France	Alsace	Alsace	Jean-Baptiste Adam		
1000005	US	California	Napa Valley	Kirkland Signature		
1000006	Argentina	Other	Cafayate	Felix Lavaque		
1000007	Argentina	Mendoza Province	Mendoza	Gaucho Andino		
1000008	Spain	Northern Spain	Ribera del Duero	Pradorey		
1000009	Italy	Sicily & Sardinia	Sicilia	Baglio di Pianetto		
1000010	US	California	Paso Robles	Bianchi		
1000011	Italy	Sicily & Sardinia	Sicilia	Canicattù		
1000012	US	California	Sonoma Coast	Castello di Amorosa		
1000013	Italy	Sicily & Sardinia	Terre Siciliane	Stemmari		
1000014	Italy	Sicily & Sardinia	Cerasuolo di Vittoria	Terre di Giurfo		
1000015	US	Oregon	McMinnville	Erath		
1000016	France	Beaujolais	Beaujolais	Henry Fessy		

Figure 14: Winery Table

Queries

Query 1: We want to figure the most experienced wine taster, by creating a report, users can easily see the top 5 most experienced tasters and how many ratings they have done. (Figure 15)

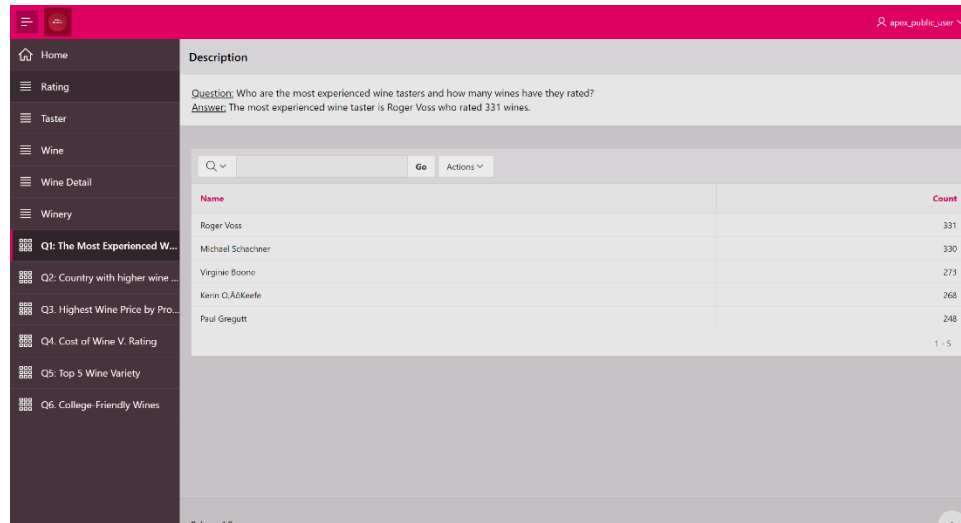


Figure 15: Q1 - Top 5 Wine Tasters

Query 2: Our second question looks at the five countries with the highest average ratings to see how many wineries are in those countries. We chose to use a bar chart here with the intent to show graphically how drastically different each country is when it comes to wine scores, with some nearly quadrupling the prior bar's ratings. (Figure 16).



Figure 16: Q2 – Number of Wineries in Countries with Higher Wine Ratings

Query 3: The next question asks about the wine prices in province in each region and find the top 10 provinces with the higher wine prices. We chose to use a bar chart to visualize our results and a table on the side to easily lookup the information. (Figure 17)

