INST 733 Database Design IM01 - Team 1 Chai Stans March 7, 2022 Team Members: Anuja Bendre, Nisa Putri

**Project Proposal**

1. **Introduction**

For the purpose of this project, we have chosen to build a database that will provide users with a list of all restaurants and attractions across the DMV area. Every state offers unique cultural experiences and delectable cuisines which attract those who have never visited it before or people who frequent these restaurants. Each state provides many different attractions and tourist places that reflect its local way of life. For the foodies out there, this database will answer questions, such as “*Oh, I am craving Japanese food, but it’s 1 am. Most of the restaurants nearby might be closed right now! Where could I find a restaurant that serves Asian food, follows all the necessary protocols, and is affordable?*” The answer to that, is, our database!

1. **Target audience**
2. Locals/Travelers

Locals and travelers are one of the most crucial stakeholders for this database because they are the ones who will frequently utilize the features that this database has to offer. They can gather information related to the current menu, price range, type of service or cuisine offered operating hours, address, contact information, and information related to protocols.

1. Restaurant Owners

This database would also be helpful for restaurant owners to understand their competitors around the area by learning other restaurants' current ratings and prices compared to their own.

1. Researchers

Researchers can use our database to support various different projects that relate to current restaurants within the DMV area. They can use this database as a coherent source of information.

1. Bloggers/Vloggers

Bloggers and vloggers can use this database as the main source to retrieve ideas such as which restaurant they should try next for their contents.

1. Health Inspection Agencies

Health Inspection Agencies can use this database to search for restaurants in the DMV area, review their protocols or guidelines, as well as obtain their contact information.

1. **Questions that the database will be able to answer:**
2. Which restaurant in the DMV has the highest rating?
3. What restaurants are open after midnight?
4. How many total restaurants serve American food?
5. How many restaurants have a rating higher than 4?
6. How many restaurants are located in College Park?
7. How many restaurants require customers to wear masks?
8. How many restaurants do dine-in or delivery?
9. Which city has the most and least number of restaurants? How many?
10. How many restaurants are closed during the weekend?
11. Which restaurants in DC serve Asian food?
12. What protocols do restaurants in MD follow?
13. Which restaurants serve Italian food within my budget?
14. How many restaurants do not have a menu linked?
15. Which type of cuisines are served by restaurants in Virginia?
16. Which restaurants in MD have ratings below the average rating?
17. **Potential entities/tables with potential attributes/columns:**

|  |  |
| --- | --- |
| **Entity** | **Column** |
| *Restaurants* | * + *Restaurant Id*   + *Restaurant Name*   + *Restaurant Address Id*   + *Restaurant Phone Number*   + *Restaurant Email Address*   + *Restaurant Website*   + *Service Type Id*   + *Restaurant Operation Hours*   + *Restaurant Current Ratings*   + *Mask Required?*   + *Protocol Id*   + *Pricing Id*   + *Menu Id* |
| *Restaurant Address* | * + *Restaurant Address Id*   + *Restaurant St Name*   + *Restaurant City Name*   + *Restaurant State Name*   + *Restaurant Zip Code* |
| *Service Type* | * + *Service Type Id*   + *Service Type* |
| *Restaurant Service* | * + *Restaurant Id*   + *Service Type Id* |
| *Pricing* | * + *Pricing Id*   + *Pricing Range* |
| *Type of Cuisine* | * + *Cuisine Type Id*   + *Cuisine Type* |
| *Restaurant Cuisine* | * + *Restaurant Id*   + *Cuisine Type Id* |
| *Protocols* | * + *Protocols Id*   + *Protocols Link* |
| *Menu* | * + *Menu Id*   + *Menu Link* |

1. **Entities/tables you will not include in the database**

Comprehending the time limit that we have for this project, this database will not include several different entities that are listed below:

1. Employees - Staff at the restaurants is not being considered
2. Customers - Patrons at the restaurants are not being considered
3. Menu items - We will not be including the individual menu items for restaurants
4. Suppliers - Supplier/Vendor information will not be included
5. Invoices- Invoices or bills generated at these restaurants will not be included
6. **Sample data**

After conducting research related to our topic for this project, we are still unable to find a concrete dataset that can be used exactly as it is, as a foundation for our database. Therefore, we decided to create a database that combines multiple different data sources into one. We will be using the following sources/types of data for our database:

1. Hypothetical data
   1. We would create some hypothetical data based on Google searches
   2. Combine data from multiple existing datasets like Kaggle
2. Freely available government data
3. USDA Data set - <https://fdc.nal.usda.gov/download-datasets.html>