## Dataset

1. The popular hotel booking demand dataset published on Kaggle: <https://www.kaggle.com/jessemostipak/hotel-booking-demand> .
2. A modified predicted version of the dataset published in the hotel prediction project on GitHub: <https://raw.githubusercontent.com/swainshashwat/hotel_exploration/master/H2.csv> .

## Basic parameters

* IsCanceled
* LeadTime
* ArrivalDateYear
* ArrivalDateMonth
* ArrivalDateWeekNumber
* ArrivalDateDayOfMonth
* StaysInWeekendNights
* StaysInWeekNights
* Adults
* Children
* Babies
* Meal
* Country
* MarketSegment
* DistributionChannel
* IsRepeatedGuest
* PreviousCancellations
* PreviousBookingsNotCanceled
* ReservedRoomType
* AssignedRoomType
* BookingChanges
* DepositType
* Agent
* Company
* DaysInWaitingList
* CustomerType
* ADR
* RequiredCarParkingSpaces
* TotalOfSpecialRequests
* ReservationStatus
* ReservationStatusDate

## Possible factors

* Hotel ID
* Client ID
* Reservation date (year, month, day)
* Reservation hour
* Arrival date (year, month, day)
* Arrival hour
* Accompanied
* With meal
* Client country
* Segment
* Client visits amount
* Client cancelation amount
* Reserved room type
* Assigned room type
* Delayed booking
* Deposit type
* Client type
* Reserved parking
* Special requests

## Methodology

Multiple correlation

## Algorithms

* For classification: K-nearest neighbor, Logistic regression.
* For correlation: Linear regression,
* For prediction: DNN.

## Objective

To find a significant coefficient for the possible factors.