BMIS 601 Project

Spring 2020

Main Objective: Each student will represent a data scientist that works for a specific country’s leadership team. The leader of the country has asked for your recommendations on how to handle the Covid-19 pandemic. You will provide a recommendation to the leader of your country on how they should handle the Covid-19 health crisis utilizing what you have learned this semester.

Details: I will assign each student a country. For the purposes of the first part of the assignment, act as if the date is Jan 15, 2020. Based on the numbers and data available on that date, make a 3-month forecast for the expected number of cases and expected number of deaths from Covid-19. Then make a recommendation on what your country should do to slow the spread of the virus assuming the date is Jan 15, 2020. For instance, you could recommend travel restrictions, social distancing, mask wearing, etc. Next, fast-forward to April 9, 2020. Make a new 3-month forecast for the expected number of cases and expected number of deaths from the virus starting 4/9/2020. Please make a recommendation of what your country should do now. Use whatever decision criteria you feel is important.

Other notes:

1. This project is technology agnostic. Use any software package to create the graphs, tables, and dashboard(s).
2. Explain the steps and process to gather, clean, transform, load, and present the data.
3. Use a decision-making framework that we learned to recommend a solution for your country.
4. Explain what data should be collected that is currently not being collected that would improve your recommendations.
5. Explain the accuracy of your first forecast based on actual numbers today. It is okay for that January 15 forecast to not be very accurate—don’t feel like you need to modify your forecasting technique to get a better fit on data we know now but that you couldn’t have known then.

Deliverables:

1. A detailed recommendation report for the country. The recommendation can be no more than 10 pages.
2. The recommendation report should *at minimum* include the following items:
   1. Background of your country (demographics, economic numbers, infrastructure information, political/religious/social environment, etc.)
   2. A 3-month forecast starting 1/15/2020
   3. Recommendation of what the country should do assuming the date is 1/15/2020
   4. Explanation of how accurate the first forecast was compared to current numbers. Again, don’t go back and change the original forecast.
   5. A 3-month forecast starting 4/9/2020.
   6. Dashboard(s) utilizing different dimensions of data
   7. Recommendation of how to slow the spread while considering other factors (well-being of the citizens, economy, etc.)