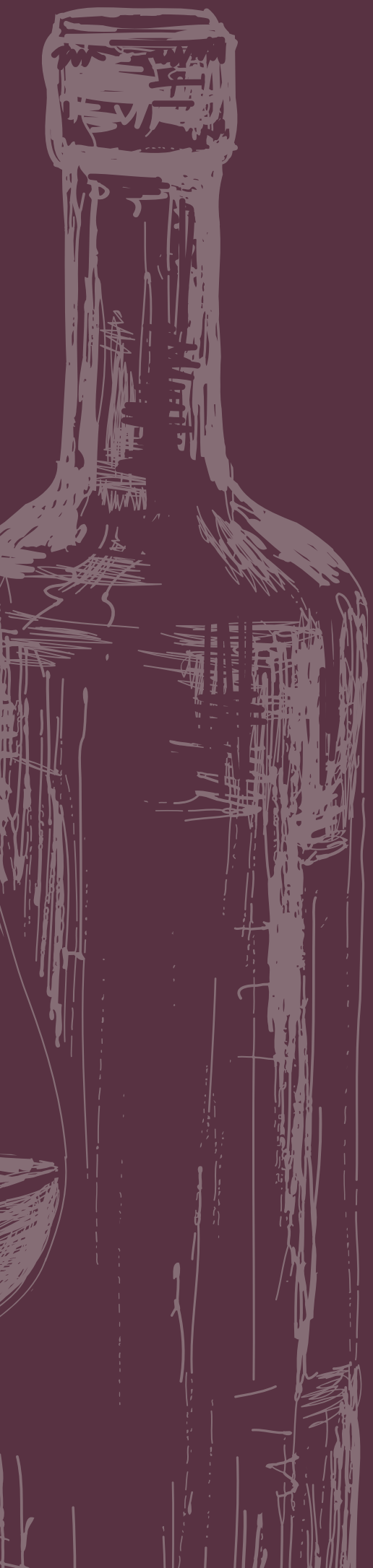


COM-480 DATA VISUALIZATION
MILESTONE 2

Vine map

WELCOME TO VINEMAP—YOUR DIGITAL SOMMELIER

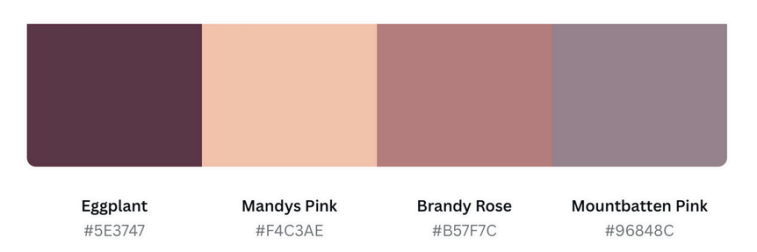
SINAN ULCAY - 296887
MALENA MENDILAHARZU - 369702
CARLOS CAPELL COLLADO - 377896
MOHAMMED KERRAZ - 288922

OVERVIEW OF THE WEBSITE

The website will begin asking the user for its age, before allowing them to enter the rest of the website (this has already been implemented).

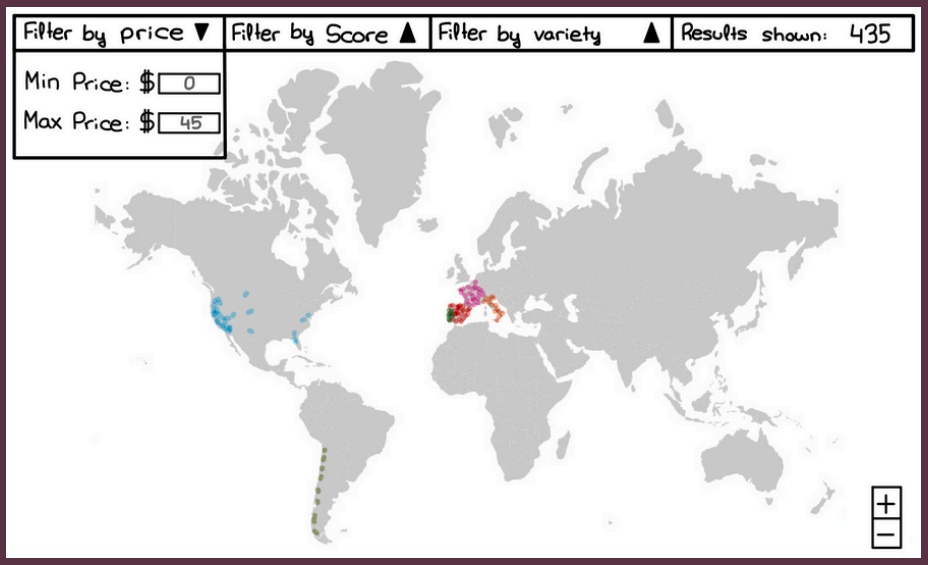
The main page of the website will be a map with the wineries (explained below). Furthermore, different tabs at the top of the page will allow to move across different sections: winery map, winery search, and wine recommendation system.

