

Depth

Prediction of depression for Twitter users

Authors: Walaa Alsubhi - Asrar Alzhrani - Fatima Assiri - Limah Alkhulifi

Email: depthapp.team@gmail.com

Supervised by: Dr. Muhammad Arif

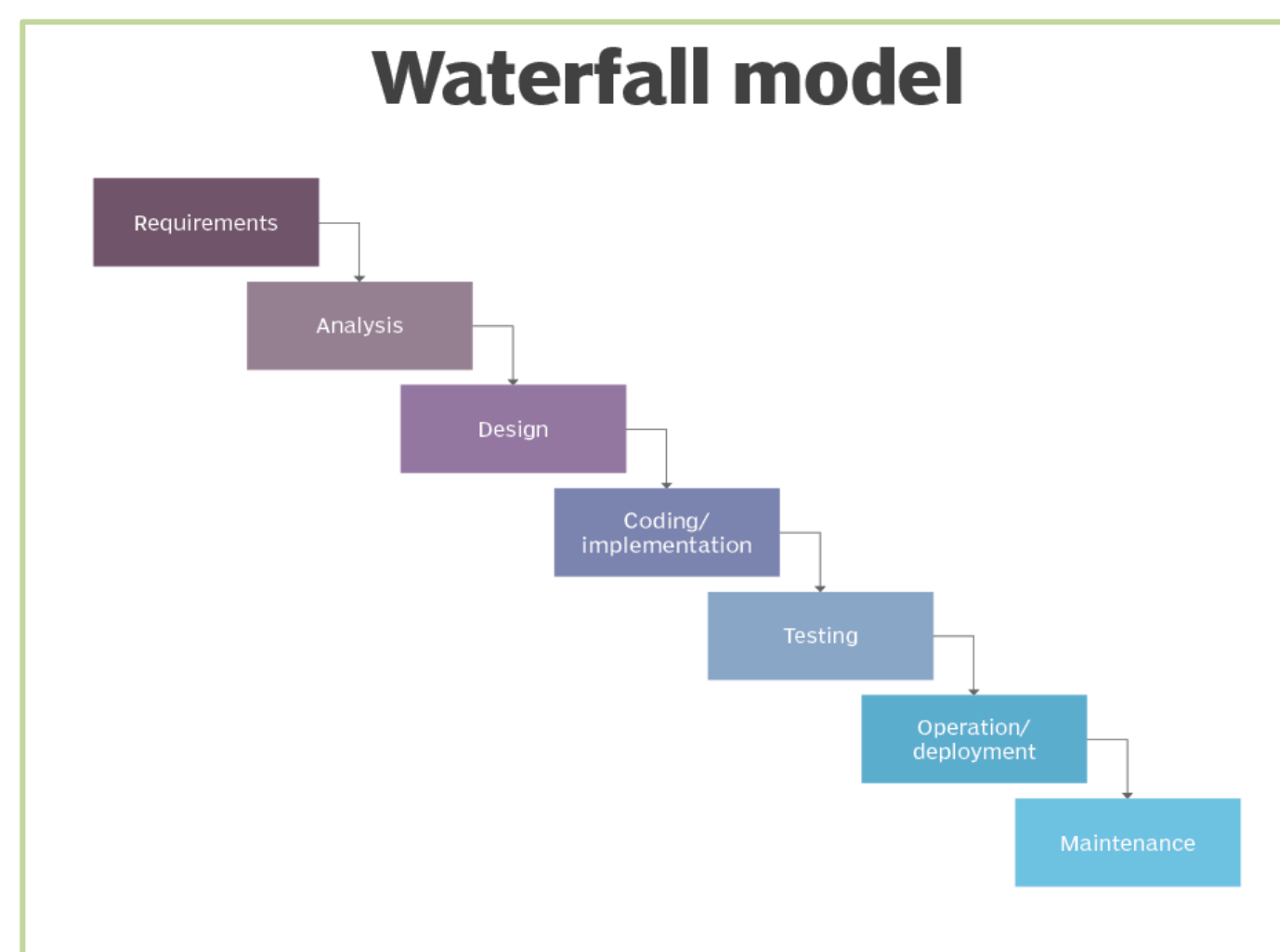
Department of computer science – Umm Al-Qura University – Makkah - KSA



ABSTRACT

Depression is one of the most popular mental illnesses between people. Nowadays, the proportion of the people with this disease increased according to psychologists, it exposes many people to danger and it leads them to suicide. Moreover, sleep, eating, mood, communication, the way of thinking about them self all of it have an effect on a depressed person. We reach the depth of the human through words that affect depressed people to alleviate or treat them. We aim to predict the depression of Twitter users through their Tweets by offering the report of statistics of the user's depression and help reduce it in our application. We provide to all users with a report of statistics of the depression, viewing some yoga exercises, proper tips. For depressed users, we make a direct counseling with a doctor, and show daily depressed tweets. We will gather dataset from tweets by TWINT tool then analyze dataset by preprocessing it from dictionary, so it gives sentiment analysis then classifier by naive bays algorithm. Therefore, it will detect whether a user has depression or not. Finally, we hope to help most of the depressed people perfectly and discover that they have depression from the beginning step before reaching the highest level of diagnosis.

