

Final Project: Team Ideas

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GitHub Documentation Folder:

<https://github.com/hcy0227/ITSC-3155-Team-Red-Pandas-FinalProject/blob/main/Documentation>

Charlotte Hill - Covid-19 Tracker Classification

Dataset

[WHO Coronavirus \(COVID-19\) Dashboard](#) | [WHO Coronavirus Disease \(COVID-19\) Dashboard](#)

This dataset is a running total of all Covid-19 cases and deaths. It is broken down to the number of cases and deaths total, in the last seven days, and the last 24 hours. These three categories are also available per 100000 people. There is an additional category that identifies how the cases/deaths are believed to be transmitting.

Customers

Customers for this area of data would be the average citizen of any country, health officials, and government officials.

Problem and Justification

The ability to know not only the number of cases/deaths from Covid-19 but also how the virus is being transmitted in different countries can help to identify individuals who may have been exposed to the virus or that may have the virus without any symptoms. Allowing the general public and health and government officials to quickly see what countries have been having cases due to clusters or community transmission. Quick identification of individuals entering a country will allow the officials to advise each individual on whether they need to quarantine for a period of time upon entering the country. It would also allow the general public to make more informed decisions when choosing to travel outside of their home country.

Product Vision

For individuals who need or want to travel outside of their home country, the impact of Covid-19 in certain countries and regions will greatly influence what their destination will be. The Covid-19 Tracker Classification application will quickly allow individuals to view a world map where each country is colored based on the number of cases/deaths in the last seven days. It will allow the user to choose a destination country from the map and provide them with a more indepth view of that country's current and overall Covid-19 history and provide the user with how the virus is being transmitted in that country.

With the users ability to easily see and interact with the map, it would give them a much better knowledge of the country and allow them to make a more informed decision before choosing to travel to a specific destination.

Features

- View a map of the world with each country colored based on the number of cases in the last seven days
- The ability to choose a country and then view its overall history with Covid-19 along with its most recent history.

Jonathan Mendenhall - WallStreetBets Tracker

Dataset

<https://www.kaggle.com/gpreda/reddit-wallstreetsbets-posts>

A capture of all posts on the wallstreetbets subreddit with the content of the posts, when they were posted, and a score for the post (number of upvotes).

Customers

- Anyone interested in individual investment in the stock market
- People who want to take advantage of the hype waves that can happen because of wallstreetbets posts and don't mind the risk

Problem and Justification

Some people who are new to the stock market and are not sure of what stocks to invest in can lose a lot of money in the process because of poor investment decisions. Although short-term investments are often the most risky compared to long-term investments, there is still the possibility to take advantage of certain market phenomena. As seen during January 2021, the wallstreetbets subreddit has a strong ability to inflate the price of stocks in their discussions, and knowing about this early in the rise could help someone have a huge return on investment as long as they get out before the price of the stock drops again. An app that lets someone see what the currently trending stocks in wallstreetbets are could help the person jump in on a "moonshot" early on then sell their position when they think prices are high and starting to go back down.

Product Vision

For anyone interested in taking advantage of bullish stock behavior caused by mass discussions on reddit, WallStreetBets Tracker is a web app that analyzes reddit posts to find trends in different stocks, allowing users to take advantage of stock price increases due to mass market activity. Unlike Yahoo Finance or other market-viewing tools that leave all of the judgement to the user, our product allows users to view trends in "hype" around various stocks that have previously led to large increases in stock price.

The utility of this product is that it can potentially get people an early position on a stock that will increase later on as discussion and hype around it increases. Driven by supply and demand, if more people demand a good, its price will go up (all else being equal).

Main Features

- View trends in stocks mentioned over time across r/wallstreetbets posts
- View currently hyped stocks so users can choose to open a position early on in the potential wave created by exponential discussion.

Daniel Tyree - NextUp Restaurant/Customer Application

Dataset

<https://www.kaggle.com/yelp-dataset/yelp-dataset>

This dataset is a fully listed documentation of customers, businesses, customer information, reviews etc. It is used to keep track of specific business acquisitions and revenue, customer information such as reviews and checking and overall restaurant numbers as a whole.

Customers

- Restaurant businesses or any other restaurant related products to keep track of customer identification and revenue
- 3rd party businesses such as Nextable or Zomato that allows them to access customer information and use it for further marketing and integration such as table management and customer feedback.

Problem and Justification

With an ongoing pandemic going on world wide, restaurants and other businesses that have foot traffic need to be aware of who is coming in and out of their restaurant/businesses. This not only helps them identify where an outbreak of the virus may have originated from but it also allows them to keep a headcount of all incoming traffic, see which days are busier than others. Being able to keep track of specific reviews customer to customer is a huge benefit for restaurants and it allows them to identify where they need to improve or where they are succeeding. On top of this, businesses and restaurants need ways to track day to day or hourly revenue to see when they are spiking and which days they need to or do not need to schedule more employees. Being able to see and track this information is a critical objective for any business to have.

Product Vision

With the need for headcounts in and out, revenue management, and table management, the NextUp web application allows for small or large scale businesses, restaurants or even mom/pop shops to keep track of customers via waitlist, email/phone number or reviews. NextUp is a user friendly application that has multiple applications. Businesses such as restaurants are able to use the software as a table management app that allows managers to map out a floor plan for the restaurant and split servers up into sections. On top of this, it allows the restaurant to see over all or hour to hour sales. The sales aspect of this application applies to other non restaurant businesses as well. With a name and phone number being taken, customer information is added to a database that allows for individual identification if necessary for covid outbreaks. On the customer side of the application, they are able to create

reservations and leave reviews that are also stored into a database. Restaurants and businesses are able to access this information to make changes to their stores.

Main Features

- Customer reservation and reviews
- Restaurant customer information logs and being able to access revenue hour to hour or overall
- Restaurant table management system

Ian Zheng - Covid-19 Data Hub

Data Set:

<https://www.kaggle.com/gpreda/covid-world-vaccination-progress>

Data is collected daily from Our World in Data GitHub repository for covid-19.

Customers:

Health organizations, biotech companies, and government agencies who like to track which country is using what vaccine and their progression on the distribution of the vaccine, it will show how many more people are vaccinated per day in terms of percentage from the entire population

Problem and Justification

Every country is in the race to vaccinate its citizens in order to have their lives back to pre-pandemic. Given the mounting number of deaths globally, and the apparent failure of many countries to contain the pandemic without severely damaging or problematic lockdowns and other measures, there have been calls to make a vaccine, if it were approved, mandatory. Mandatory vaccination, including for COVID-19, can be ethically justified if the threat to public health is grave, the confidence in safety and effectiveness is high, the expected utility of mandatory vaccination is greater than the alternatives, and the penalties or costs for non-compliance are proportionate.

Product Vision

For health organizations, biotech companies, and government agencies who want to find out the vaccination rate of Covid-19 in each country of the World and what type of vaccine they are using. Covid-19 Data Hub will help them to find out which countries have the better distribution system in place. Unlike another newspaper website which only giving information on vaccination people in the country, but does not provide different kinds of vaccine are being used. This web-based app can also identify the daily vaccination trend.

This application would be useful to give an insight into how different countries handle their vaccine distribution. It might well provide how compatible for each vaccine to be working on different ethnicities.

Main Features

- Provide daily trend on the vaccination for every country in the world
- Color coded each country with types of vaccine they are using