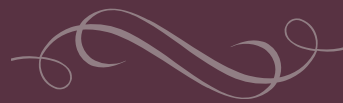




COM-480 DATA VISUALIZATION  
MILESTONE 3

# Vine map

WELCOME TO VINEMAP—YOUR  
DIGITAL SOMMELIER



SINAN ULCAI - 296887

MALENA MENDILAHARZU - 369702

CARLOS CAPELL COLLADO - 377896

MOHAMMED KERRAZ - 288922

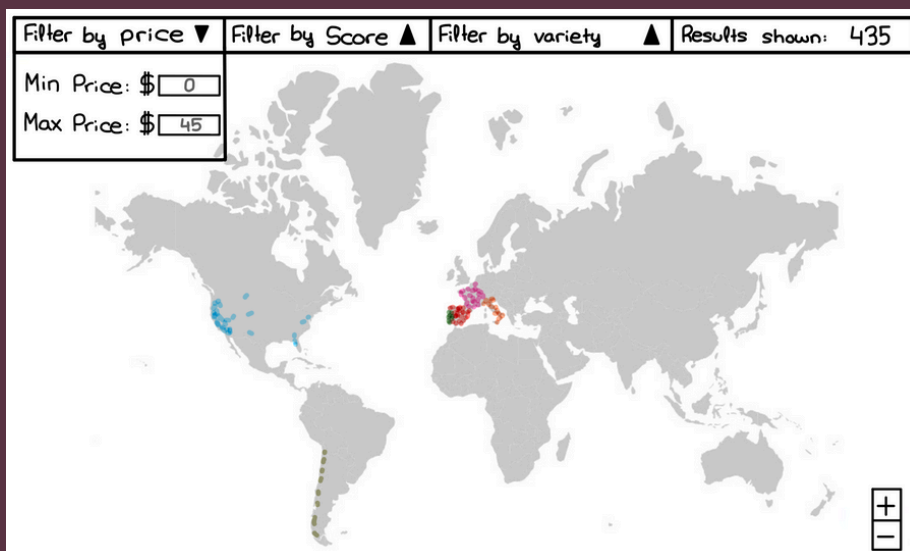
# THE PATH

1. WE INITIALLY DECIDED ON THE SITE LAYOUT, OPTING FOR A SINGLE SCROLLABLE PAGE WITH DISTINCT SECTIONS. THIS CHOICE FACILITATED THE INDEPENDENT ADDITION OF RELEVANT CONTENT TO EACH SECTION, ALLOWING EACH TEAM MEMBER TO DESIGN THEIR SECTION AND SEAMLESSLY INTEGRATE IT INTO THE PRE-EXISTING HTML STRUCTURE, THEREBY PARALLELIZING THE WORK.



2. NEXT, WE AGREED ON THE SPECIFIC SECTIONS TO INCLUDE AND DETERMINED THE CONTENT AND COLOR GRADIENTS FOR EACH TO ENSURE A COHESIVE OVERALL RESULT.

3. WE THEN FOCUSED ON THE DATA STORYTELLING SCHEME, AIMING FOR OUR WEBSITE TO TAKE USERS ON A JOURNEY INTO THE WORLD OF WINE, RESEMBLING A TRIP THROUGH A MAP. WE FIRST ADDED A NARRATIVE SECTION FOLLOWED BY AN INTERACTIVE MAP, ALLOWING USERS TO LOCATE WINERIES. THIS WAS COMPLEMENTED BY AN INTERACTIVE PLOT THAT ENABLES USERS TO EXPLORE DETAILED INFORMATION ABOUT THE WINERIES, SUCH AS PRICES, PROVIDING THEM WITH INSIGHTFUL IDEAS.



