Uncovering Insights: Analyzing Food Inspection Data

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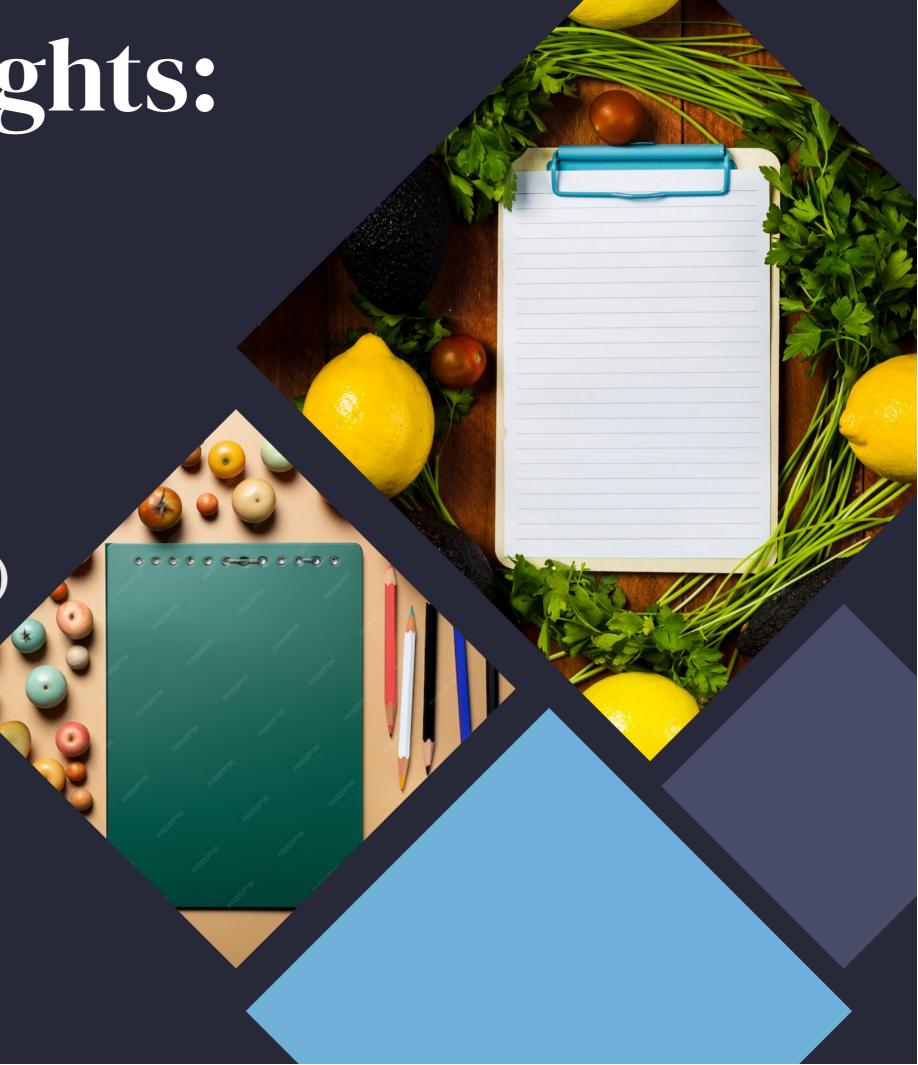
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## Problem

## Big Idea

• Find the most common violation types and whether surrounding areas have influence over those violation types.

#### **Problem**

• Create solution to understand why certain areas have more violations than others.

### Why Care

- Research can help individuals understand their health, their community, and families in various ways.
- Especially the people who are living in areas with the most violations.

## **Choosing the Data**

- Searched and determined data that would engage us to think of interesting questions regarding specific data
- Food inspection data fulfills our choice because:
- Detailed, organized data
- Understand real world issues revolving around food inspections



## Data

- Data is pre-formatted in CSV by the city of Chicago
- Size of data contains roughly 260,400 records (rows)
- 22 Columns of varying data
- Zero effort required to access data
- Research of data required to determine solution/hypothesis
- Data is structured and organized

