Práctica 2: Booking Data Cleaning

Gerard Carrera and Guillem Rochina

2022-12-24

DESCRIPCIÓN DEL DATASET

```
booking <- read.csv("hotels_data.csv")
summary(booking)</pre>
```

```
##
                                                                    adults
        name
                            city
                                              check.in
##
    Length: 2632
                        Length:2632
                                            Length: 2632
                                                               Min.
                                                                       :2.00
##
                                                                1st Qu.:2.00
    Class : character
                        Class :character
                                            Class : character
    Mode :character
                        Mode :character
                                            Mode : character
                                                               Median:4.00
##
                                                               Mean
                                                                       :3.32
##
                                                                3rd Qu.:5.00
##
                                                               Max.
                                                                       :5.00
##
##
       children
                     check.out
                                          num_rooms
                                                           address
           :1.000
                    Length:2632
                                                :2.000
                                                         Length: 2632
##
    Min.
                                        Min.
    1st Qu.:1.000
                    Class : character
                                        1st Qu.:2.000
                                                         Class : character
   Median :3.000
                                        Median :2.000
                    Mode :character
                                                         Mode : character
          :2.484
##
   Mean
                                        Mean
                                                :2.268
    3rd Qu.:3.000
                                        3rd Qu.:3.000
##
   Max.
           :3.000
                                        Max.
                                                :3.000
##
                        hotel_score
                                                            hotel_description
##
    hotel_coordinates
                                        hotel_scores
##
    Length:2632
                        Min.
                             :-1.00
                                        Length: 2632
                                                            Length: 2632
                        1st Qu.: 8.00
    Class : character
                                        Class : character
                                                            Class : character
   Mode :character
                        Median : 8.40
                                        Mode :character
                                                            Mode : character
##
##
                        Mean
                               : 8.25
##
                        3rd Qu.: 8.80
                               :10.00
##
                        Max.
##
                        NA's
                               :5
                                              page_count
##
      features
                        room_data
                                                              current_page
                        Length: 2632
                                           Min. : 0.00
##
    Length:2632
                                                             Min.
                                                                     :1.000
    Class :character
                        Class :character
                                            1st Qu.: 25.00
                                                             1st Qu.:2.000
                                           Median : 54.00
##
    Mode :character
                        Mode :character
                                                             Median :3.000
                                                  : 57.53
##
                                            Mean
                                                             Mean
                                                                     :2.758
##
                                            3rd Qu.: 88.00
                                                             3rd Qu.:4.000
##
                                                   :133.00
                                           Max.
                                                             Max.
                                                                     :5.000
##
##
    in_page_count
                    search_date
## Min. : 0.00
                    Length: 2632
   1st Qu.: 6.00
                    Class : character
```

```
## Median :13.00 Mode :character
## Mean :12.55
## 3rd Qu.:19.00
## Max. :27.00
```

INTEGRACIÓN Y SELECCIÓN

```
name
                                                                city
## 1 Holiday Inn Express Barcelona City 220, an IHG Hotel Barcelona
                                     Ofelias Hotel 4* Sup Barcelona
## 3
                                                Onix Fira Barcelona
## 4
                         Aspasios Rambla Catalunya Suites Barcelona
## 5
                                     Hotel Lloret Ramblas Barcelona
##
             check.in adults children
                                             check.out num_rooms
## 1 12-December-2022
                           2
                                    3 16-December-2022
## 2 12-December-2022
                           2
                                    3 16-December-2022
                                                                2
                           2
                                                                2
## 3 12-December-2022
                                    3 16-December-2022
## 4 12-December-2022
                           2
                                    3 16-December-2022
                                                                2
## 5 12-December-2022
                           2
                                    3 16-December-2022
                                                                2
##
                                                         address
## 1
            Pallars, 203, Sant Mart\xed, 08005 Barcelona, Spain
## 2
              Llan\xe7\xe0, 24, Eixample, 08015 Barcelona, Spain
              Llan\xe7\xe0, 30, Eixample, 08015 Barcelona, Spain
        Rambla de Catalunya 42, Eixample, 08007 Barcelona, Spain
## 5 Rambla Canaletes, 125, Ciutat Vella, 08002 Barcelona, Spain
          hotel_coordinates hotel_score
## 1 41.40145712,2.19775379
## 2 41.37673208,2.15001449
                                    8.6
## 3 41.37705814,2.14974493
                                    7.7
## 4 41.39020152,2.16497585
                                    8.6
## 5 41.38493925,2.17013776
                                    8.1
##
## 1 {'': '', 'Staff': '9.0', 'Facilities': '8.0', 'Cleanliness': '8.4', 'Comfort': '8.2', 'Value for m
## 2 {'': '', 'Staff': '9.0', 'Facilities': '8.7', 'Cleanliness': '9.2', 'Comfort': '9.1', 'Value for m
## 3 {'': '', 'Staff': '8.7', 'Facilities': '7.5', 'Cleanliness': '8.1', 'Comfort': '7.9', 'Value for m
## 4 {'': '', 'Staff': '8.3', 'Facilities': '8.6', 'Cleanliness': '8.8', 'Comfort': '8.9', 'Value for m
## 5 {'': '', 'Staff': '8.9', 'Facilities': '7.8', 'Cleanliness': '8.4', 'Comfort': '8.2', 'Value for m
## 1
## 2 ["You're eligible for a Genius discount at Ofelias Hotel 4* Sup! To save at this property, all you
## 4
## 5
## 1 ['Free WiFi', 'Bathtub', 'Air conditioning', '24-hour front desk', 'Daily housekeeping', 'Non-smok
## 2
## 3
## 4
        ['Apartments', 'Kitchen', 'Washing machine', 'Free WiFi', 'Air conditioning', 'Private Bathroom
## 5
##
## 1
## 2 {'35087504_359192576_0_2_0': {'room_name': 'Triple Room (3 Adults)', 'room_price': '\x80 723', 'ro
```

```
## 3
## 4
## 5
## 5
## 5
## 1 page_count current_page in_page_count search_date
## 1 0 1 0 2022-11-18
## 2 1 1 1 1 2022-11-18
## 3 2 1 1 1 2 2022-11-18
## 4 3 1 1 3 2022-11-18
## 5 4 1 1 4 2022-11-18
```

LIMPIEZA DE LOS DATOS

ANÁLISIS DE LOS DATOS

RESOLUCIÓN DEL PROBLEMA