**Project Proposal**

**COVID-19 Survey Data on Symptoms, Demographics and Mental Health in Canada**

**Objective:**

“All people in Canada and all over the world should have an opportunity to have the best mental health possible.”. As we know that we are having and at the same time gathering huge amount of data day by day, there are many ways in which we can process this data and can make predictions or can learn from the analysis. But when it comes to mental health we as a person don’t like to share and come out or people are shy to come out and as for help or guidance on how to tackle this situations. Our goal is to summarize the current status of the issue and offer some options and recommendations for advancing a mental health information agenda

This dataset is  based on survey responses collected from 294,106 Canadians from March 23rd until July 30th 2020, using a platform developed by Flatten, a Canadian non-profit organization. This data for academic and industry research.

**Data Science Insight:**

As we all know that now a data is collected from everywhere possible, and the dataset which we are using is collected using a survey, which was done during covid-19. So with the assistance of this information we'll get the experiences, which can be conceivable as it were by examining the information from the overview.

Survey responses related to Pattern 1 are the most numerous, consisting of 263,640 individual-level records submitted during the first weeks of the pandemic (March 23 to April 8, 2020). These reactions also correspond to the peak of Flatten's presence in the media. The survey responses related to Pattern 2 consist of 14,932 records (April 8 to April 28, 2020) and Pattern 3 consists of 15,534 records (April 28 to July 30, 2020).and Schema 3 consists of 15,534 records (April 28th to July 30th of 2020). Although Schema 2 and Schema 3 contain far fewer records than Schema 1

Our goal is to analyse the data on covid-19 symptoms and mental health in Canada and give the troubled covid-19 applicants a platform to describe their state so they may get coached up or treated in accordance with their circumstance. In order to carry out the business operations necessary to address our issue statement and our data analysis objectives, we would be following the below steps:

* make a supervised model grounded on the identified data and training it to prognosticate similar cases in unborn according to the input data given by the person from the platform.
* precious information about demographic profile of the check party that schema 1 doesn’t have, similar as their race, coitus, age, and epidemic-convinced most pressing requirements(food, medical, fiscal, emotional, other).

**Following methods and tolls will be used to execute this project:**

* Data Collection
* Data Cleaning (MS Excel, SQL, Python)
* Exploratory Data Analysis (Python)
* Data Visualization (Excel, Tableau, IBM Cognos)
* Build and apply suitable algorithms (Python,Tableau)

**Data Requirements:**

Information is the powerful and necessary tool for creating positive change. Data on covid-19 was gathered by Flatten, Through an online survey responses collected from 294,106 Canadians of all age.  However, data has been a consistent factor in determining how well non-pharmaceutical therapies may be used. The raw Flatten dataset consists of 498,211 survey submissions (90.81% of which were replies from unique participants). Due to ethical, privacy, and identity protection concerns, only a de-identified subset of survey responses is made accessible in this version's release. Given the prominence of the province in the records of the gathered data (60.3% of the replies), only the subset of survey responses where the participant acknowledges residing in Ontario are made available.

* Training the model to predict the future data recorded in the platform provided
* Giving respective solution based on the seriousness

**References:**

* [**https://physionet.org/content/flatten-covid-survey/1.0/**](https://physionet.org/content/flatten-covid-survey/1.0/)
* Have also referred your Word file.