* Topic - Describe and name your project in 1-2 sentences max
  + Customer Segmentation/Market Basket Analysis. Use customer data to group customers with similar characteristics. This will allow for specific marketing strategies by groups and identify target customers.
* Business Problem - Describe the business problem your project is trying to solve and/or the research questions you will explore
  + As the owner of a store, I have customer data, but I don’t know why some customers purchase items and others do not. To determine which customers should be targeted with marketing efforts, I want to be able to identify and group customers with similar characteristics to determine which customer group is the most likely to purchase.
* Datasets - where are you getting your data? Describe the data that you will use to solve the problem
  + I will be using the dataset “Mall Customer Segmentation Data” from Kaggle. The dataset has 5 columns: CustomerID, Gender, Age, Annual Income (k$), and Spending Score (1-100).
    - CustomerID is a unique key
    - Gender is a string with either “Male” or “Female”
    - Age is an integer variable of the age of the customer from 18 to 70
    - Annual Income is an integer from 15 to 137
    - Spending Score is and integer from 1 to 100
* Methods - What analysis methods will you use to complete this project? Note: this is just a proposal, your project can adapt as you work on it
  + Exploratory Data Analysis (EDA) and visualizations
  + K-Means Clustering
  + Possibly try some other clustering algorithms to see if I get different results
* Ethical Considerations - What are some potential ethical concerns of this topic or analyzing the data?
  + There could be ethical concerns regarding using customers’ personal data as well as developing marketing strategies to target customers based off it.
* Challenges/Issues - What are some issues and challenges do you think you might face?
  + One concern may be that the clusters may not fall into well-defined groups, making the analysis less useful.
* References - What sources will you use to validate your results and support your project topic?
  + Blog from 3tierlogic on what Customer Segmentation and why it is important. <https://www.3tl.com/blog/importance-of-customer-segmentation#:~:text=Segmentation%20helps%20businesses%20customize%20their,feel%20more%20connected%20and%20engaged>.
  + Possibly others. I am still exploring more scholarly sources.