



As a next step in the selection process, the data department proposes to perform the following practical exercise:

From Stayland, we are interested in prospecting the areas of California state: Big Bear and Joshua Tree and their surroundings (zip codes: 92314, 92315, 92284 and 92252). For this, we have the following data:

- Market Analysis: information at the listing level from 2019. A listing is an advertisement for a specific property on Airbnb. The information is aggregated at the month level. For clarification:
  - *unified\_id*: unique code of the property
  - *revenue*: dollars generated by that property
  - *openness*: days per month that the property is available for booking
  - *occupancy*: ratio as a percentage between the days booked and the days available for booking (openness)
  - *nightly rate*: average price in dollars
  - *lead time*: number of days between booking (check-in) and the start of the stay at the property.
  - *length stay*: average number of days of the reservations made that month for that property
- Amenities: this file indicates whether a listing has (value 1) or does not have (value 0) a pool or hot tub.
- Geolocation: file that contains the latitude, longitude of the listings.
- Sales properties: information related to houses for sale in the study areas. In the Joshua Tree area (92284 and 92252) there are two files by zip code. One with the total information and the other is a subset with properties that have a pool.

This is an open test, reasoning ability and obtaining insights from the provided information will be valued above other skills. You are free to delve as much as you want and reinforce your presentations with any type of graph or dashboard.

**Tools:**

- Mandatory: All data treatment, reasoning and conclusions should be performed and subsequently delivered in a Jupyter notebook (\*.ipynb). We do not want any powerpoint.
- Optional, positively valued, if the visualization part, partially or totally, is exposed in Tableau. For this, a .twb can be delivered or the dashboard can be published on Tableau Public.