We plan to use the following color palette (inspired by the style of this document):



INTERACTIVE WORLD MAP OF WINERIES

Following our focus on showing the geographical varieties and differences in wines, the main section of the website will be the map with the list of wineries, colored based on their country. The user can filter the wineries shown to include just those that sell at least one wine that satisfies certain price, score, and variety characteristics. When zoomed inside a country, wineries from different regions are colored on different shades of the country's color code.



Clicking a specific winery will display specific information, in the same format as the winery search presented later.

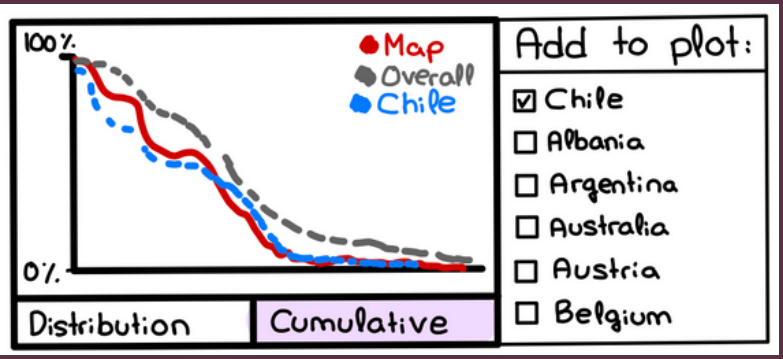
One of the major challenges of this part will be how to locate the wineries, as although each has geographical information, it may not be too precise (e.g.: California, US). We will need to use geolocation APIs such Geocode, and distribute the different wineries across the region (e.g. separating each 5km from each other).

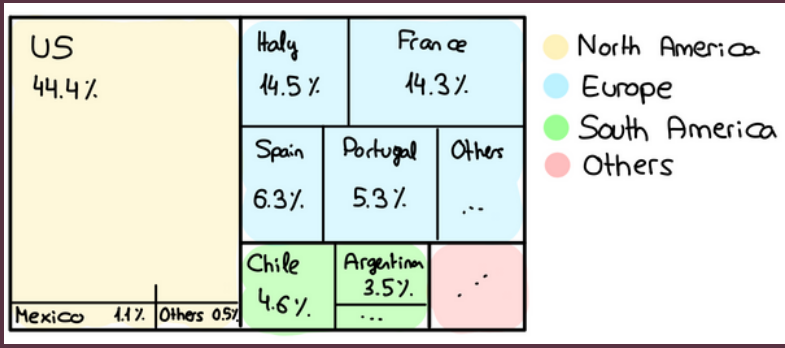
Challenging idea: option to "pan" and select different wineries so you see the average information of the selected wineries (e.g.: pan over the a region of Spain and see their average price, the most common varieties, etc).

DISTRIBUTION OF WINES IN FILTERED WINERIES

This second part will allow to visualize how many wines from the filtered selection are available in each country, as well as their distribution of prices, and scores. It will be presented in the same tab as the map, shown as a column at the right of the map that the user can choose to display or hide. It will include (at least) the following two visualizations:

