**Dataset for capstone**

Title: **US Hospital Customer Satisfaction**

Dataset: https://www.kaggle.com/datasets/abrambeyer/us-hospital-customer-satisfaction-20162020

The "US Hospital Customer Satisfaction" project intentions to improve patient satisfaction across various hospitals in the United States by analyzing patient feedback and hospital performance metrics. The data includes facility information, patient survey data under the HCAHPS standards, and performance comparisons on mortality, safety, and care effectiveness, among others.

This project will utilize these metrics to identify key improvement areas in healthcare delivery, focusing on understanding the relationships between hospital characteristics and patient satisfaction levels. By analyzing these factors, the project attempts to provide hospitals with actionable insights to improve service quality and patient outcomes, helping them not only meet but exceed national healthcare quality standards.

Title: **Customer Churn**

Dataset: https://www.kaggle.com/datasets/arashnic/marketing-series-customer-churn

Customer churn, or the rate at which customers stop doing business with a company, is a critical metric that can significantly impact a company's revenue and growth. Analyzing churn can help businesses identify why customers leave and what strategies can be implemented to retain them. A capstone project focusing on customer churn would involve analyzing a dataset with various customer attributes and their subscription status.

The dataset for this project includes a range of features such as CustomerID, Gender, Senior Citizen status, and more detailed service-related attributes like Phone Service, Internet Service, and Tech Support. Additional variables include Billing information such as Payment Method, Monthly Charges, and Total Charges. Importantly, the dataset includes a Churn label indicating whether a customer has left the company.

By analyzing these data, the project can explore patterns and characteristics that distinguish churned customers from those who stay. For instance, it might be possible to find trends related to customer demographics like age, service usage like multiple lines, and financial factors like payment method. Understanding these factors can help in crafting targeted interventions aimed at improving customer retention strategies for the business.

Title: **H1N1 flu Vaccine acceptance**

Dataset: https://www.kaggle.com/datasets/sivabalana/h1n1-flu-vaccine

The project titled "Vaccine Acceptance" aims to explore factors influencing the decision to receive the H1N1 vaccine, using a detailed dataset that captures a broad range of demographic, behavioral, and opinion-based data. The project seeks to understand how various factors contribute to the likelihood of vaccination, which is crucial for enhancing public health strategies and vaccine outreach programs.

The dataset provides extensive information on respondents, including age, education level, race, gender, income, and marital and housing status. Employment data combined with health behaviors and opinions offers a comprehensive picture of the factors that might influence vaccine acceptance. Notable health behavior indicators in the dataset include frequency of handwashing, avoidance of large gatherings, and usage of antiviral medications, which can reflect the respondent's proactive measures towards disease prevention.

The analysis of this data will focus on identifying patterns and correlations between these features and the reported vaccination status. This could provide insights into which demographics are more likely to accept vaccination and the reasons some might be hesitant, such as fear of side effects or doubts about vaccine effectiveness. By exploring this data, public health officials could tailor more effective communication and intervention strategies to target groups that are hesitant about vaccines, ultimately increasing overall vaccination rates and reducing the spread of diseases like H1N1.

https://www.kaggle.com/datasets/mysarahmadbhat/lung-cancer

https://www.kaggle.com/datasets/center-for-medicare-and-medicaid/hospital-ratings