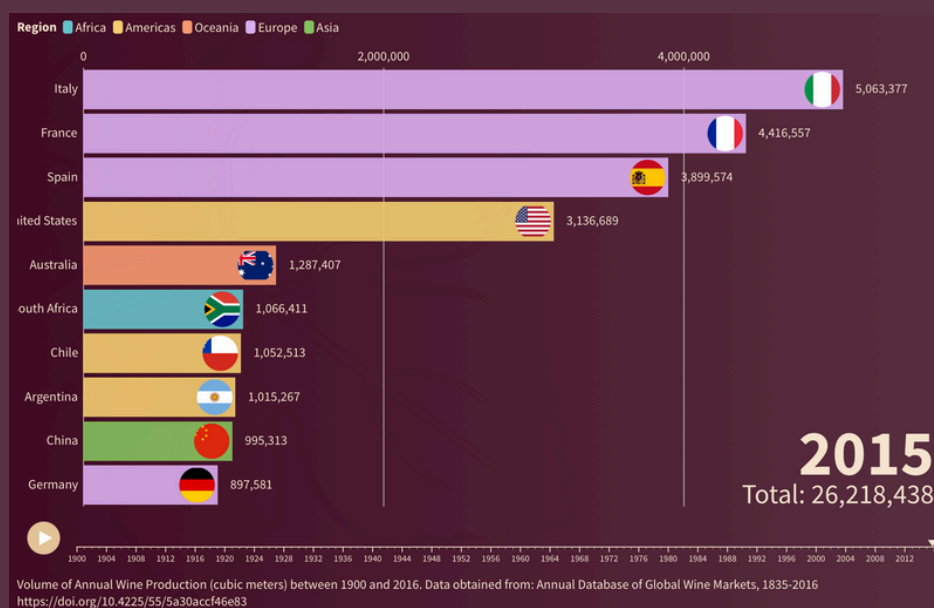
4. FINALLY, ONCE EVERYONE ADDED THEIR RESPECTIVE SECTIONS, WE ENSURED THAT THE OVERALL LAYOUT AND STYLE WERE COHERENT, OFFERING A SEAMLESS USER EXPERIENCE.

# BAR CHART ANIMATION

WE DID NOT INCLUDE THIS VISUALIZATION IN THE M2 PLAN. HOWEVER, AS WE CONVERGED ON A MORE PRECISE STORYTELLING, WE WANTED TO START THE WEBSITE BY A VERY SHORT INTRO TO THE HISTORY OF WINE (SPECIALLY OVER THE LAST CENTURY).

WITH THIS CHART, WE AIM TO SHOW AN ANIMATION OF THE TOP 10 WINE PRODUCERS DURING EACH YEAR IN THE PERIOD FROM 1900 TO 2016.

- BAR CHART ANIMATIONS, WHILE NOT ABLE TO CONVEY A LOT OF INFORMATION AT THE SAME TIME, HAVE POPULARIZED DURING THE LAST YEARS, THANKS TO THEIR ANIMATED AND “COMPETITIVE” APPROACH. FOR THIS REASON, WE THINK USING THIS TYPE OF ANIMATION CAN HELP MAKE OUR WEBSITE MORE ENGAGING.
- WE CONVEY MORE SUMMARIZED INFORMATION ON WINE PRODUCTION EVOLUTION IN THE FOLLOWING AREA CHARTS (EXPLAINED LATER).



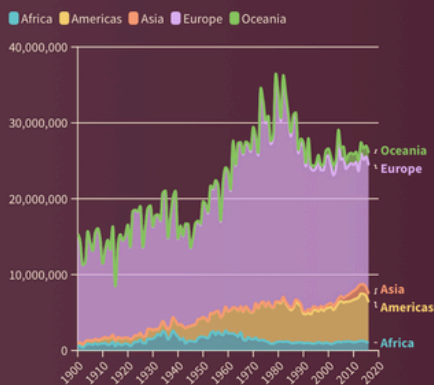
SOME CHARACTERISTICS OF THE PLOT WORTH HIGHLIGHTING ARE:

- COUNTRIES COLORED BY CONTINENT, AND IT IS POSSIBLE TO FILTER TO SHOW THE TOP 10 PRODUCERS OF SPECIFIC CONTINENTS (OR DO NOT CONSIDER SPECIFIC CONTINENTS).
  - THIS IS ESPECIALLY USEFUL IF, FOR EXAMPLE, ONE WANTS TO EXPLORE THE EVOLUTION OF WINE PRODUCTION OUTSIDE OF EUROPE, A TREND THAT HAS BEEN ESPECIALLY RELEVANT AND INTERESTING IN THE LAST DECADE
- IT IS POSSIBLE TO START AND STOP THE ANIMATION, AND TO NAVIGATE TO SPECIFIC YEARS. WE DECIDED THE ANIMATION TO MOVE FAST THROUGH THE YEARS TO MAKE IT MORE ENGAGING. HOWEVER, AS IT SPANS 116 YEARS, IT TAKES 90 SECONDS TO COMPLETE A WHOLE LOOP.

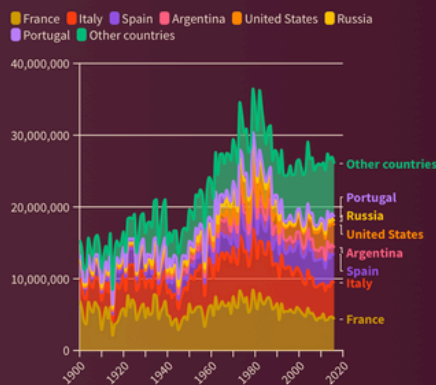
# AREA CHARTS

WITH THE IDEA TO CONVEY THE INFORMATION FROM THE ANIMATION BAR CHART IN A SINGLE PLOT WHERE ONE CAN EXPLORE THE EVOLUTION OVER THE YEARS, WE PRESENT THREE AREA CHARTS.

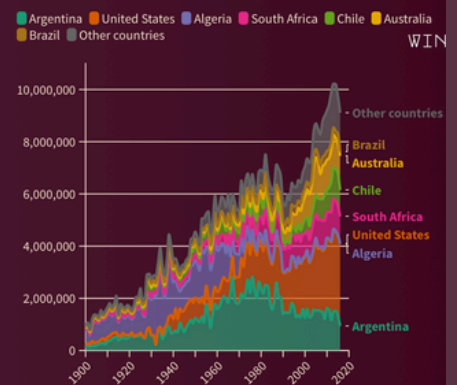
Production by Continent (kL/yr)



Production by Country (kL/yr)



Production in Non-European Countries (kL/yr)



IN THESE PLOTS, ONE CAN APPRECIATE BETTER THE EVOLUTION OVER THE YEARS, AND WHILE IT DOES NOT EASILY REVEAL THE RANKING FOR A SPECIFIC YEAR, IT SERVES BETTER THE GOAL OF SHOWING THE OVERALL TRENDS.

## 1. PRODUCTION BY CONTINENT

WE WANT TO SHOW THE EVOLUTION OF PRODUCTION IN THE WORLD, HIGHLIGHTING THE DOMINANCE OF EUROPE, AND THE GROWTH IN THE AMERICAS ON THE SECOND HALF OF THE CENTURY.

## 2. PRODUCTION BY COUNTRY

PRODUCTION OVER THE YEARS OF THE TOP 8 COUNTRIES WHICH MOST WINE PRODUCED OVERALL DURING THESE 116 YEARS. IT ALSO SHOWS HOW MUCH WINE PRODUCTION IS CONCENTRATED IN A FEW COUNTRIES, AS THE “OTHER COUNTRIES” SECTION IS RELATIVELY SMALL CONSIDERING THAT IT CONTAINS 150 OTHER COUNTRIES

## 3. PRODUCTION IN NON-EUROPEAN COUNTRIES

WHILE THE OVERALL WINE PRODUCTION BETWEEN 1900 AND 2016 INCREASED BY A FACTOR OF 2, IN NON-EUROPEAN COUNTRIES IT INCREASED BY A FACTOR OF 8.