METHODOLOGY



STATISTIC FOR DEPRESSION

Depression is one of the most prevalent mental illnesses at the moment and scientific studies confirm the high incidence in the future. Everybody is susceptible to it and psychological depression, is not only a mental illness, but also affects all the body parts. Medical studies have shown that providing appropriate treatment helps treat about 80% of depression. Through our project we reach the depth of the human via the words affect them in order to alleviate or treat depression for depressed. In the figure 1, there are statistics for countries in the world showing the increase in depression in the last decade

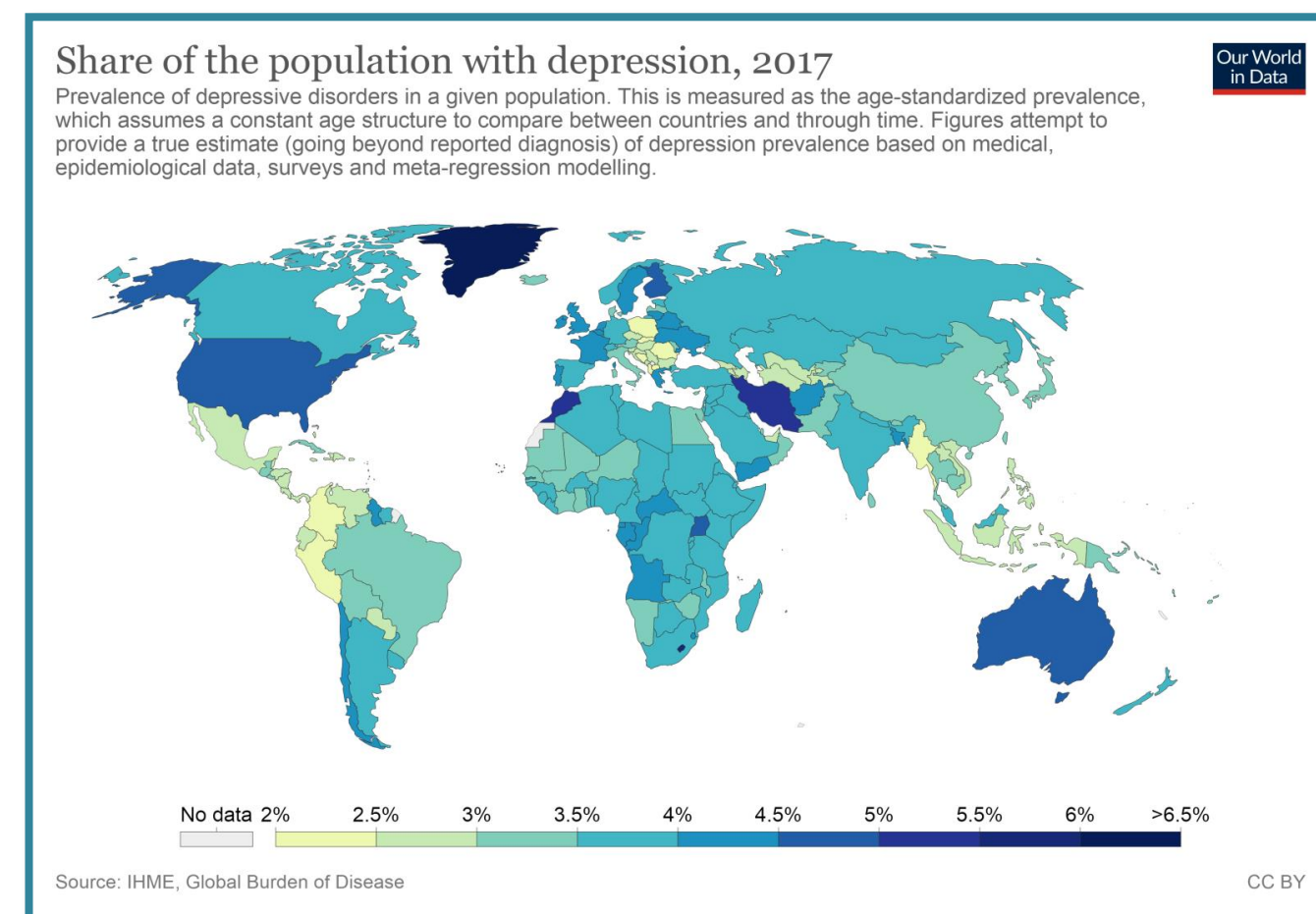


Figure 1: Statistic for depression

OBJECTIVES

- Predicting the presence of depression among Twitter users
- helps reduce it with positive advice
- Providing a psychiatric consultation with a doctor, as a psychological treatment
- Offering yoga exercises as a natural remedy

