Capstone Project Submission

Instructions:
i) Please fill in all the required information.
ii) Avoid grammatical errors.

Team Member's Name, Email, and Contribution:

Name: Vikas Kumar
Email: er.vikas2268@gmail.com
Contribution:
 	
      Prepared Technical Documentation.
      Contribution to Presentation.
      Contribution to team colab.
      Find the missing value, then delete it from the dataframe.
      Used heatmaps to analyze the relationship between the two data sets.
      Examination of both hotel and reservation data year-wise.
      Hotels lead time analysis.
      Based on Deposit type analysis.
      Contribution to writing inferences and conclusions of EDA.
 	
Name: Arshad Aafaq D
Email: aafaqclassic@gmail.com
Contribution:
 	
      Cleaning of DataSet removing null values.
      Contributed to the Exploratory Data Analysis
      Analyzed the correlation between both the data sets using heatmaps.
      Contributed in the Data Wrangling.
      Data Visualization.
      Prepared the presentation
      Prepared the summary
      Contributed in the collab notebook
      Fetched the insights from the data set.
      Contributed in writing inferences and conclusions of the EDA.
      Contributed in technical documentation.
 	
Name: Kaveri Shende
Email: kawerishende@gmail.com
 	
      Analyzed the correlation between the Data Sets
      Prepared the presentation.
      Contribution in Team Collaboratory
      Data cleaning and manipulation
      Contributed to technical documentation.
      Contributed to writing inferences and conclusions of the EDA
      Prepared individual collab
      Prepared the video
 	
Name: Sakshi Chaturvedi

Email: sakshichaturvedi0207@gmail.com

Contribution:

Importing data from the local drive.
Importing all the important libraries
Understanding the dataset (like shape, head, data information)
Removing the null values and duplicates.
Prepared the Presentation.
Contributed in Technical documentation.
Data pre-processing (like data cleaning handles null values).
Done 7 questions solved (example -What is the booking rate according to the population?)
Data Visualization
Conclusion.

Name: Yogesh Shivraj Agre

Email: yogeshagre62@gmail.com

Contribution:

In the data cleansing section, look for null values. Instead of using the 'isnull' method directly, I created a separate function called "null details" to find all of the data details.
including null values, unique values, total values, and datatype.
Recognized the variety of hotels that appear in our data.
Determining which hotels are preferred by which age group.
Focus is primarily on the presentation and colab portions.
Investigated cancellation data and made several attempts to find answers.
Participated in the writing of the EDA's inferences and conclusions.

Please paste the GitHub Repo link.

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https://github.com/Sakshi00207/hotel-booking-analysis

Please write a short summary of your Capstone project and its components. Describe the problem statement, your approaches, and your conclusions. (200-400 words)

In this project we analyze the data set of the Hotel Booking system. The purpose of our project was to gather and analyses detailed information about hotels in order to provide insights and estimate the profit In this data set of hotels booking, we have booking information for the city hotels and resort hotel which includes so many insights such as when the booking was made, length of stay, the number of adults children, and/or babies, and the number of available parking spaces, among other things. The data analysis of hotel bookings would be very useful for Agents, individual customers, companies and Hotel owners.

In order to come out with the best results of our analysis, we focused more on the data cleaning and removing the NAN and duplicates values. We have replaced the few NAN with the mean values. With the cleaned data we performed Exploratory Data Analysis to understand our dataset. We have find out correlation between various features with the help of heatmaps. With the data visualization on the basis of graphs and plots to gather some meaningful information.

Our main task is to perform the EDA on the cleaned Data to find out the useful insights responsible for the Hotel booking system. After analyzing the dataset, I concluded that the city hotel is mostly preferred by most guests. The maximum booking done in the month of August. TA/TO distribution channel is more preferred by the customer as compared to others, In order to grow their business, hotels might partner with these agents and operators or promote using them as a medium.

Drive Link :-
https://drive.google.com/drive/folders/1vhpcgkN_I2UTqlvH2nK-6wBKt3Ulq0qF?usp=sharing