ONE OF THE MAIN GOALS OF THIS WEBSITE IS TO BRING TO PEOPLE’S MIND THAT WINES ARE NOT JUST PRODUCED IN EUROPE AND CALIFORNIA, AND WE AIM TO CREATE A MORE GLOBAL COMMUNITY OF WINE ENTHUSIASTS.

MOREOVER, IT IS VERY RELEVANT TO SHOW THIS VISUALIZATIONS BECAUSE AFTER SEEING THEM, ONE REALIZES THE DOMINANCE OF EUROPE IN THIS SECTOR. HOWEVER, IN THE SUBSEQUENT TREEMAP WE SHOW THE CURRENT DISTRIBUTION OF DIFFERENT WINES PRODUCED, AND THIS DATA CHANGES SIGNIFICANTLY THE PERSPECTIVE ON WINE PRODUCTION.

US 44.4%	Italy 14.5%	France 14.3%	<ul style="list-style-type: none"> <li>North America</li> <li>Europe</li> <li>South America</li> <li>Others</li> </ul>	
	Spain 6.3%	Portugal 5.3%		Others ...
	Chile 4.6%	Argentina 3.5%		...
Mexico 4.2%	Others 0.9%	...		...

**WORLD > CONTINENT > COUNTRY > PROVINCE > WINERIES**

## COUNTRIES IN EUROPE



## PROVINCES IN SPAIN

HOWEVER, THIS APPROACH ALSO BRINGS A FEW DRAWBACKS THAT ARE WORTH HIGHLIGHTING. FOR EXAMPLE, ONE CAN NO LONGER COMPARE AT THE SAME TIME PRODUCTION BETWEEN COUNTRIES IN DIFFERENT CONTINENTS. FOR EXAMPLE, THE DRAFT TREEMAP CANNOT BE DISPLAYED WITH THIS APPROACH (WE CANNOT HAVE BOTH THE US AND FRANCE AT THE SAME TIME). HOWEVER, WE BELIEVE THAT OVERALL THE EXPERIENCE IS HUGELY IMPROVED WITH THIS INTERACTIVE VERSION.

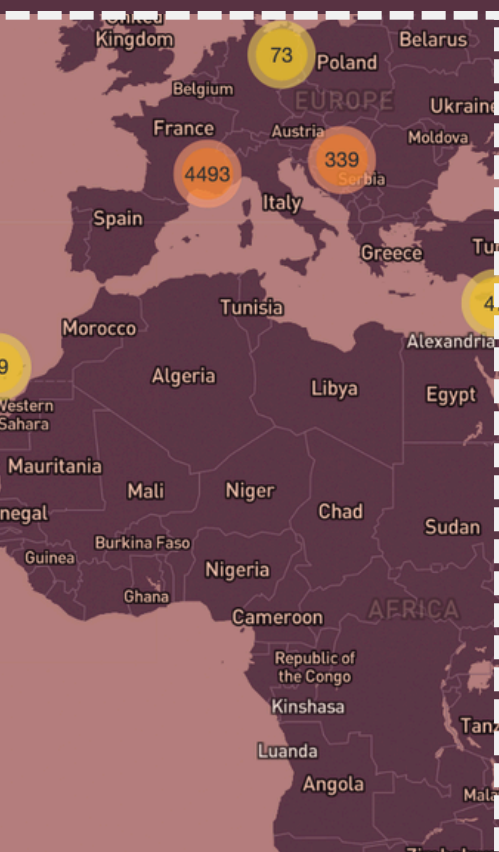
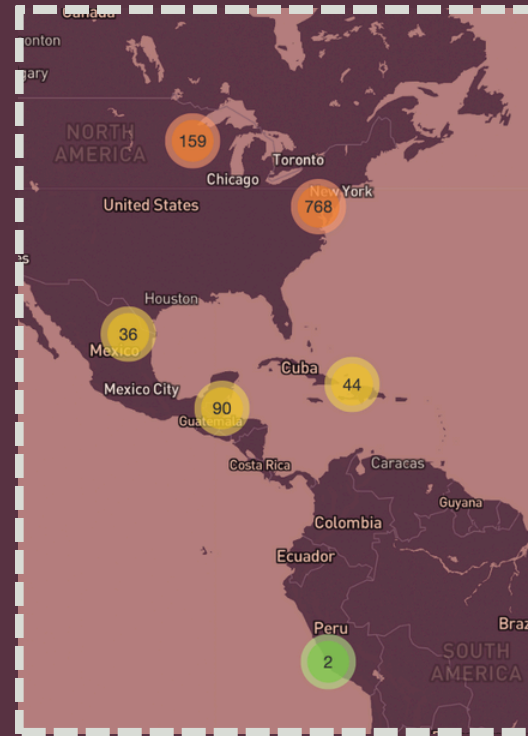


