Goal: To select an optimal price (best price out of the available choices) such that revenue will be maximized.

DATASET OVERVIEW

Is Cancelled: 0 if booking is not cancelled.

Arrival Date Year: Year of booking.

Arrival Date Month: Month of booking.

Arrival Date Day of Month: Day of booking.

Stay in Weekend Night: Number of weekend days customer stayed in hotel.

Stay In Weeknights: Number of week days customer stayed in hotel.

Adults: Number of adults (18+) in one booking

Children: Number of children (4-18) in one booking.

Babies: Number of babies (0-4) in one booking.

Meal:

1. HB: Half Board (Breakfast and Dinner normally)
2. BB: Bed & Breakfast.
3. FB: Full Board (Breakfast, Lunch and Dinner)

Assigned Room Type: Categories (A-D) of rooms based on facilities available in the room.

Agent: Unique number provided to each agent through which booking was made.

Dynamic Pricing with historical data:

Select agent, room and meal type for which we predict the optimal price and display the difference of predicted revenue with the actual revenue through different graphs.

Dynamic Pricing with no data.

Here, we provide some initial price and some initial demand around which we explore our optimal price:

Price space: price interval.

Price explore: the range of price to be explored with respect to the initial price.

Date: Date on which we start with the initial price.

The Dynamic Price model will learn itself the optimal price out of the available choices as the environment changes.