**File Name: Hotel Booking.xls**

**Data Source: Adopted from**

Antonio, Nuno, Ana de Almeida, and Luis Nunes. "Hotel booking demand datasets." *Data in brief* 22 (2019): 41-49.

Hotel demand data. Attribute Information is as follows:

**Attribute Information:**

| IsCanceled | Value indicating if the booking was canceled (1) or not (0) |
| --- | --- |
| BookingChanges | Number of changes/amendments made to the booking from the moment the booking was entered until the moment of check-in or cancellation |
| Country | Customer Country of origin |
| CustomerType | Type of booking, assuming one of three categories: 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 is not associated to other transient booking; |
| DaysInWaitingList | Number of days the booking was in the waiting list before it was confirmed to the customer. |
| LeadTime | Number of days that elapsed between the entering date of the booking into the database and the arrival date. |
| Meal | Type of meal booked. Categories are presented in standard hospitality meal packages:    BB – Bed & Breakfast; HB – Half board (breakfast and one other meal – usually dinner); FB – Full board (breakfast, lunch and dinner)  NO MEAL-No meal plan |
| IsRepeatedGuest | Repeat customer (0-false) (1-yes) |
| ReservedRoomType | Room Types (A,B,C,D,E,F) |
| TotalOfSpecialRequests | Number of special requests made by the  customer (e.g. twin bed or high floor) |

1. Build a logistic regression model
2. Write the estimated equation.
3. Assess model fit and provide recommendations

Don’t include countries – too many levels (we only go for bi=cardinality). Use continents instead.