# THE MAP

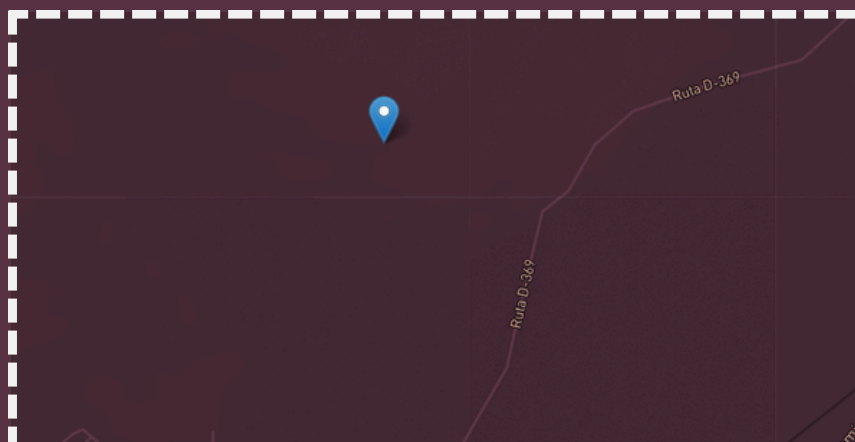
THE MAP WE CREATED IS AN INTERACTIVE REPRESENTATION OF WINERIES AROUND THE WORLD. CLUSTERS INDICATE THE NUMBER OF WINERIES IN EACH REGION. USERS CAN CLICK ON THEM TO REVEAL DETAILED INFORMATION ABOUT EACH WINERY, MAKING IT AN EXCELLENT TOOL FOR WINERY EXPLORATION

CREATING THE MAP WAS CHALLENGING DUE TO INCOMPLETE LOCATION DATA IN OUR ORIGINAL DATASET. WE ONLY HAD PROVINCE AND COUNTRY INFORMATION BUT NO EXACT COORDINATES. OUR INITIAL ATTEMPTS TO USE `WINERY_NAME + PROVINCE + COUNTRY` IN LOCALIZATION APIS FAILED, SO WE ADJUSTED TO USE ONLY PROVINCE AND COUNTRY, WHICH SUCCESSFULLY RETRIEVED CENTRAL COORDINATES.

THIS CHANGE LED TO OVERLAPPING LOCATIONS FOR MULTIPLE WINERIES IN THE SAME AREA, SO WE GENERATED RANDOM LOCATIONS WITHIN A RADIUS AROUND THE PROVINCE CENTER. THIS SOMETIMES PLACED WINERIES IN WATER, WHICH WE CORRECTED BY CHECKING LOCATIONS AGAINST CONTINENT BORDERS TO ENSURE THEY WERE ON LAND.

