

## COMP 3610 – BIG DATA ANALYTICS

The University of the West Indies, St. Augustine

### Assignment 1

**Date Distributed:** February 12<sup>th</sup>, 2020

**Date Due:** February 26<sup>th</sup>, 2020 (11:59pm)

A mental health institution is investigating mental health issues in tech companies. There is concern about where mental health stems, that is, if it is hereditary, appears at a specific age, prevalent in certain geographic locations, and also if someone's job has a role to play in mental health. Also, attention is being drawn to whether companies are taking mental health seriously and, if so, are they providing any benefits with mental health in mind and also treat mental health employees fairly, giving them time to recover if needed. There is even concern about if individuals are being treated for their mental health issues.

The mental health institution has hired you to investigate the above issues using some data they have collected (see details of attributes below). You are required to explore the data and use appropriate graphs/plots and narratives (via text/markdown code) for each plot in order to describe your findings and tell your story based on the data.

Tip: There should be no less than 7 plots in your solution and no more than 15.

#### Guidelines:

1. You may use any python visualization library for graphs/plots.
2. You are required to submit a Jupyter notebook file.

#### Submission Details:

1. Ensure that your name and ID are present in the notebook.
2. Export/download your file from Jupyter notebook.
3. Email your file to [ssooklal27@gmail.com](mailto:ssooklal27@gmail.com). Put as the title of the email COMP 3610 A1.
4. There would be a 10% penalty per day for late submissions, up to 5 days.

# Content

This dataset contains the following data:

- **Timestamp**
- **Age**
- **Gender**
- **Country**
- **state**: If you live in the United States, which state or territory do you live in?
- **self\_employed**: Are you self-employed?
- **family\_history**: Do you have a family history of mental illness?
- **treatment**: Have you sought treatment for a mental health condition?
- **work\_interfere**: If you have a mental health condition, do you feel that it interferes with your work?
- **no\_employees**: How many employees does your company or organization have?
- **remote\_work**: Do you work remotely (outside of an office) at least 50% of the time?
- **tech\_company**: Is your employer primarily a tech company/organization?
- **benefits**: Does your employer provide mental health benefits?
- **care\_options**: Do you know the options for mental health care your employer provides?
- **wellness\_program**: Has your employer ever discussed mental health as part of an employee wellness program?
- **seek\_help**: Does your employer provide resources to learn more about mental health issues and how to seek help?
- **anonymity**: Is your anonymity protected if you choose to take advantage of mental health or substance abuse treatment resources?
- **leave**: How easy is it for you to take medical leave for a mental health condition?
- **mental\_health\_consequence**: Do you think that discussing a mental health issue with your employer would have negative consequences?
- **phys\_health\_consequence**: Do you think that discussing a physical health issue with your employer would have negative consequences?
- **coworkers**: Would you be willing to discuss a mental health issue with your coworkers?
- **supervisor**: Would you be willing to discuss a mental health issue with your direct supervisor(s)?
- **mental\_health\_interview**: Would you bring up a mental health issue with a potential employer in an interview?
- **phys\_health\_interview**: Would you bring up a physical health issue with a potential employer in an interview?
- **mental\_vs\_physical**: Do you feel that your employer takes mental health as seriously as physical health?
- **obs\_consequence**: Have you heard of or observed negative consequences for coworkers with mental health conditions in your workplace?
- **comments**: Any additional notes or comments