

A mockup of a web dashboard titled "SafeStay LA Airbnb Safety Dashboard". The dashboard is displayed on a light gray rounded rectangle with a subtle drop shadow, set against a background of a stylized map with yellow, blue, and green lines. The dashboard itself has a light gray background with several decorative elements: three colored dots (red, yellow, green) in the top left corner; a small blue circle and a yellow horizontal line near the top center; a blue horizontal line near the top right; a yellow horizontal line and a red circle on the right side; a yellow horizontal line and a red circle on the left side; a blue horizontal line near the bottom right; a red circle and a yellow circle near the bottom left; and a thick horizontal bar at the bottom composed of four segments: yellow, red, green, and blue. The title "SafeStay LA" is centered in a large, colorful, handwritten-style font. Below it, the subtitle "Airbnb Safety Dashboard" is centered in a bold, dark gray sans-serif font. At the bottom of the dashboard is a white rounded rectangular search bar containing a magnifying glass icon on the left and the text "Evangeline Chang" on the right.

SafeStay LA

Airbnb Safety Dashboard



Evangeline Chang



Agenda

Problem

Why my work is needed

Data Sources

Where I got the data from

Data Utilization

How I used the data

- Crime and Population Data
- Airbnb Listings
- Airbnb Reviews

Dashboard

What I put on the dashboard



❗ Problem

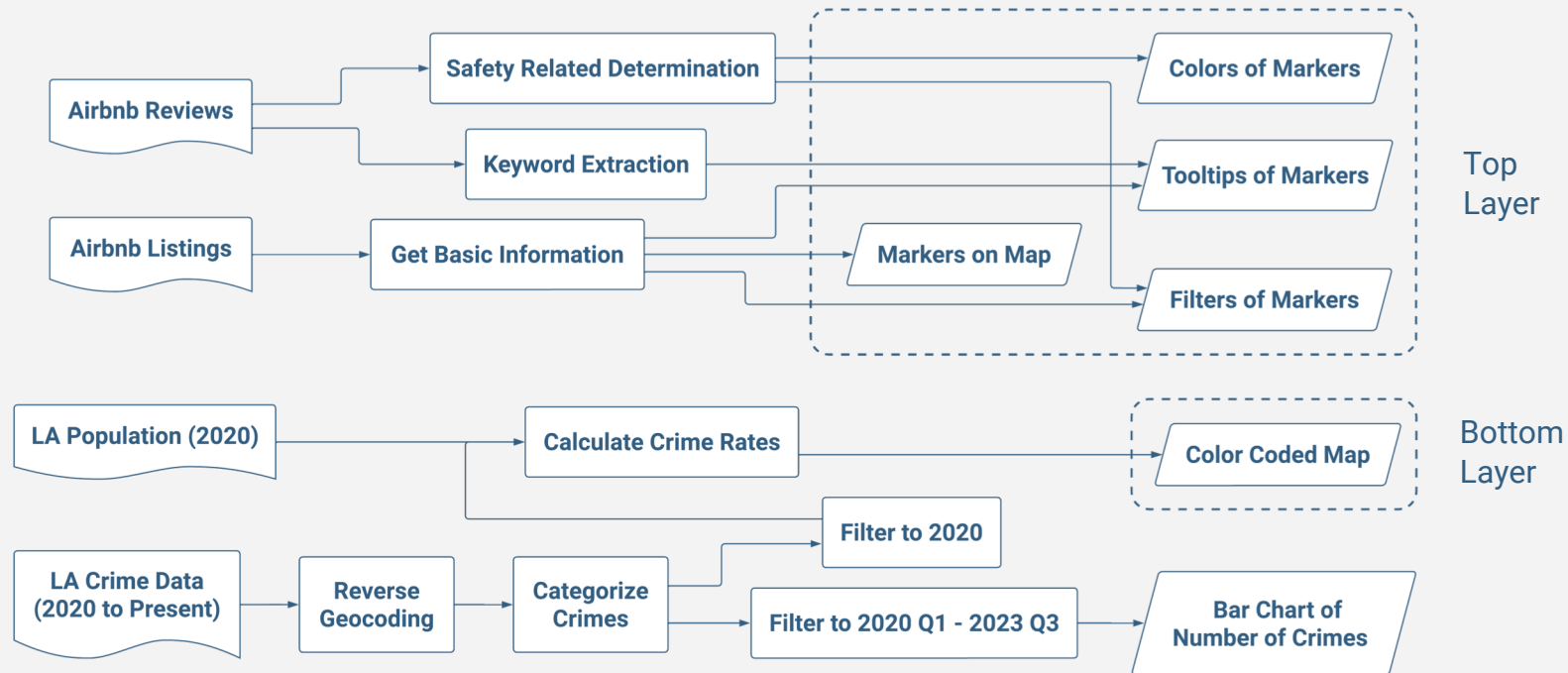
- Safety concerns in LA
- Airbnb app's lack of emphasis on safety considerations
- Empower users to prioritize safety in their accommodation choices



Data Sources

- Inside Airbnb – Airbnb Listings & Reviews (Sep 3, 2023)
(<http://insideairbnb.com/get-the-data/>)
- DataLA – Crime data in Los Angeles (Nov 8, 2023)
(<https://data.lacity.org/Public-Safety/Crime-Data-from-2020-to-Present/2nrs-mtv8>)
- US Census Bureau – Population by ZIP Codes (2020)
([https://data.census.gov/table/DECENNIALDHC2020.P1?q=040XX00US06\\$86000000&y=2020](https://data.census.gov/table/DECENNIALDHC2020.P1?q=040XX00US06$86000000&y=2020))

