Please provide the following information to be shared with on capstone information exchange platform:

1. **Project number**: S20-8

2. **Project title (as will appear on the poster)**: Trading Application

3. **Team members**: Kanak Borad, Andrew Lau, Vancha Verma

4. **Adviser(s) name(s)**: Wade Trappe

5. **Up to 5 keywords that will help to classify the project scope**:
   - Algorithm, Trading, Stocks, Market

6. **Project abstract (up to 250 words) to be shared with judges**:

   (General guidelines: The abstract should include: (a) A background review of the state of the art in the relevant field; (b) The problem addressed in the project; (c) Objective of the proposed projects; and (d) The adopted approach)

   The stock market is where shares of publicly listed companies are traded. Most adults have some kind of money tied to the stock market whether it’s a 401k, IRA, or they are a retail investor or trader. Retail investors and traders buy and sell stocks using their own personal money as compared to professionals who work at banks and hedge funds. It is estimated that there is around a 10% success rate for day traders which means the vast majority of people trading stocks are losing money.
There are many reasons why traders money. This includes, guessing when to buy and sell, trading with emotions, missing trading opportunities, and not having a trading strategy. Our team's proposed solution is to make an algorithm that does the trading for the typical retail investor. Having an algorithm trade, fixes many of the common mistakes that cause people to lose their money. An algorithm makes trades faster by eliminating the manual clicking required for typical brokerages and does not require someone to constantly watch the market. Furthermore, the program will trade with a consistent strategy which eliminates the emotional and guessing aspects of typical retail traders. Using python, Alpaca API, and Quantopian we can code and test our algorithm on previous and live market data. The algorithm will use a variety of market indicators such as SMA, EMA, and RSI to dictate the trades. The future of retail trading will be automated and will provide a significant advantage over manual trading.