# Hotel Booking Demand

## Description

`hotel_bookings.csv` contains data about 119,390 hotel bookings for city and resort hotels. It is a 16.07 mb, 32 column dataset containing information such as when the booking was made, length of stay, the number of adults, children, and/or babies, and the number of available parking spaces, etc.

This data was originally from the article Hotel Booking Demand Datasets, written by Nuno Antonio, Ana Almeida, and Luis Nunes for Data in Brief, Volume 22, February 2019. The data was cleaned by Thomas Mock and Antoine Bichat during the week of February 11th, 2020 for #TidyTuesday.

## Usage

`data(hotels)`

## Format

A dataframe with 119,390 obervations (hotel bookings) and the following 32 variables:

- `hotel`: Hotel type, resort or city
- `is_canceled`: Value indicating if the booking was canceled (1) or not (0)
- `lead_time`: Number of days that elapsed between the booking and the arrival date
- `arrival_date_year`: Year of arrival date
- `arrival_date_month`: Month of arrival date
- `arrival_date_week_number`: Week number of year for arrival date
- `arrival_date_day_of_month`: Day of arrival date
- `stays_in_weekend_nights`: Number of weekend nights (Saturday or Sunday) the guest stayed or booked to stay at the hotel
- `stays_in_week_nights`: Number of weerk nights (Monday to Friday) the guest stayed or booked to stay at the hotel
- `adults`: Number of adults
- `children`: Number of children
- `babies`: Number of babies
- `meal`: Type of meal booked (Undefined/SC - no meal, BB - Bed & Breakfast, HB - half board (breakfast and one other meal - usually dinner), FB - full board (breakfast, lunch and dinner))
- `country`: Country of origin
- `market_segment`: Market segment designation ("TA" - "Travel Agents", "TO" - "Tour Operators")
- `distribution_channel`: Booking distribution channel ("TA" - "Travel Agents," "TO" - "Tour Operators")
- `is_repeated_guest`: Value indicating if the booking name was from a repeated guest (1) or not (0)
- `previous_cancellations`: Number of previous bookings that were cancelled by the customer prior to the current booking
- `previous_bookings_not_cancelled`: Number of previous bookings not cancelled by the customer prior to the current booking
- `reserved_room_type`: Code of room type reserved (Code is presented instead of designation for anonymity reasons)
- `assigned_room_type`: Code for the type of room assigned to the booking. Sometimes the assigned room type differs from the reserved room type due to hotel operation reasons (e.g. overbooking) or by customer request. (Code is presented instead of designation for anonymity reasons)
- `booking_changes`: Number of changes/amendments made to the booking from the moment the booking was created until the moment of check-in or cancellation

- **deposit_type**: Indication on if the customer made a deposit to guarantee the booking (No Deposit - no deposit was made, Non Refund - a deposit was made in the value of the total stay cost, Refundable - a deposit was made with a value under the total cost of stay)
- **agent**: ID of the travel agency that made the booking
- **company**; ID of the company/entity that made the booking or responsible for paying the booking (ID is presented instead of designation for anonymity reasons)
- **days_in_waiting_list**: Number of days the booking was in the waiting list before it was confirmed to the customer
- **customer_type**: Type of booking (Contract - when the booking has an allotment or other type of contract associated to it, Group - when the booking is associated to a group, Transient - when the booking is not part of a group or contract and not associated to other transient booking, Transient-party - when the booking is transient but associated to at least other transient booking)
- **adr**: Average Daily Rate as defined by dividing the sum of all lodging transactions by the total number of staying nights
- **required_car_parking_spaces**: Number of car parking spaces required by the customer
- **total_of_special_requests**: Number of special requests made by the customer (e.g. twin bed or high floor)
- **reservation_status**: Reservation last status (Canceled - booking was canceled by the customer, Check Out - customer has checked in but already departed, No-Show - customer did not check-in and did inform the hotel the reason why)
- **reservation_status_date**: Date at which the last status was set (This variable can be used in conjuction with the ReservationStatus to understand when was the booking canceled or when did the customer check-out of the hotel)