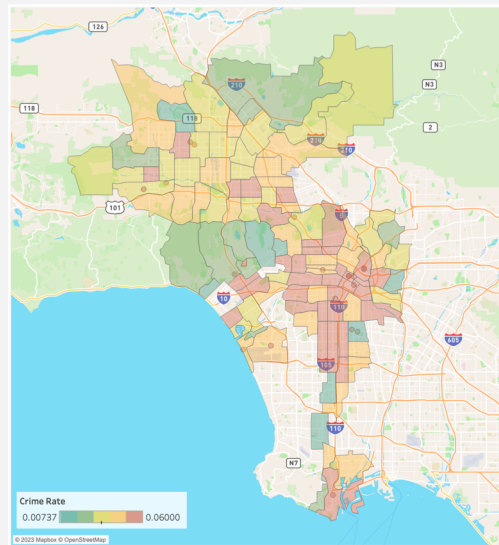
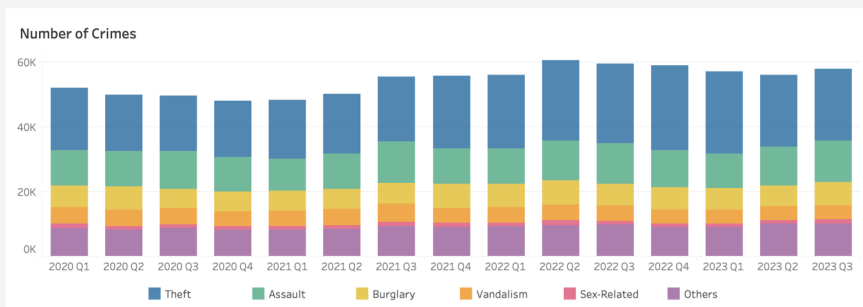
Data Utilization





Crime and Population Data

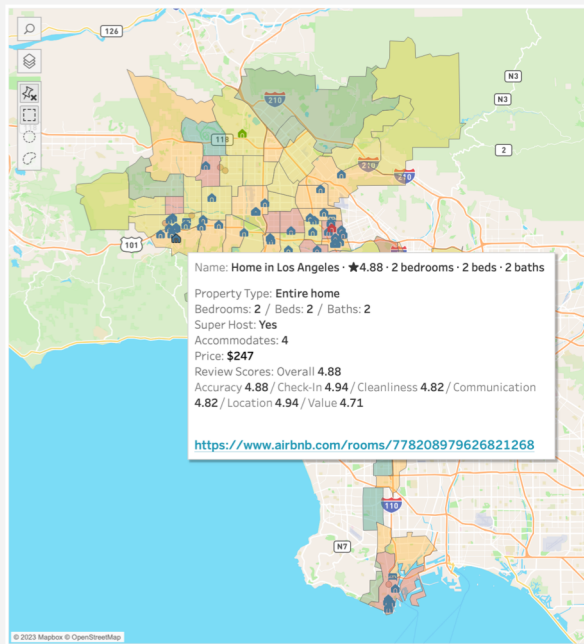
- Reverse Geocoding (Nominatim)
- Categorized Crimes
- Crime Rate by ZIP Codes
- Number of Crimes by Quarters and ZIP Codes





Airbnb Listings

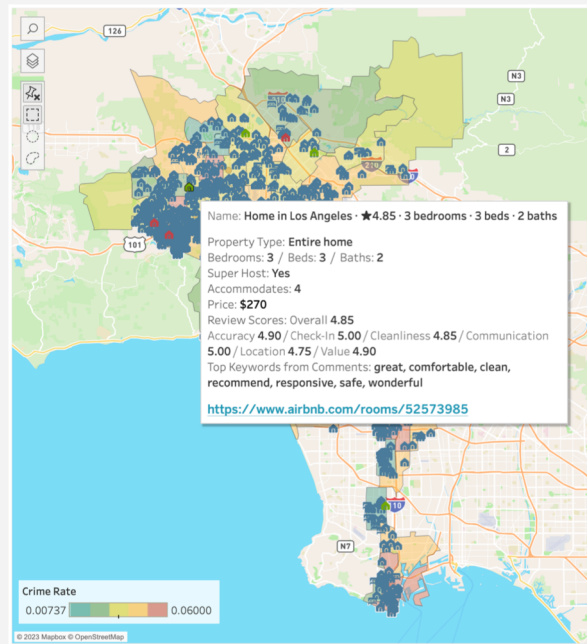
- Name
- Property Type, Room Type
- Bedrooms, Beds, Baths
- Super Host
- Accommodates
- Price
- Ratings
- Listing URL





Airbnb Reviews

- **Cleaning**
 - Remove non-English reviews
 - Remove comments that are too short
- **Keyword Extraction (yake)**
 - Remove host names and words that meant nothing when alone
e.g. Wendy's house, place, Airbnb
- **Safety Related**
 - Set keywords: safe, security, danger, unsafe, safety, dangerous





Dashboard

- Remove areas that are not part of LA
- Remove Airbnb listings with no bottom layer

https://public.tableau.com/views/SafeStayLAAirbnbSafetyDashboard/Dashboard22?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link





Thank You



SafeStay LA