## **Features**

- Descending order of inspection report
- Most recent reports at top of data

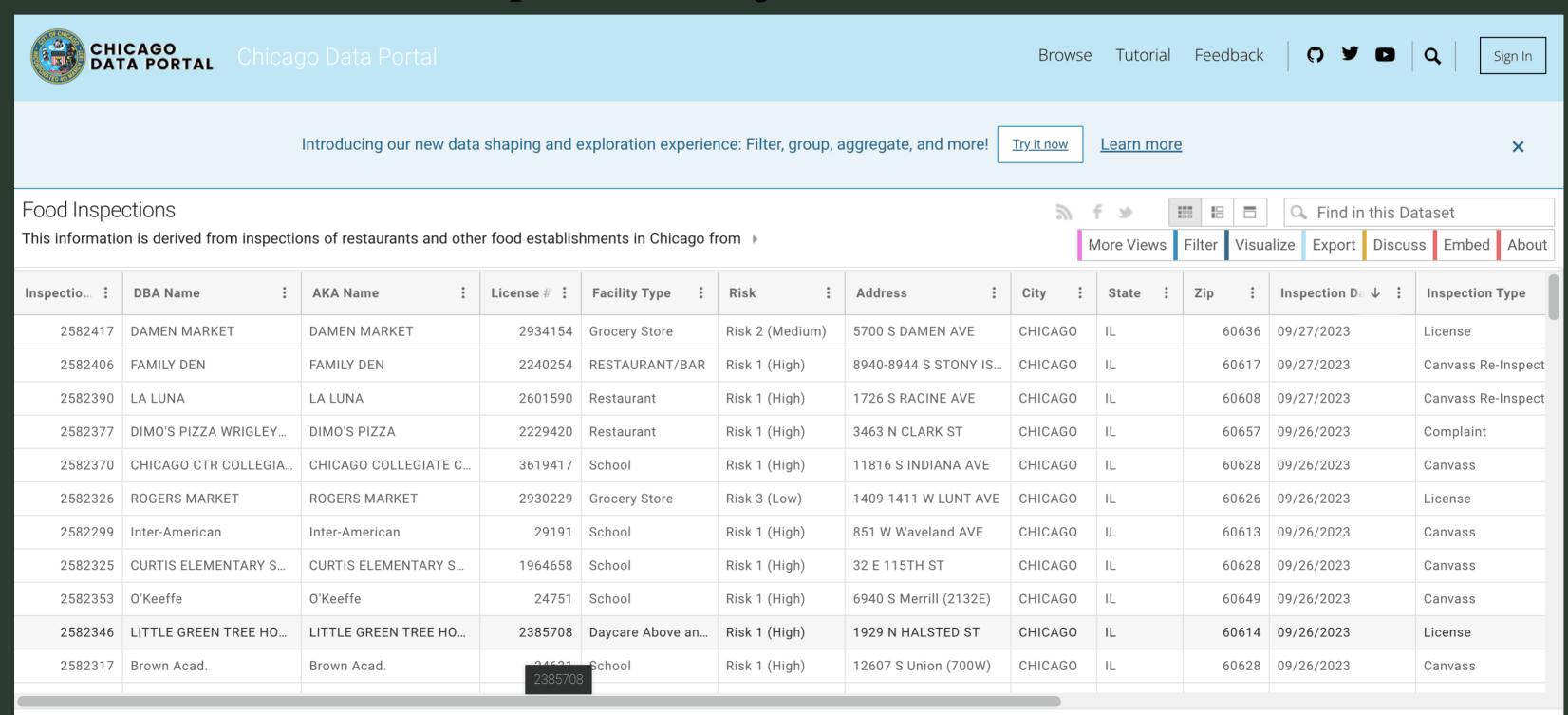
## **Example columns**

- Violation type
- Ward/zip code
- Facility type/name



## Data Representation: Chicago Data Portal

credit:https://data.cityofchicago.org/Health-Human-Services/Food-Inspections/4ijn-s7e5/data



# Solution and Expected Deliverables/Findings

## **Approach**

- Approach the problem by categorizing the data by the violation type
- Gather more information regarding the surrounding area in which said violation occurred in
- Type of facility has the most types of these kinds of violations

## The scope

- Encompass the mitigating factors of these violations and proposed solutions to prevent repeated events
- The system will be static for now, but may change in the future.

### **End Result**

- Establish a clear direction for this project with the collection of data
- Utilize proposed analysis techniques for the data
- We envision the end results to provide an understanding towards the causes of various food violations
- Possible solutions to preventing these violations in the future

## **Technique**

- Use pandas to help organize or group the data by certain facilities, violation types, and areas so we can analyze the data
- Use visualizations such as graphs or charts.

