

## Asynchronous Experiment Session

### Week 10 Session 1-2021

#### Case study

The World Health Organization estimates that 1.3 million Kenyans suffer from untreated major depressive disorder (MDD; commonly known as depression) every year, and that sub-Saharan Africa has the highest prevalence of the illness of any region in the world. Yet mental health treatment in Kenya suffers from a lack of resources and stigmatization. There are only two certified psychiatrists per million people in Kenya. Few facilities exist outside of urban areas and people are unlikely to know about or access them. There is urgent need to find a model that may provide an understanding on whether a particular person is suffering from depression or not.

#### Data Source

<https://zindi.africa/competitions/busara-mental-health-prediction-challenge/data>. The dataset is labelled **train.csv** (305.5 KB) with 950 samples

#### Experiment instructions

Your group is requested to suggest and provide a solution to the above-mentioned problem. You need to apply all techniques we have covered in class to date. Please justify all solution with clarity on every step/stage i.e. from data wrangling, feature engineering to performance metrics visualization. You are free to choose any model of your choice.