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**Data Visualization**

1. **Vacation Rental Property Finder**

**Project Overview:**

The Vacation rental property finder/comparison tool aims to assist users in finding and comparing rental properties for their stays. Whether planning a getaway or relocating, users can explore available properties, filter based on preferences, and visualize essential information.

**Key Components:**

1. **Data Collection and Storage:**
   * Gather data on vacation rental properties (e.g., location, price, amenities).
     1. Data Source: <https://www.kaggle.com/datasets/datafiniti/palm-springs-vacation-rentals>

For Palm springs CA market, will be expanded to SW Florida (Fort Myers, Naples) based on data availability

* + Store data in a database (e.g., PostgreSQL, MongoDB).

1. **Backend Development:**
   * Set up a Flask backend with interactive API routes.
   * Implement user-driven interactions (e.g., filtering by location, budget).
   * Serve data to frontend based on user queries.
2. **Visualization Libraries:**
   * Choose a visualization library (e.g., Matplotlib, Plotly).
   * Create visualizations (maps, price distributions, amenity comparisons).
3. **Frontend Development:**
   * Design a user-friendly interface.
   * Allow users to input preferences (location, budget).
   * Display dynamic visualizations based on user selections.
4. **Views (Minimum of Three):**
   * **Map View:** Show rental properties on a map (using Leaflet or similar).
   * **Price Distribution:** Display rental prices (histogram or box plot).
   * **Amenities Comparison:** Compare amenities across properties.
5. **Deployment:**
   * Deploy the application (frontend and backend) to a server or cloud platform.

Places where we looked for data:

Airbnb

TripAdvisors

Expeedia

VRBO

AirDNA

1. [**Kaggle Datasets**1](https://www.kaggle.com/datasets): Kaggle offers thousands of public datasets across various domains, including computer vision, natural language processing (NLP), and data visualization. You can explore, analyze, and share quality data on this platform.
2. [**Mashvisor**](https://www.kaggle.com/datasets)[2](https://www.mashvisor.com/blog/rental-data/): Mashvisor provides an updated database covering almost every real estate market across all 50 states. Subscribers can access a massive dataset and various investing tools related to rental properties.





1. [**Inside Airbnb**](https://www.kaggle.com/datasets)[3](https://www.altexsoft.com/blog/vacation-rental-data/): Inside Airbnb offers anonymized datasets with snapshots of Airbnb listings, including reviews, calendars, and over 50 data points. It’s a valuable resource for short-term rental data.





1. **GitHub**: GitHub hosts collaborative and open-source code repositories, many of which include datasets related to real estate. Explore repositories to find relevant data.
2. [**Google Dataset Search**4](https://builtin.com/data-science/free-datasets): Use Google Dataset Search to find publicly available datasets on various topics. It’s a great resource for discovering data for your project.