MGT 6203 Group Project Proposal Template

**Please edit the following template to record your responses and provide details on your project plan.**

**TEAM INFORMATION (1 point)**

**Team #:**

**Team Members:**

1. Team Member 1 Loraine Vizconde; Lvizconde3
2. Team Member 2 Name; GT Id or EdX username
3. Team Member 3 Name; GT Id or EdX username
4. Team Member 4 Name; GT Id or EdX username
5. Team Member 5 Name; GT Id or EdX username

**OBJECTIVE/PROBLEM (5 points)**

**Project Title: The stock market as a predictor of recession.**

**Background Information on chosen project topic:**

The stock market is, without a doubt, a leading indicator of the performance of the economy. A well performing economy produces a bull market where the prices of stocks continue to rise. A bear market is the opposite, where the prices trend to go downwards. There are several macroeconomic factors affecting recession such as GDP, unemployment rates and etc. However, it is rare to hear how stock market predicts an impending recession.

**Problem Statement (clear and concise statement explaining purpose of your analysis and investigation):**

Recession has always been painful to all sectors of the economy. Some views take this as a necessary reset. But the bottom line is, it is still negatively affects both individuals and companies alike. To anticipate these challenges and better prepare for future, it would be so valuable if recession can be recognized with everyday readily available data such as stock market index prices. The purpose of this study is to validate stock market contribution in determining an imminent economic downturn.

**State your Primary Research Question (RQ):**

Can stock market performance help predict Recession?

**Add some possible Supporting Research Questions (2-4 RQs that support problem statement):**

1. Can a bearish stock market indicate a looming recession?
2. What stock market information can aid useful for this study?

**Business Justification:** **(Why is this problem interesting to solve from a business viewpoint? Try to quantify the financial, marketing or operational aspects and implications of this problem, as if you were running a company, non-profit organization, city or government that is encountering this problem.)**

For better business decision, forecasting and planning.

**DATASET/PLAN FOR DATA (4 points)**

**Data Sources (links, attachments, etc.):**

NYSE, DowJones, SP500

Bloomberg

Yahoo Finance

**Data Description (describe each of your data sources, include screenshots of a few rows of data):**

Data would include the histrocal index prices, historical GDP and unemployment rates.

**Key Variables: (which ones will be considered independent and dependent? Are you going to create new variables?** **What variables do you hypothesize beforehand to be most important?)**

1. Independent Variable = Recession (GDP, Unemployment)
2. Dependent Variables= historical prices of the indexes

**APPROACH/METHODOLOGY (8 points)**

**Planned Approach (In paragraph(s), describe the approach you will take and what are the models you will try to use? Mention any data transformations that would need to happen. How do you plan to compare your models? How do you plan to train and optimize your model hyper-parameters?))**

Determine which market data are useful for the study.

Finalize sources of data and the building of data set.

Compare best models to use and plan on the division of duties.

**Anticipated Conclusions/Hypothesis (what results do you expect, how will you approach lead you to determining the final conclusion of your analysis) Note: At the end of the project, you do not have to be correct or have acceptable accuracy, the purpose is to walk us through an analysis that gives the reader insight into the conclusion regarding your objective/problem statement**

Stock market is an insignificant predictor to an economic recession. The volatility of the market gives an undetermined contribution to an economic downturn.

**What business decisions will be impacted by the results of your analysis? What could be some benefits?**

One area of that will be impacted by the analysis is the Buying, Holding or Selling portfolio of the company. This study will also help the company in planning its future business needs.

**PROJECT TIMELINE/PLANNING (2 points)**

**Project Timeline/Mention key dates you hope to achieve certain milestones by:**

**Appendix (any preliminary figures or charts that you would like to include):**