Sahan Jayalath

How to Make a





What makes a 'Star' Hotel? And Why do we care?

1-5 star hotels

Hotels are typically rated from 1 to 5 stars. This rating system was originally the agreed system that Forbes & Mobil Travel Guide came up with to rate the type of service and standard that particular hotel had according to those publications:

Tourist (\star)

Standard ($\star\star$)

Comfort ($\star\star\star$)

First Class ($\star\star\star\star\star$)

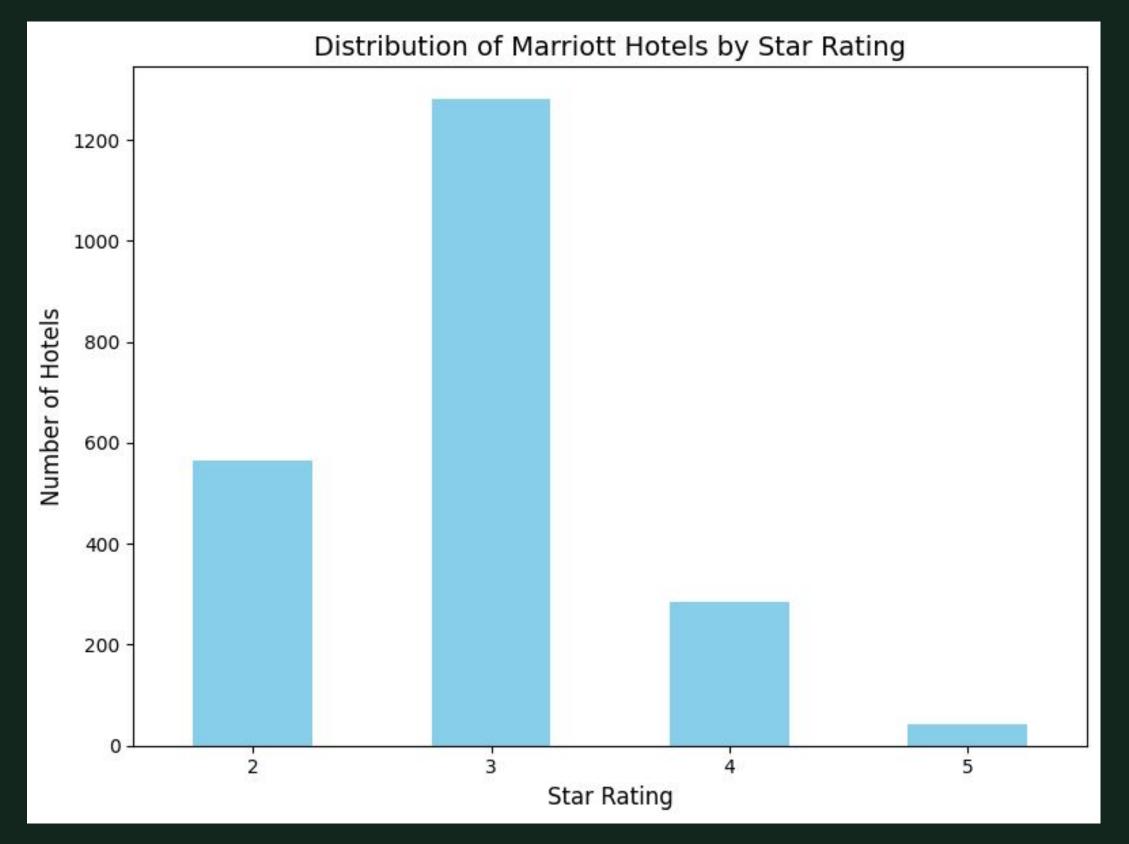
Luxury ($\star\star\star\star\star$)

Marriott Hotels

Marriott Hotels, some of our hotels hover around 4 to 5 stars in the large urban cities in the united states (NY, LA, Miami...etc).

However a majority of our Marriott's are in smaller cities and close to airports, have fallen as low as 2 star hotels. how do we bring our standards up?









Our Tools

NLP

We're going to take a dataset that has Hotel entries by their star rating, across the entirety of the united states. There are two columns in our dataset that lists Facilities and descriptions each hotel has.

