Homework 6: Advanced Visualizations in Tableau

Released Mon Apr 26

You’re tasked with work that will prepare you for Capstone 2, which emphasizes Data Visualization, Statistics, and Data Warehousing concepts (Modeling & Aggregations)

* Analysis of SuperStore with concepts applied from Advanced Tableau Udemy
  + Use 4+ Advanced Tableau features (Sections 3 & 4 of Advanced Udemy Course)
* Data Discovery - Research into a dataset of importance to you – one that you would like to derive and tell stories about. Test your assumptions of the topic by toying with the data in Tableau to do some data discovery on it. Criteria to include:
  + Work appropriateness:
    - Provider information in currently active nursing homes
  + From reputable sources:

<https://data.cms.gov/provider-data/dataset/4pq5-n9py>

* + Data Visualization – does the data have potential for visually intriguing dashboards? What Visual Vocabulary techniques are possible? (See link below)
  + Statistical Merit
    - Does the data lend itself to statistical analysis?
    - Is there a story to tell? Are there surprising insights?
  + Data Modeling/Data Clean-up requirements: What level of pre-processing is required, or possible?
  + Cross-domain viability: is it possible to combine two separate (but reputable) data sources? E.g. census data vs market data?
    - https://data.cms.gov/provider-data/dataset/mj5m-pzi6
* Data Show-and-Tell – evening session on Thurs Apr 29 to share your Data Discovery, and how it stacks up against the Criteria above.

Tableau & Other Relevant Resources:

Visualization

* Visual Vocabulary: <https://public.tableau.com/en-us/gallery/visual-vocabulary>
* <https://help.tableau.com/current/pro/desktop/en-us/order_of_operations.htm>
* Example Vis: <https://public.tableau.com/profile/makeover.monday#!/vizhome/MakeoverMondayWeek47/W47>
* Tableau Basics+Advanced in a nutshell: <https://public.tableau.com/en-us/s/resources>
* <https://www.tableau.com/learn/get-started>
* <https://help.tableau.com/current/pro/desktop/en-us/visual_best_practices.htm>
* <https://usergroups.tableau.com/>

Stats

* Re-watch Jose Portilla’s Probability & Statistics Course: <https://teksystemsbootcamp.udemy.com/course/probability-and-statistics-for-business-and-data-science/learn/lecture/10741736#overview>

Data Warehousing in Tableau

* <https://help.tableau.com/current/pro/desktop/en-us/datasource_datamodel.htm>
* <https://help.tableau.com/v2021.1/pro/desktop/en-us/datasource_relationships_learnmorepage.htm>