7-1 Project Two: Analyzing Databases

DAD-220

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1. Begin by writing SQL commands to **capture usable data** (which you have preloaded into Codio) **for your analysis**. Specifically, the product manager wants you to investigate and analyze the following:
   * **Analyze** the frequency of returns by state and describe your findings in your report.
     1. After using the above command, I got the above output which shows the number of returns per state. According the output, the top 5 states with returns are: Massachusetts, Alaska, Arkansas, West Virginia and Oregon.
     2. select state, count(RMA.RMAID) from Collaborators inner join Orders on Collaborators.CustomerID = Orders.OrderID inner join RMA on Orders.OrderID = RMA.OrderID group by state order by count(RMA.RMAID);
     3. A picture containing text

        Description automatically generated A picture containing timeline

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   * **Analyze** the percentage of returns by product type and describe your findings in your report.
     1. select sku, count(RMA.RMAID) from Orders inner join RMA on Orders.OrderID = RMA.OrderID group by sku order by count(RMA.RMAID);
     2. After running the above command, I got the above output that shows total number of returns per product. Altogether there are a total of 100,000 returns.
        1. A picture containing graphical user interface

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        2. (Found by using command select count(RMAID) from RMA; ) With that I can get the percentage of returns by product. The following are the Percentage of returns by product: BAS-48-1 C 22.4%, ENT-48-40F 16.4%, ENT-24-10F 11.2%, BAS-08-1 C 11.2%, ENT-48-10F 11.2%, ADV-48-10F 11.1%, ADV-48-10F 11.1%, ADV-24-10C 11%, ENT-24-40F 5.5% and BAS-24-1 C .1%.
2. In your report, **summarize your analysis of the data you’ve captured**. Include screenshots of the results of each query. When summarizing results, you may want to consider the following questions:
   * How does the data provide the product manager with usable information?
     1. The data that I provided is useful to management because this will help them in identifying which states they are getting the least returns from. And, which products are being returned less. With this information they can focus more on the states that return less product and focus on selling more of the product that barely gets returned. It will also help them in figuring out what they can do to keep the products from being returned in the high-volume states and the products that are being returned so often.
   * What are the potential flaws in the data that has been presented?
     1. The biggest flaw in the data that is provided is that the state returns do not correlate to the product returns. This means that even though Massachusetts has the highest returns and that the BAS-48-1 C product is the product that is returned most often it does not mean that Massachusetts is returning the BAS-48-1 C product the most.
   * Are there any limitations on your conclusions, or any angles you haven’t considered?
     1. The limitation on my conclusions are that these are just numbers for returns. There is no explanation on why the products are returned and if any money is being lost. Any angles that weren’t considered were that the number of returned products weren’t matched with which state they were coming from.
3. Clearly **communicate your findings** to stakeholders.
   * Make sure that all parts of your report are written in a way that very clearly explains the necessary information.
     1. There is a very high percentage of returns, which indicates a low level of satisfaction of products. There is no analysis by state for this information as it cannot be found in query format and is illogical to assume it could be analyzed by the human eye.