Story pitch:

A topic of frequent discussion is a country's economic health as measured by gross domestic product (GDP) and how happy its citizens are. The year 2022 raises special attention when we think about this topic, especially when we look back at the years prior. This is because 2022 and the years before it saw big changes in the world, including how money moved, the COVID-19 pandemic, and what people felt was significant to their well-being. This project will focus on how money and happiness are correlated in different countries with a focus on 2022 in particular.

GDP is one tool we can use to see how a country's economy is doing. GDP is calculated by adding up all of the money spent by consumers, businesses, and the government in a given period. GDP is similar to a report card that shows the total value of everything made and sold in a country over a certain time. If GDP is going up, it is typically an indicator that a country is doing well. If it's going down, there might be deeper concerns that need to be addressed, such as employment. In 2020 for example, we saw a global economic crisis arise in response to the pandemic which resulted in many business closures. Many employees were laid off, and even though GDP is on the rise again, we are still struggling to find employment for a large portion of those who wish to be employed. In many cases, the higher a country's GDP, the more well-off the individuals living in that country are.

Happiness isn't solely about money. Happiness is an emotional state characterized by feelings of joy and satisfaction. It includes having enough resources to live on, having healthy relationships, having the freedom to do what you want, and being physically and mentally healthy among many other factors. People have tried to measure happiness in several ways, but the one we will address in this project is the World Happiness Report, which ranks countries based on variables like how much they earn, if they have support from friends and family, how long they live, if they are able to trust the people around them, and if they are generous.

In the years leading up to 2022, the world saw changes across several categories. There were challenges surrounding money, new tech discoveries, and changes in how countries worked together politically. As these things happened, we started to see patterns change and arise in money exchange (GDP) and happiness. In many places, there was a clear connection between economic health and overall happiness. Countries with more money per person such as Finland, Denmark, and Iceland often had people who scored higher on the happiness index. These places had good schools, hospitals, and a better way of life because of the money that was invested into the community. It is apparent when a country has a higher GDP per capita, the citizens of that country are likely to live happier lives. However, this isn't always the same everywhere. Some places that made a lot of money didn't always have happier people. For example, some countries got rich faster but had problems that included larger gaps between the rich and poor, pollution, and disagreements among people regarding political and social issues. These problems sometimes make people less happy, even if there is more money in the economy. Then, there were countries that didn't have a lot of money but had very happy people. Things like close

communities, traditions that focus on collective happiness and well-being, and good political leaders might be the reason for this phenomenon.

Looking at GDP and happiness in 2022 and comparing it to earlier years tells us a lot about the large-scale changes that have occurred regarding the flow of money as well as its effect on the happiness and satisfaction of the people. More money can make life better, but it's not the only thing that matters. Culture, friendships, and how a country is run also affect happiness. The goal of our project will be to dive into the statistical correlation between GDP and happiness to see if we can pinpoint whether money really does buy happiness, or if there are some other factors that come into play based on statistics alone. The reason that this topic is important to discuss is that in the upcoming years, we will likely see large changes in both GDP and happiness coming off of lockdown. Many people will be reemployed, more money will be circulating in the economy due to businesses running again, and many mental and physical health needs can be addressed now that there is rising awareness for them in lieu of the pandemic.

Finding Data: At this stage, your group should identify and download two independent sources of data. In your project proposal, you will then describe both datasets.

Dataset #1:

- The first source was found on Kaggle (https://www.kaggle.com/code/alejopaullier/gdp-by-country-1999-2022/notebook)
- This data is about the GDPs of different countries around the world. GDP is usually calculated by the national statistical agency for each country.
- The 23 rows in the dataset represent the years from 1999 up until 2022.
- The 180 columns represent the 180 countries that are in the data set

Dataset #2:

- This second data set was downloaded from Kaggle (https://www.kaggle.com/datasets/mathurinache/world-happiness-report?select=2022.csv)
- The data was generated by looking at the Happiness reports from different countries and listing them in order of most happy to least happy. The report primarily uses data from the Gallup World Poll.
- The 147 rows represent the 147 countries that are in the data set
- The 12 columns represent different metrics used to measure happiness. These include a happiness score, happiness explained by GDP, social support, healthy life expectancy, and freedom to make choices among others.

Background Research:

Source #1: GDP is Not a Measure of Human Well-Being (GDP and Human Wellbeing)(Kapoor)

- Gross domestic product (GDP) measures the size of a nation's economy by evaluating imports and exports of products and doesn't necessarily reflect a nation's welfare.
- Policies that result in economic growth are seen to be beneficial for society, even if that may not be the case at the household level.
- GDP is an aggregate measure that includes the value of goods and services produced in an economy over time There is no scope for the positive or negative effects on individuals or households created in the process of production and development.
- While this source addresses GDP and and confirms there is no causation between the two (ex: higher GDP causes high well-being), it does not address in detail the correlation the two have with each other.

Source #2: Self-Reported Satisfaction vs. GDP (Satisfaction and GDP)(World Happiness Report):

- Self-reported life satisfaction is measured on this website on a scale from 0-10, where 10 is the highest possible life satisfaction and 0 is the lowest possible life satisfaction.
- This source provides a chart visualization with satisfaction scores as the Y-axis and GDP per capita as the X-axis.
- This source is very similar to what we are looking to observe in our project, but satisfaction is more a long-term feeling that may have taken years to reach, but happiness measures more momentary feelings that come from economic or social events.

Source #3: Income Inequality and Happiness (Income Inequality and Happiness)(Emmanuel):

- Income inequality makes us all as a whole less happy with our lives, even if we're "well-off."
- It was found that the more income is concentrated in the hands of the few and the rich, the more likely individuals are to report lower levels of life satisfaction.
- Psychologically it is believed that an increase in the share of income held by the richest 1% can make you feel as if your chance of moving up the ladder is beyond your ability.
- This source brings up very interesting facts that discuss the distribution of wealth within a country but does not talk directly about GDP (though these may be correlated).

Source #4: World Happiness Report and The Pandemic (Kindness During the Pandemic)(Newman):

- During the pandemic, researchers saw a surge in volunteering, which is believed to have had an effect on our satisfaction in life contrary to what many believed. The uptick in kind, helpful behavior happened in every region of the world.
- Despite some of the positive things that came from the pandemic people did feel more sadness and many reported having fewer people to count on as the pandemic went on.
- For this project, we are particularly interested in observing if happiness and GDP decreased during or after the pandemic, so this source gives us some insight into mental health and emotions surrounding the pandemic.

Source #5: Can Money Buy Happiness? (Money and Happiness):

- Observations done by Daniel Kahneman and Matthew Killingsworth found that people are "generally happier as they earn more, with their joy leveling out when their income hits \$75,000."
- The research done that is addressed in this source says that "unhappy people gain more from increased income than happier people do."
- As this review finds, money and wealth can have an impact on emotions, particularly
 happiness. In our study, we will see how economic health/wealth has an impact on
 happiness instead of household income.

Works Cited

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