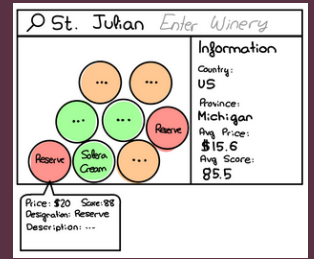


TO ENHANCE THE MAP, WE ADDED A TEMPERATURE LAYER USING AN API FOR THE LATEST 2-METER TEMPERATURE DATA. THIS MADE THE MAP MORE DYNAMIC, BUT SINCE WE DIDN'T PAY FOR THE PREMIUM API VERSION, HIGH USAGE MIGHT MAKE THE TEMPERATURE FEATURE TEMPORARILY UNAVAILABLE

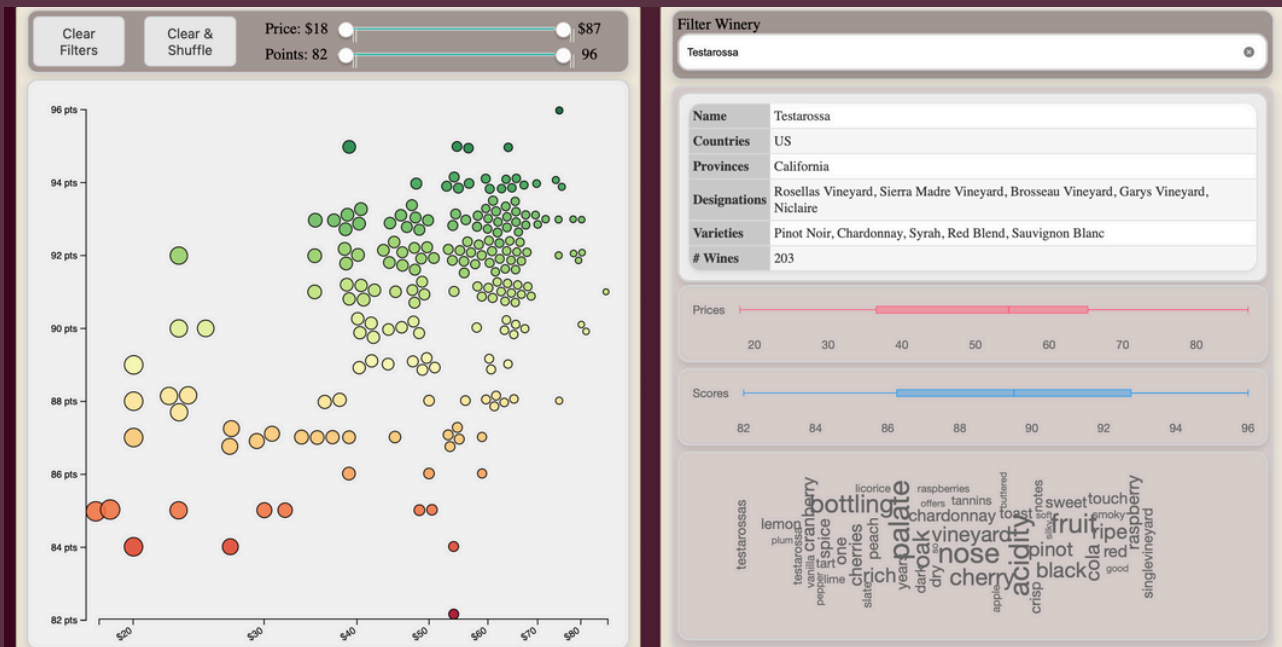


# WINERY SEARCH

INSPIRED BY THE  
VALUABLE INSIGHTS  
FROM THIS PLOT, WE  
ENHANCED ITS  
FEATURES AND MADE  
IT A KEY COMPONENT  
OF OUR WEBSITE.  
BUILT PRIMARILY  
FROM SCRATCH USING  
D3.JS.



