

Project-2

Dublin Market Analysis

Assignment

A new city manager for Airbnb has started in Dublin and wants to better understand:

- what guests are searching for in Dublin,
- which inquiries hosts tend to accept.

Based on the findings the new city manager will try to boost the number and quality of hosts in Dublin to fit the demands from guests. The goal of this challenge is to analyze, understand, visualize, and communicate the demand / supply in the market. For example you may want to look at the breakdown of start date day of the week, or number of nights, or room type that is searched for, and how many hosts accepted the reservation. In particular, we are interested in:

- what the gaps are between guest demand and host supply that the new city manager could plug to increase the number of bookings in Dublin,
- what other data would be useful to have to deepen the analysis and understanding.
- Also try to use power bi and create a dashboard for final report

Data Description

There are 2 datasets

searches.tsv - Contains a row for each set of searches that a user does for Dublin

contacts.tsv - Contains a row for every time that an assigned visitor makes an inquiry for a stay in a listing in Dublin

Project-2

searches dataset contains the following columns:

ds - Date of the search
id_user - Alphanumeric user_id
ds_checkin - Date stamp of the check-in date of the search
ds_checkout - Date stamp of the check-out date of the search
n_searches - Number of searches in the search set
n_nights - The number of nights the search was for
n_guests_min - The minimum number of guests selected in a search set
n_guests_max - The maximum number of guests selected in a search set
origin_country - The country the search was from
filter_price_min - The value of the lower bound of the price filter, if the user used it
filter_price_max - The value of the upper bound of the price filter, if the user used it
filter_room_types - The room types that the user filtered by, if the user used the room_types filter
filter_neighborhoods - The neighborhoods types that the user filtered by, if the user used the neighborhoods filter

contacts dataset contains the following columns:

id_guest - Alphanumeric user_id of the guest making the inquiry
id_host - Alphanumeric user_id of the host of the listing to which the inquiry is made
id_listing - Alphanumeric identifier for the listing to which the inquiry is made
ts_contact_at - UTC timestamp of the moment the inquiry is made.
ts_reply_at - UTC timestamp of the moment the host replies to the inquiry, if so
ts_accepted_at - UTC timestamp of the moment the host accepts the inquiry, if so
ts_booking_at - UTC timestamp of the moment the booking is made, if so
ds_checkin - Date stamp of the check-in date of the inquiry
ds_checkout - Date stamp of the check-out date of the inquiry
n_guests - The number of guests the inquiry is for
n_messages - The total number of messages that were sent around this inquiry

Download Datasets

Data Set Link:-

<https://drive.google.com/file/d/1tFrgUzF7fqz2HWF34HYb6OBMseJD-z5/view?usp=sharing>

Project-2

Power bi Dashboard Hint link:-

<https://drive.google.com/file/d/1hcpwkgC2jRMLU4A8k2yerfkMeeleRjgd/view?usp=sharing>

Note:-

Analyze the provided data and answer the questions to the best of your abilities. Include the relevant tables/graphs/visualization to explain what you have learnt about the market. Make sure that the solution reflects your entire thought process including the preparation of data - it is more important how the code is structured rather than just the final result or plot. You are expected to create a final document for the analysis.

Project-2