Line Graph Distributions



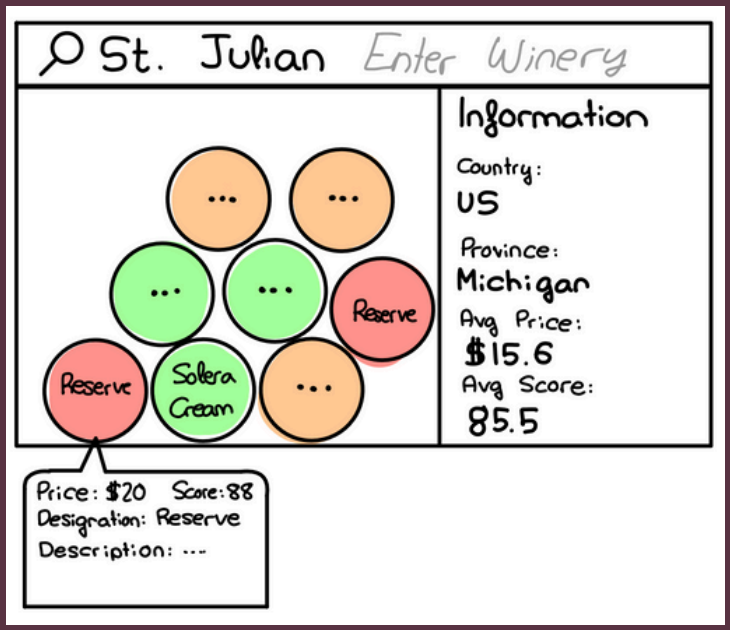


Tree map

WINERY SEARCH

The user enters the name of a winery:

- Right column: textual description of the winery's main characteristics.
- Left column: bubble plot (each bubble is a wine available at the winery). Bubbles are color-coded by price and labeled with the wine's designation. Clicking a bubble displays detailed information about the wine (price, score, designation, description).

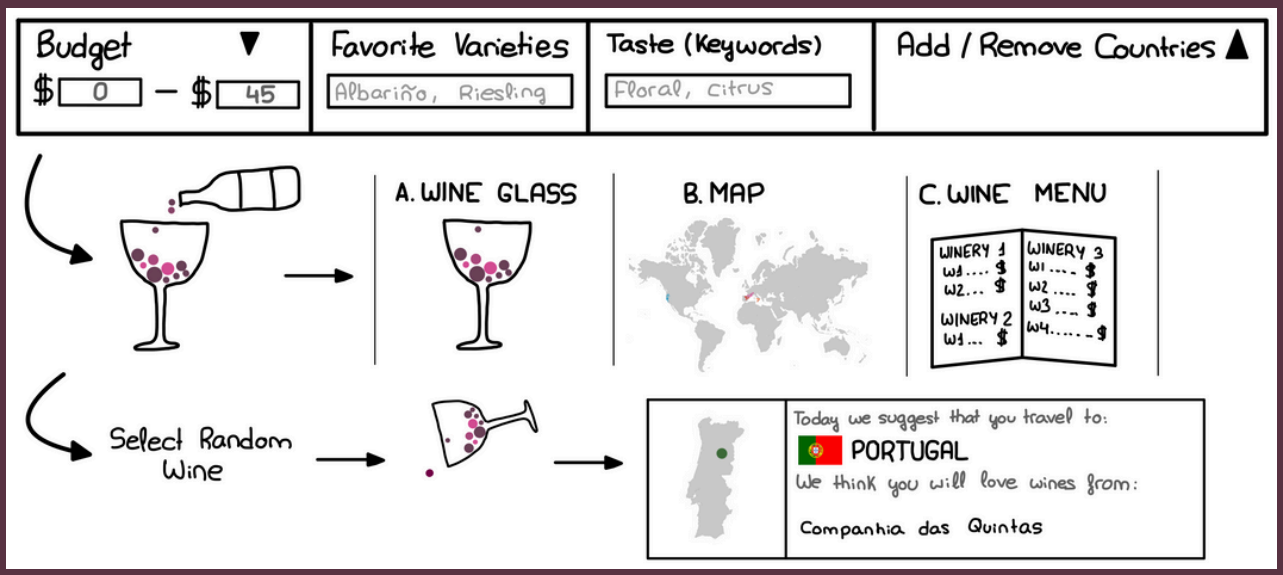


CHALLENGING IDEA

WINERY RECOMMENDATION SYSTEM

Recommends wineries based on its budget, tastes, countries and varieties preferences. It shows an animation of a sommelier pouring wine, with each "drop" representing a wine recommendation (sized by how well it adjustes to user preferences and colored by country of the winery). Recommendations can be visualized in three formats: as the glass of wine, on a map (sized and colored in the same way), or as a restaurant-style wine menu (listed in order of preferences).

Additionally, a "choose a random wine" button animates a drop falling from the glass. Then, details about the randomly selected winery and its location on a map are displayed.



REQUIRED TOOLS AND LECTURES

In addition to general tools such as JS, or D3.js, we will need:

- Map data: Leaflet.js, Mapbox or Google Maps API.
- Tabular data: Crossfilter.js, Plotly.js (for tree map, line graph distributions, and bubble plots).
- NLP: not part of course scope, but will need to create NLP model (nltk, PyTorch).
- General: interactions (and animations), colors, marks, and channels.