IN OUR SKETCHES, WE PLANNED TO INCORPORATE A BUBBLE PLOT COLORED BY SCORE, LABELED BY THE DESIGNATION, AND WITH A RIGHT COLUMN TO FILTER WINERIES AND SHOW IN TEXT ITS MAIN INFORMATION. OUR FINAL VISUALIZATION INCLUDES ADDITIONAL FILTERS AND VISUALIZATIONS ON THE WINERY CHARACTERISTICS, DETAILED HERE:



- **LEFT COLUMN: WINE INFORMATION**
  - DISPLAYS WINE DETAILS COLORED ACCORDING TO THEIR SCORES.
  - WINE ICONS ARE SIZED BASED ON PRICE TO HIGHLIGHT MORE AFFORDABLE OPTIONS FOR A MIDDLE-CLASS AUDIENCE, MAKING IT EASIER TO ASSESS QUALITY VERSUS PRICE.
- **RIGHT COLUMN: WINERY INFORMATION**
  - SELECT WINERY TO DISPLAY ITS WINES IN THE LEFT COLUMN.
  - GENERAL INFORMATION LIKE COUNTRIES, PROVINCES, VARIETIES, DESIGNATIONS (SORTED BY FREQUENCY), AND THE NUMBER OF WINES.
  - BOX PLOTS: SHOW STATISTICS FOR WINE PRICES AND SCORES AT THE WINERY. HOVERING OVER THE BOX PLOTS REVEALS TEXT DESCRIPTIONS (MIN, MAX, MEDIAN) TO AID THOSE UNFAMILIAR WITH THE FORMAT.
  - TEXT CLOUD: TO GIVE A GENERAL IDEA OF FREQUENT DESCRIPTORS IN THE WINERY'S WINE DESCRIPTIONS, LIKE "ACIDIC" AND "FRUITY," WITHOUT NEEDING PRECISE DETAILS, THUS CONVEYING THE WINERY'S CHARACTERISTIC FLAVORS AND ATTENTION TO BOTTLING.

# TASK DISTRIBUTION

	<b>Sinan Ulcay</b>	<b>Malena Mendilaharzu</b>	<b>Mohammed Kerraz</b>	<b>Carlos Capell Collado</b>
Milestone 1	<ul style="list-style-type: none"> <li>Found the database and made the relation with the book.</li> <li>Described the related work.</li> <li>Helped with the post-processing of the data</li> </ul>	<ul style="list-style-type: none"> <li>Initial data post-processing and cleaning.</li> <li>Described the related work.</li> </ul>	<ul style="list-style-type: none"> <li>Was in charge of the exploratory data processing</li> </ul>	<ul style="list-style-type: none"> <li>Defined the problematic and the detail about the dataset.</li> </ul>
Milestone 2	<ul style="list-style-type: none"> <li>Initial draft of the website HTML and the landing page with pop-up.</li> </ul>	<ul style="list-style-type: none"> <li>Started drafting the map and further post-processing.</li> </ul>	<ul style="list-style-type: none"> <li>Further furbish the website with the graphics and age verification.</li> </ul>	<ul style="list-style-type: none"> <li>In charge of documenting the process.</li> <li>Came up with the visualizations.</li> </ul>
Milestone 3	<ul style="list-style-type: none"> <li>Section 2 (story text) HTML CSS for the animations of the text.</li> <li>Added SVG graphics as background images.</li> </ul>	<ul style="list-style-type: none"> <li>Added the location points on the map.</li> <li>Fetches data for the weather via an API and added the layer on the map.</li> </ul>	<ul style="list-style-type: none"> <li>Came up with the initial website layout.</li> <li>HTML and CSS base of the single page website.</li> </ul>	<ul style="list-style-type: none"> <li>Data visualization with d3.js, and other libraries (winery filter, treemap, area chart, bar chart animation, scatterplot).</li> <li>Storytelling</li> <li>Screen Casting</li> </ul>