

Les zinzins : Milestone 2

For our visualization of Airbnb data in Europe, we have envisioned a website designed around the theme of housing. The main concept is a multi-story house, with each floor representing a different insight. When the user clicks on each floor, a unique aspect of our data will be displayed using a different and relevant visualization tool each time. Some floors will have switch buttons. These will allow interaction with the associated visualization (e.g. weekday vs weekend).

Initially, the user will arrive at a cross-section view of the Airbnb house. As soon as they click on a floor, it will be highlighted, and the house will shift to the side to make room for the data. Here is the layout of the house:

Floor	Room	Parameter of Interest	Type of Chart	Description	Switch
4	Attic	Prices	Violin chart	For each city, a violin plot is designed. The thickness corresponds to the number of apartments at that price, and the median and 25-75% quartiles are indicated	Weekday / weekend
3	Bedroom	Distance to downtown	Circle pie chart	Each segment of the circle has a radius proportional to the distance from the city center, with intermediate lines for the quantiles	Distance to downtown / distance to metro
2	Living room	Capacities of the Airbnb	Tree map	When a user chooses a category, the 3 or 4 cities with the most apartments of that capacity are displayed using a tree map of the Airbnb capacities in that city	4 options: <ul style="list-style-type: none">- Alone 1p- Couple 2p- Family 3-5p- Group +5p
1	Basement	Weather	Simple plot X vs Y	The size of the city dots is related to the number of sunny days, and clicking on a dot displays a curve of the average temperature by month	No

You can also see this in the summary diagram provided below. The core visualization is the house, and each floor is an independent piece to implement.

The main goal is to create a tool that can be used to decide where to go on vacation, as well as to simply explore the data in a fun and engaging way (without a specific purpose). The decision will be based on criteria not at the individual apartment level, but at the city level and its characteristics. The means to accomplish this will no longer be individual requests for each apartment with information to search for each time, but rather in a more global, enjoyable manner that makes it easier to understand underlying trends.

Extra ideas: An additional idea is to provide the user with information not available on Airbnb. This would include information about the city, such as its sunshine, precipitation, average temperatures, tourist traffic, population, travel time to the airport, etc. This data will be collected from external sources for weather data, for example. We still need to make choices on what we will display. The user will have a map of Europe on which they can hover over cities to see this information.

Another idea is to change the website's homepage. Instead of displaying a cross-section of the house with a "start" button next to it, users could see the house's facade and click on the front door to begin their journey.

We are also considering reworking the tree map, as it may not be the most suitable method for presenting this data.

Necessary lectures: Most of the necessary lectures are past: interactions, D3, more general subject, etc. One lecture that may be useful to us is the one on maps. As our website tries to tell a story, maybe the lecture on storytelling will also be relevant.

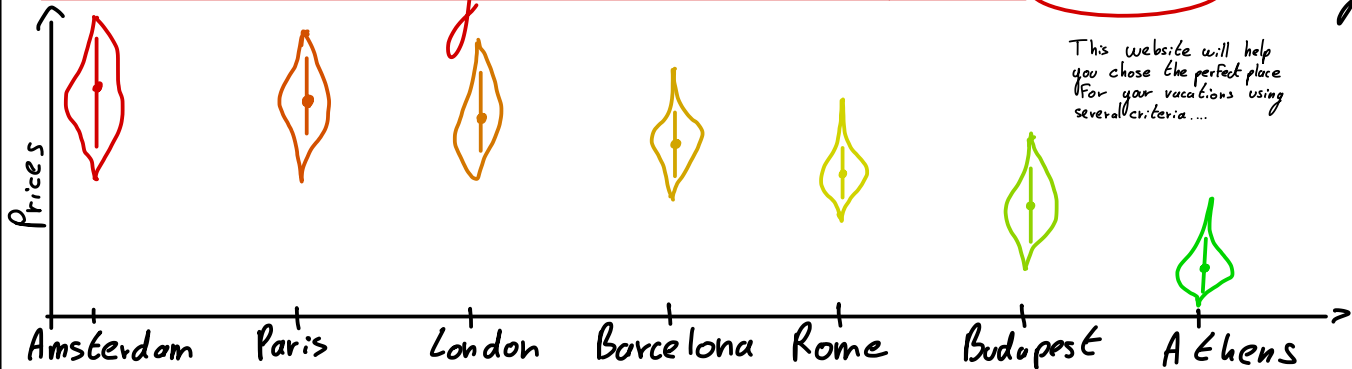
The Airbnb experience

This website will help you choose the most suitable place for your vacations using several criteria

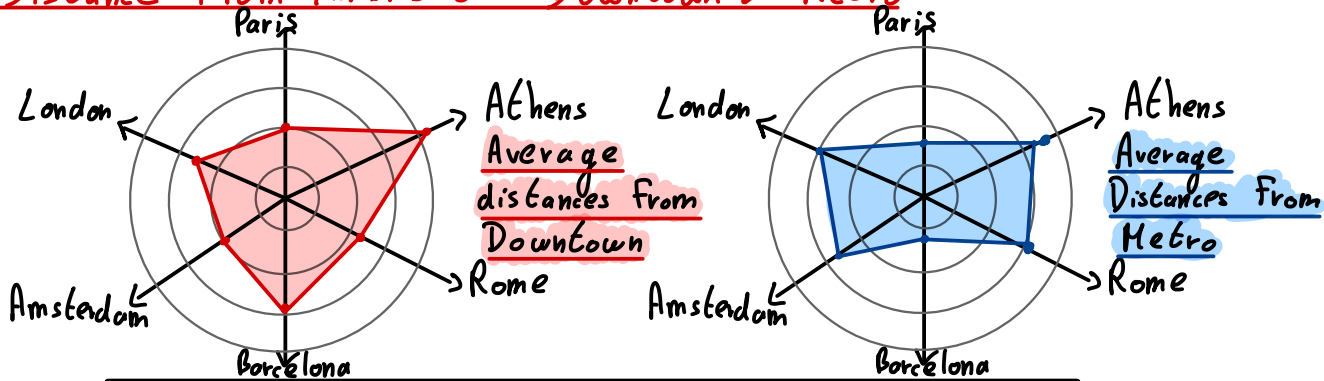
START the recommendation

START

Choose the city based on Prices Weekend ● Weekdays



Distance From Airbnb to Downtown & Metro



What is the city most suited to your group size?

- ☐ Travel Alone (1p)
- ☒ Travel in couple (2p)
- ☐ Travel in family (3p-5p)
- ☐ Travel in group (+5p)

Amsterdam

55 %	5% Group
2 persons housing	15% Alone
	20% Family

Lisbon

30%	24% Alone
2 persons housing	23% Group
	23% Family

Paris

67 %	20% Alone
2 persons housing	8% Family
	5% Group

Choose your destination

with respect to the meteo

Sunny Days per year: 300
Average temperatures:

