1) Business Problem: Monitoraggio Competitors Silversea

Context: Il dipartimento Pricing di Silversea, ha bisogno di monitorare I suoi competitors. Il maggior concorrente di Silversea e' Regent. Silversea vorrebbe catalogare **l'offerta Regent.**

Dal sito Regent: Find a cruise, date, selezionare una cruise, cruise highlights + itinerary + suites (in particolare STANDARD FARE) + hotels

Richiesta: Cosa proporresti per il risolvere il Business Problem?

Indicare architettura, tecnologie utilizzate, outputs finali per il team pricing, KPIs utili per il team pricing.

2) Business Problem: Previsione cancellazione della prenotazione

Context: Il comportamento dei clienti e le possibilità di prenotazione sono stati radicalmente modificati dai canali di prenotazione alberghiera online. In molti casi, ciò è facilitato dalla possibilità di farlo gratuitamente o a basso costo, vantaggioso per gli ospiti dell'hotel ma meno desiderabile e redditizio per gli hotel.

Richiesta: Costruire un Modello di ML per capire se il cliente onorera' la riservazione oppure la cancellera'.

Dataset:

Data set: test_dataset, train_dataset

Data Dictionary:

Booking ID: unique identifier of each booking

No of adults: Number of adults
No of children: Number of Children

noofweekend_nights: Number of weekend nights (Saturday or Sunday) the guest stayed or booked to stay at the hotel

noofweek_nights: Number of week nights (Monday to Friday) the guest stayed or booked to stay at the hotel

typeofmeal_plan: Type of meal plan booked by the customer:

requiredcarparking_space: Does the customer require a car parking space? (0 - No, 1- Yes)

roomtypereserved: Type of room reserved by the customer. The values are ciphered (encoded) by INN Hotels.

lead_time: Number of days between the date of booking and the arrival date

arrival_year: Year of arrival date arrival_month: Month of arrival date arrival_date: Date of the month

Market segment type: Market segment designation.

repeated_guest: Is the customer a repeated guest? (0 - No, 1- Yes)

noofprevious_cancellations: Number of previous bookings that were canceled by the customer prior to the current booking noofpreviousbookingsnot_canceled: Number of previous bookings not canceled by the customer prior to the current booking

avgpriceper_room: Average price per day of the reservation; prices of the rooms are dynamic. (in euros)

noofspecial_requests: Total number of special requests made by the customer (e.g. high floor, view from the room, etc)

booking_status: Flag indicating if the booking was canceled or not.