### **URL**:

https://public.tableau.com/shared/QS4WWSDZQ?:display\_count=n&:origin=viz\_share\_link

### Narrative Description:

Our rental property visualization is designed to empower individuals seeking accommodation in Singapore with valuable insights into the rental market. Through interactive and informative charts, maps, and filters, our visualization provides a comprehensive understanding of key factors influencing rental prices and options in Singapore.

## Three design elements:

#### 1. Color Scheme:

Why: In the persona document, it's mentioned that the intended audience includes individuals who may be new to Singapore and are looking for rental properties. To provide a visually engaging and user-friendly experience, I will select a color scheme that reflects a modern and inviting aesthetic. I'll avoid overly bright or distracting colors and opt for a combination that conveys professionalism, trustworthiness, and a sense of home.

#### 2. Interactive Filters:

Why: The persona document highlights the importance of user-friendliness for individuals who may not have extensive experience with data analysis tools. Interactive filters make it easy for users to customize their rental property search without the need for technical skills. Placing these filters prominently ensures that users can quickly access and adjust their search criteria, enhancing the overall user experience.

### 3. Clear and Concise Labels:

Why: As mentioned in the project proposal, the primary objective is to simplify the rental property search process for individuals seeking accommodation in Singapore. Clear and concise labels ensure that users can easily understand and navigate the dashboard without confusion. It aligns with the persona's potential need for straightforward and intuitive guidance when interacting with the tool.

By selecting a suitable color scheme, incorporating interactive filters, and maintaining clear and concise labels, the dashboard design aims to create a user-friendly, visually appealing, and informative experience that caters to the needs and preferences of the intended audience.

# Project Proposal: Singapore Rental Accommodation Dashboard

## 1. Executive Summary

I am embarking on a project to create a comprehensive dashboard for individuals looking to rent accommodation in Singapore. The aim is to consolidate rental price information from PropertyGuru and 99.co, providing users with a quick overview of rental price distribution and user-friendly filtering options. This dashboard will benefit newcomers and anyone seeking to rent in Singapore.

# 2. Why (Objectives and Business Case)

Objectives: The primary objective is to simplify the process of finding suitable rental units in Singapore by providing a centralized platform for rental price information.

Business Case: The project addresses the need for a more user-friendly and efficient way to access rental property information, enhancing the experience for individuals relocating to Singapore or searching for rental accommodations.

# 3. Who (Intended Audience)

Audience: The final presentation of this project is intended for anyone looking to relocate to Singapore or seeking to rent accommodation in the city. This includes expatriates, students, and local residents.

#### 4. Persona Documents

To understand and cater to the needs of the intended audience, we will create the following persona documents:

Persona 1: "Newcomer Nina" - A recent expatriate moving to Singapore for work, looking for a convenient and affordable rental option.

Persona 2: "Student Sam" - A foreign student planning to study in Singapore, searching for budget-friendly accommodation near educational institutions.

Persona 3: "Local Lucy" - A Singaporean resident exploring rental options for a change of location within the city.

## 5. What (Dataset Selection)

We will obtain data for the dashboard by web scraping rental price information from PropertyGuru and 99.co. Care will be taken to ensure data accuracy and timeliness.

## 6. How (Dashboard Features)

The dashboard will include the following key features:

Rental Property Map: An interactive map displaying rental property locations, allowing users to visualize properties in preferred areas.

Price Trend Analysis: Visual representation of rental price trends over time in different regions of Singapore.

User-Friendly Filters: Users can filter results by room type, region, price range, and other relevant criteria.

Neighborhood Information: Information about nearby amenities, schools, public transportation, and safety ratings.

### 7. Challenges and Learning Goals:

Challenges: The main challenge is obtaining clean and up-to-date data through web scraping. We will explore ways to mitigate potential risks associated with web scraping.

Learning Goals: Gain experience in web scraping, data cleaning, and dashboard development. Ensure compliance with data privacy and terms of use when collecting data from websites.

#### 8. Reflection:

In the end, the data is only coming from one sources instead of multiples sources that I mentioned in the very beginning. It is very time consuming to extract real-estate from multiple sources together. Moreover, it takes some effort to process data from different sources since their format are quite different. I will continue this project further on to add more features. Lastly, I plan to create another multi-frame data story to include all my findings in EDA process.

# Persona Document

### Persona 1: "Newcomer Nina"

Name: Nina Chang

Age: 30

Gender: Female

Goals:

- Find a suitable rental unit in Singapore for her new job.
- Budget-conscious and seeking affordable accommodation.
- Prioritize convenience and accessibility to public transportation.

# Challenges and Needs:

- Limited knowledge of Singapore's rental market.
- Needs clear and easy-to-use tools to filter rental options.
- Wants information about neighborhoods, safety, and nearby amenities.

#### Context:

- Nina will interact with the dashboard on her laptop or smartphone.
- She'll use the dashboard to compare rental prices in different areas, filter options based on her budget and preferred room type, and explore neighborhood information.

### Persona 2: "Student Sam"

Name: Sam Patel

Age: 21

Gender: Male

### Goals:

- Find affordable accommodation near the university campus in Singapore.
- Ensure the rental unit is within a walking or short commuting distance to classes.
- Stick to a tight budget while maintaining basic comfort.

## Challenges and Needs:

- Limited budget as a student.
- Requires quick access to listings near educational institutions.
- Prioritizes proximity to public transportation and essential amenities.

#### Context:

- Sam will primarily access the dashboard on his smartphone.
- He'll use the dashboard to search for rental properties close to the university, apply filters for budget-friendly options, and verify public transportation options.

# Persona 3: "Local Lucy"

Name: Lucy Tan

Age: 35

Gender: Female

### Goals:

- Explore rental options for a change of residence within Singapore.
- Wants to balance budget with improved living conditions.
- Values neighborhood safety and proximity to work.

# Challenges and Needs:

- Needs accurate information about available properties.
- Seeks neighborhood insights to ensure a smooth transition.
- Wishes to compare rental prices in different regions.

#### Context:

- Lucy will use the dashboard on her laptop and occasionally on her tablet.
- She'll use the dashboard to browse rental properties in various neighborhoods, consider price trends, and evaluate safety ratings and nearby amenities for her potential new residence.