7.2 - Project 1 & Pulling and Merging with Git (Project 1 Team Collaboration )

Saturday, July 24, 2021

10:11 AM

1. Extract/download your data (API, SQL Python/R downloading from Kaggle)

2. EDA (exploratory data analysis) average, mode, median, box plots, scatter plots, look for relationship, look for correlation. Do a violin plot instead of box plot to see distribution. Do a bar graphs on categorical data. Use pandas describe (). Use pandis.info(). Use python packages (matplotlib.pyplot, seaborn, pandas)

3. Hypothesis testing - Develop the business question you are going to answer using your data. What is the business problem you are trying to solve?

a. Sprint Cycles

i. Brainstorm, data research, write description

A. Joe - data research

B. Jack - data research

C. Beth - data research

b. Design/Spec Documentation (project mgr.)

i. Development Cycle Begins:

A. EDA Tasks

a) Joe - boxplot, scatter plot

b) Jack - describe, info(), correlation heat map

c) Beth - Violin, bar chart

B. Review the detailed findings:

a) Every one review all the visualizations and come up with the story, solution

b) How to utilize hypothesis testing to answer the question.

C. Final Presentation

a) Bradley - Template, introductory, business problem slides

b) Jack - Pulling out high quality files for visualizations and putting them in slide deck

c) Novak - Hypothesis testing and closing statements + next steps.

4. Utilize Hypothesis testing with your data to answer your business question.

5. Formal PowerPoint presentation on you project and prepare to present it.

Proposal: What is the most brew style of beer in the Georgia? Of the Georgia beers, which ones have the highest abv content?

Team Members: Dawn Washington, David Owens, and Grey Hardy

IF THEN STATEMENT DISCUSSION:

Beers that have more ABV content are more prevalent in ATL than other breweries in the state of Georgia.

Beers that have more ABV content are more prevalent in ATL than other breweries in the state of Georgia.

Proposal:  What is the most brewed style of beer in the country?  Of the Georgia beers, which ones have the highest abv content?

Beer style

Beer abv

State

Which style has the highest ABV?

Which state has the most of that style?

*Which state has the most selection of beers with high ABV rating?*

Business Case:

A entrepreneur would like open a brewery. They need to determine where to open the brewery and which style of beer to brew since they only have enough money to brew one beer.

Questions to solve for:

1. Which style has the highest ABV?

Sort on ABV

Bar Chart, Line Chart

1. Which state has the most of that style?

Sort by state, then style

Scatter, bar

1. Which state(s) has the most selection of beers with highest ABV rating?

Sort by state, sort by style (count)

Stacked

1. Which state(s) has the least selection of beers with highest ABV rating?

Sort by state, sort by style (count)

Key: Top/Lowest 5 states

To Do:

1. Sprint Cycles
   1. Brainstorm, data research, write description
      1. Joe - data research
      2. Jack - data research
      3. Beth - data research
2. Design/Spec Documentation (project mgr.)
   1. Development Cycle Begins:
      1. Exploratory Data Analysis Tasks
         1. Joe - boxplot, scatter plot
         2. Jack - describe, info(), correlation heat map
         3. Beth - Violin, bar chart
      2. Review the detailed findings:
         1. Every one review all the visualizations and come up with the story, solution
         2. How to utilize hypothesis testing to answer the question.
      3. Final Presentation
         1. Bradley - Template, introductory, business problem slides
         2. Jack - Pulling out high quality files for visualizations and putting them in slide deck
         3. Novak - Hypothesis testing and closing statements + next steps.
3. Utilize Hypothesis testing with your data to answer your business question.

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