Finalize one capstone idea based on the feedback that you received on your initial ideas and your discussions with your mentor.

The proposal should address the following questions:
- What is the problem you want to solve?
- Who is your client and why do they care about this problem? In other words, what will your client do or decide based on your analysis that they wouldn't have done otherwise?
- What data are you using? How will you acquire the data?
- Briefly outline how you'll solve this problem. Your approach may change later, but this is a good first step to get you thinking about a method and solution.
- What are your deliverables? Typically, this includes code, a paper, or a slide deck.

Submission instructions:
1. Write your proposal in a Google Doc (1-2 pages) and submit the link via the "Submit" button. Make sure your mentor has permissions to comment on the document.
2. Work with your mentor to incorporate any feedback into later drafts and submit as many times as needed.
3. Once your mentor has approved your proposal, convert the doc to a PDF file.
4. Create a GitHub repository for this project (if you haven't done so already).
5. Add the PDF to your GitHub repository for this project.
6. Share the proposal with your peer community for feedback.

Note: All code and further documentation you write will be added to this repository.

Problem: Dockable Bike Station Rebalancing Strategy
Rebalancing is performed on bicycle stations to ensure that there is a balance of supply and demand of bikes. Ford GoBike is a bike-sharing company operating in the bay area. I would like to employ time series forecasting techniques to recommend an improved rebalancing strategy.

Client: Bike Sharing Companies, e.g. Ford GoBike, CitiBike, etc.

Sample Data: https://www.fordgobike.com/system-data

Methodology:
- Wrangle the data from Ford GoBIke Website
- Clean data sources; the dependent variable is bikes at a bike station.
- Exploratory Data Analysis:
    - How does station demand generally change over time?
    - What are current bike rebalancing strategies? Could we detect this in the data?
    - Is the time series data a random walk model?
- Machine Learning
    - Perform several time series forecasting techniques, such as ARIMA, moving average, and autoregression
    - Could I generalize an approach for any bikeshare program?
- Document and summarize results

Deliverables:
- PPT
- Jupyter Notebook for detailed explanation and analysis
- Github repository