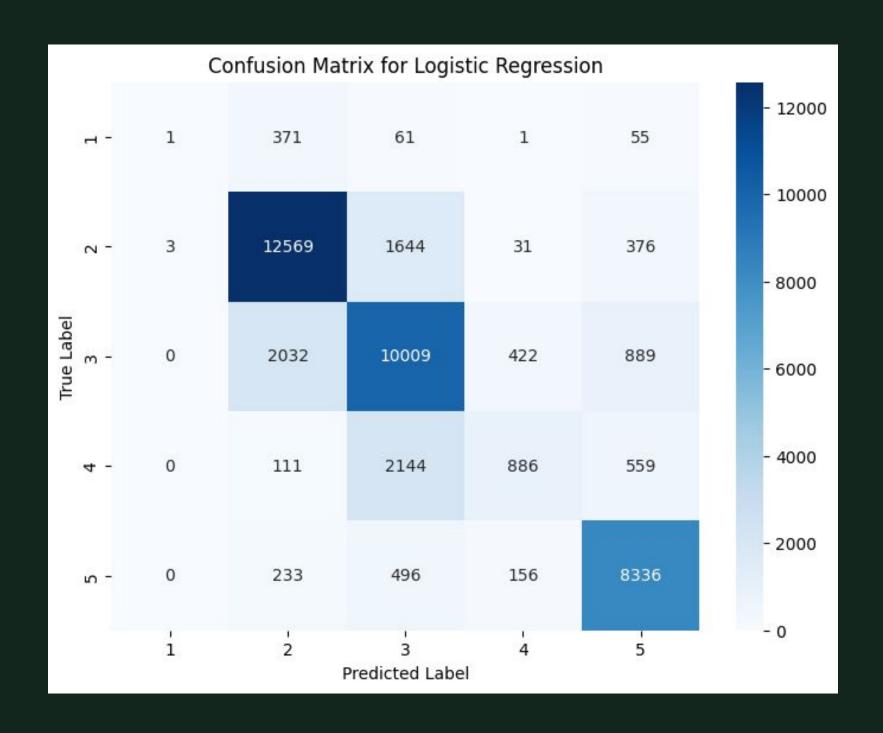
- concatenate
- clean/lemmatize
 - TF-IDF

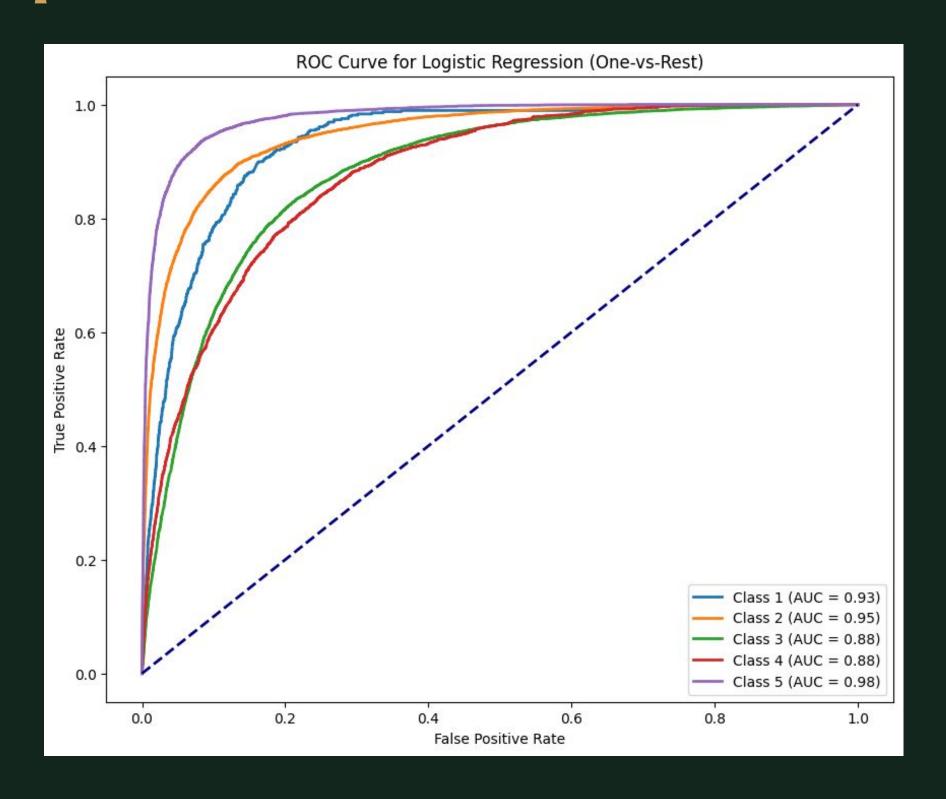
Logistic Regression Pipeline

So once we have the embeddings we've gathered from our TF-IDF embeddings, We want to extract important features class by class, Logistic regression is one of the best tools for this and can be used to find important hints to what makes a '5-star Hotel'



Our Pipeline





Our important features!

4 Star Hotels:

Word Cloud for Class 4 (Rating 4) smokefree terbellno winechampagne recycling de barslounges

5 Star Hotels

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Word Cloud for Class 5 (Rating 5)
   steam invoice couplesprivate hho
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What 2-3 star Marriott Hotels should include

Based on our findings with feature importance we can probably figure out it might be good for the 2-3 star Marriott Hotels to include:

-Better Amenities for their guests (Steam room, Wine/Champagne, Laundry, Ironing/laundry services)

-Staff with specific tasks that are found in 4 and 5 star Hotels: (Porter BellHop, Concierge, Valet...etc)

-Better Facilities that will make our hotels seem upscale: (Ballrooms/Conference centers, Private Sport courts, Bar/Lounges...etc)



THANKYOU