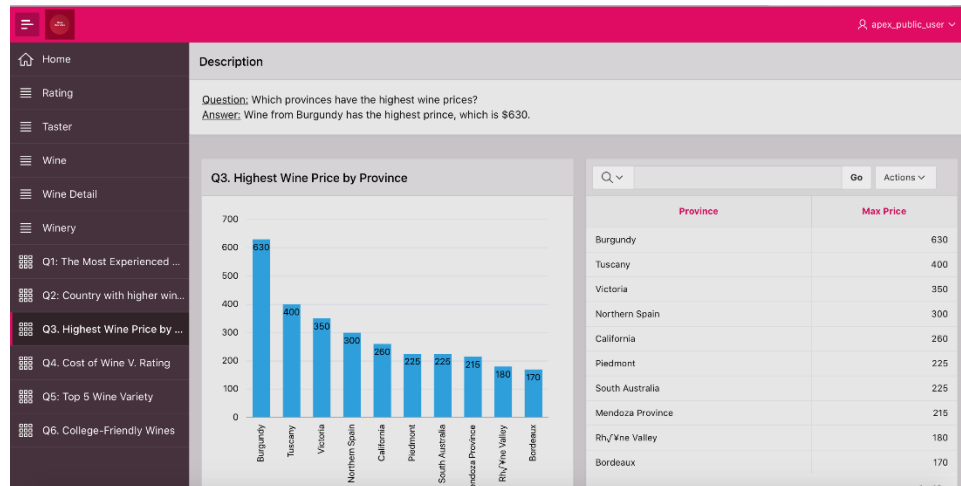


Figure 17: Q3 – Highest Wine Price by Province

Query 4: The 4th query is a simple join query that uses the average function on the points column for particular wine. We grouped the scores by descending wine price and compared several prices from the top, middle, and bottom rows of the query. (Figure 18)

Price	Averagepoints	Title
\$630	96	Louis Latour 2014 Le Montrachet (Montrachet)
\$400	90	Tua Rita 2013 Redigaffi Merlot (Toscana)
\$350	95	Château de la Tour 2013 Vieilles Vignes (Clos de Vougeot)
\$350	100	Chambers Rosewood Vineyards NV Rare Muscat (Rutherglen)
\$350	98	Chambers Rosewood Vineyards NV Rare Muscadelle (Rutherglen)
\$300	95	Artadi 2011 Viv'za El Pison (Rioja)
\$260	94	Domaine Leflaive 2009 Les Pucelles Premier Cru (Puligny-Montrachet)
\$160	83	Stacy-Levin Wine Co. 2011 Cabernet Sauvignon (Napa Valley)

Figure 18: Q4 - Average Points and Price by Wine

Query 5: The 5th query shows the top five wine varieties based on their highest average points in table form as seen in Figure 19. The purpose was to find if red or white wines scored the highest in ratings. The returns show that the top two wines are white but the second three are reds. This shows that both colors of wine receive high ratings on average. (Figure 19)

Description	
<p>Question: What are the top 5 varieties of wine by their average rating?</p> <p>Answer: The top 5 varieties are shown below, the Muscadelle is the most popular one.</p>	
<div> <input type="text"/> <input type="button" value="Go"/> <input type="button" value="Actions"/> </div>	
Variety	Average Points
Muscadelle	98
Muscat	95.7
Shiraz-Viognier	95
Cabernet Sauvignon-Syrah	94.5
Cabernet Sauvignon-Malbec	94
1 - 5	

Figure 19: Q5 - Top Five Wine Varieties

Query 6: In the 6th query we wanted to show the most affordable wines for college kids. We concluded that a price of under \$20 is reasonable for college students, so we showed all the wines that are priced under \$20 and named them “College Friendly.” (Figure 20)

apex_public_serv

Home

Rating

Taster

Wine

Wine Detail

Winery

Q1: The Most Experienced Wi...

Q2: Country with higher wine ...

Q3: Highest Wine Price by Pro...

Q4: Cost of Wine V. Rating

Q5: Top 5 Wine Variety

Description

Question

What wines are college friendly?

Answer

The wine price under \$20 are marked as College Friendly. College students who would like to purchase cheap wines can refer the table below. This table is ordered by price, you can change the filter if you are interested in higher price wine.

Go

Actions

Title	Price	Country	Friendly
Felix Solis 2013 Flirty Bird Syrah (Vino de la Tierra de Castilla)	\$4	Spain	College Friendly
Don Cristobal 1492 2010 1492 Red (Mendoza)	\$7	Argentina	College Friendly
Domainio de Eguren 2011 Protocolo Rosv © (Vino de la Tierra de Castilla)	\$7	Spain	College Friendly
Domainio de Eguren 2010 Protocolo Blanco White (Vino de la Tierra de Castilla)	\$7	Spain	College Friendly
Viv'za Alball 2012 Smooth Red Tempranillo (Valdepev'za)	\$8	Spain	College Friendly
Marqu'©s de C'v'ceres 2006 Blanco Fermentado en Barrica White (Rioja)	\$8	Spain	College Friendly
Vieil Armand 2013 Tradition Pinot Blanc (Alsace)	\$8	France	College Friendly

Figure 20: Q6 – The Most College Friendly Wines