INST327 (0202)
Project Proposal (3.17.2020)
Team 4
Amina Lampkin, Ani Tansinda,
Edward Tatchim, Femi Odekunle, David Carroll

Introduction

Our idea for this project is to create a database centered around restaurants in the Washington, D.C., Maryland, and Virginia region. Since we are still in the exploratory phase of the project, we are considering limiting the scope of this database to solely restaurants in Maryland, or those in the University of Maryland's home county, Prince George's County. The database will include information that varies from details about different restaurants to customer information. The intentions we have for this project are informative, but also indirectly persuasive. Analyzing this database will provide a person with an idea of the variety of restaurants around them, and also persuade a person to taste a type of cuisine.

The database will contain various categories of information to fulfill the needs of the users. These categories include general information such as location, customer information related to possible dress codes and smoking restrictions, the price range, payment options, types of cuisine served, vendors, and delivery options. All of these categories will be linked with a specific Restaurant ID. When using the database users will be able to compare restaurants based on their preferences to determine where they wish to eat. It will also answer many questions like what is the most popular cuisine at a certain restaurant, or what are the average ratings?

We chose this topic to help provide a useful database containing local restaurants in the surrounding Mid-Atlantic region. Instead of digging for information, anyone can find general information in this database with ease. We provide an organized, central location for the information one would be seeking.

Target Audience

The audience for this database includes a large variety of people. More specifically, those who would find this database useful would be entrepreneurs looking to open a business in the food industry. As a result, such a person would be interested in comparing and contrasting the revenue and profit made by certain restaurants, and the reasons behind why some restaurants are

more popular than others. Apart from business owners, the average person who is interested in food tasting could benefit from this database by learning what restaurants to try. There are plenty of people that have hobbies revolving around food. Lastly, this database would be optimal for any college student searching for a new place to dine. Oftentimes, college students adhere to budgets, so a database such as our own would allow a student to filter his or her results based on price, cuisine, etc.

Sample data

To obtain the sample data, we will be looking on Kaggle.com. This website features a variety of restaurant data. The best dataset we've found is from UCI Machine Learning. The dataset features nine CSV files centered around restaurant ratings. Five of the files include general information about the restaurant; three feature information on the person doing the rater; and the last file is the final rating.

Some of the tables we plan to use (i.e. vendors and restaurant drivers) may hold hypothetical data if we are unable to access the information on the web or through contacting the restaurants.

Possible data sources

1. Restaurant Data with Consumer Ratings: These are the restaurant ratings mentioned in the previous section.
2. Restaurants on Yellow Pages
3. LA County Restaurant Inspections and Violations

Potential Tables

Below we have identified some potential tables that can be created from the dataset. We anticipate using the Restaurant ID to link the tables to one another. We wanted the tables to be usable and understable for potential diners. For example, *Customer Information* features relevant information to help diners plan their trip. If I'm going to a restaurant in Washington, D.C., I might want to take the Metro as opposed to driving if I see there is only street parking.

Table Name	**Column Names and Attributes** ***Reference Key**
General information	● Restaurant ID** ● Restaurant Name ● Street address ● City ● State ● Phone number
Customer Information	● Restaurant ID** ● Parking Information ● Is alcohol served? ● Can you smoke? ● Is there a dress code? ○ If so, what is it?
Price Point	● Restaurant ID** ● How expensive is the restaurant? (Using dollar signs or maybe a scale to determine how expensive or cheap the restaurant is?)

Rating	● Restaurant ID** ● Rating
Payment/Sales	● Restaurant ID** ● Net income (Look through public records)
Types of Cuisine	● Restaurant ID** ● Type of Cuisine Sold ● Most Popular Menu Item
Vendors	● Restaurant ID** ● Vendor ID** ● Typical vendor type/company ● Category of vendor ○ Food ○ Dining Ware ○ Decorations
Restaurant Drivers	● Restaurant ID ** ● Do they offer delivery? ● If so, how many drivers are on staff?/How many drivers should be on staff?

Entities/tables you will not include

To make our database more relevant to our client(s), we will be only including restaurants in Maryland. If we find that this database is a success, we can consider creating another database or tables that are subset by region. The database will feature any private information, about the people who provided the ratings, customers, or drivers. We want our database users to feel like

they can rate and enjoy restaurants at their leisure without worrying about their private information getting out.

Questions that the database will be able to answer

1. What are the best [insert cuisine type] restaurants?
2. What is the best aspect about this particular restaurant?
3. What is the average rating for a specific type of cuisine?
4. What type of cuisine sold the most in a particular year?
5. What county had the most sales in a particular year?
6. What was the most popular cuisine within a certain price range?
7. What was the least popular cuisine within a certain price range?
8. Which restaurants in a certain location offer delivery services?
9. Which restaurant within a certain location had the highest rating?
10. What restaurants offer the best customer amenities?
11. What type of cuisine generates the most revenue?
12. What meal of the day receives the most customers (Breakfast/Brunch/Lunch/Dinner)?