**Palomar College**

**Computer Science & Information Technology**

**CSIT 226 – Lab/Team Project Write up Template**

**Student(s) Name: Team 2:**

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**Lab/Project name/number:**

* **Project 2:**

**State the problem:**

* **Lower the number of FDA Citations and keep our FDA inspections low.**

**State the data set:**

* **2022/W42: FDA Food Inspection:**

We choose this data set because it’s a relevant topic. All of us consume or utilize products that are regulated by the food and drug administration such as human food, animal food, house and electric, devices and drug (pharmaceutical) products among a few others. This data set has a good amount of data and up to date information we felt that we can work with. The data set provides information from foreign countries as well as U.S.A. data. We decided to focus on the U.S. to narrow our data and keep it relevant to what our audience would like to see.

**KPI’s**

1. Reduce the number of citations in the next couple of years by working with manufacturers by addressing most common issues and areas of concern.
2. Identify the top states with the highest inspections and citations to monitor performance and improvements.
3. Identify top companies with the highest number of citations in the last 10 years to monitor product quality control and processes.
4. Mitigate product shortages and product defects by improving inspection processes.

**State the questions to answer in the data visualization:**

1. What are the top states with the highest number of inspections?
2. What are the top states with the highest number of citations?
3. Number of inspections by product type?
4. As far as trends go, what do all product types have in common? Are we seeing an increase or decrease in the number of inspections being conducted
5. Which are the top companies with the highest number of citations?

**Did the visualization answer the analysis questions? (Analysis)**

Our dashboard shows the geographical map which shows the top states with the highest number of inspections and citations. The darker teal color indicates a higher number of inspections. Once you hover over the states you can see the labels with the number of citations and inspections. In this case you can see that California has the highest number of citations and inspections with 29,808 and 10,216 respectively. The number of citations by Fiscal Year shows 2011 with the highest number of citations and inspections and 2021 with the lowest count of inspections and citations which signify a downward trend. This is great because this addresses one of our KPI’s. We want to see the number of citations/inspections decrease over time. In our area chart you can see that Food/Cosmetics has the highest number of inspections by product type. Some of the top companies with the top number of citations are companies such as CSL Plasma Inc., Baxter Healthcare Corporation and Airgas USA, among others.

**Best Practices/Tips/Noteworthy thoughts:**

The team worked to keep the dashboard visuals simple and related to the proposed questions. We worked with data that is relevant to the US, since this is the country that we reside in, we are interested in showing our audience information that is relevant.

**Challenges:**

Finding a data set was a bit of a challenge. Makeover Monday has a lot of great data sets; however, a lot of them do not have enough data to work with or have missing fields that would make it a challenge to work with and hit all the points required for this project.