MECHANISM OF ACTION

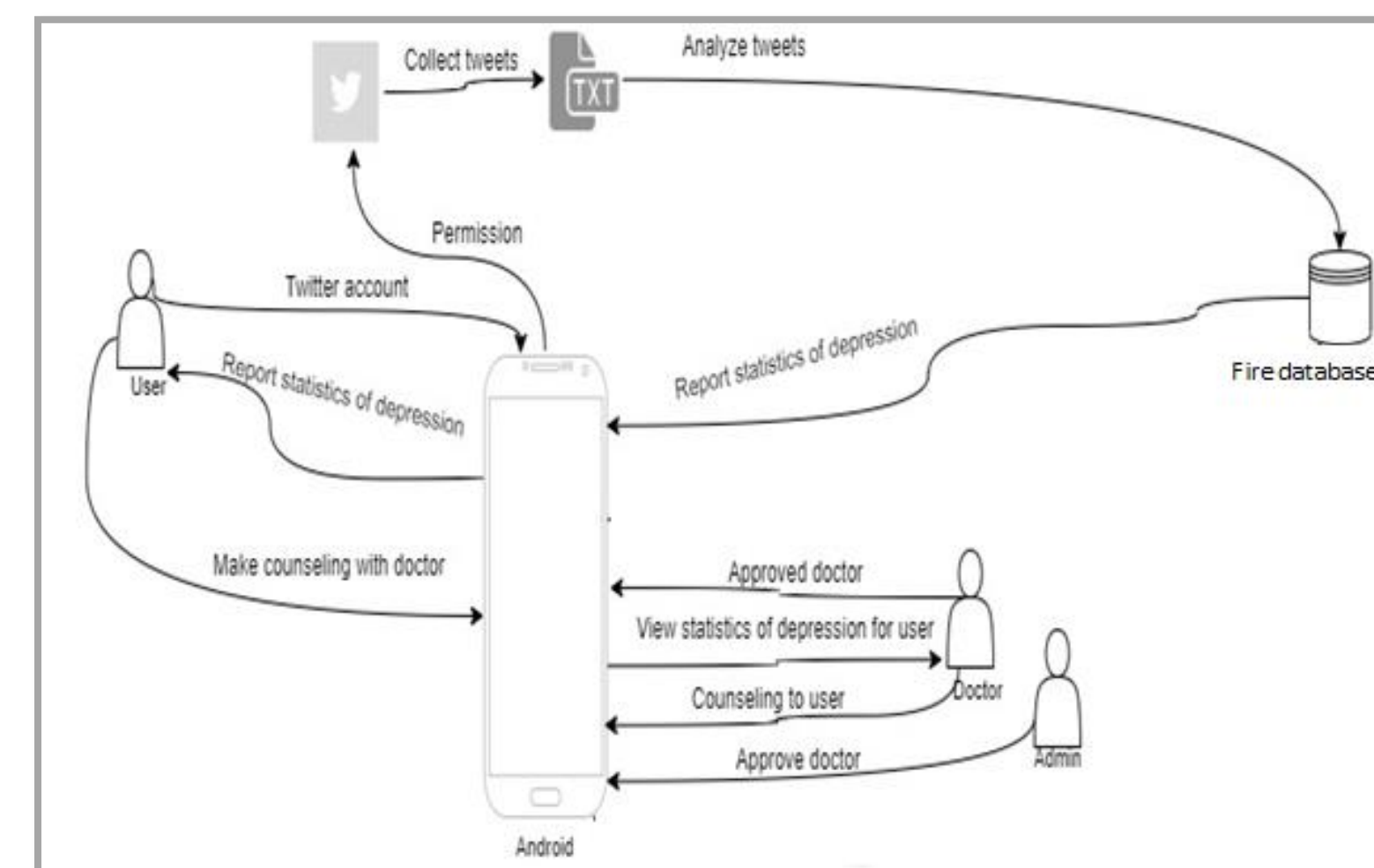


Figure 2: Mechanism of action

Tweet's preprocessing texts shown in figure 3

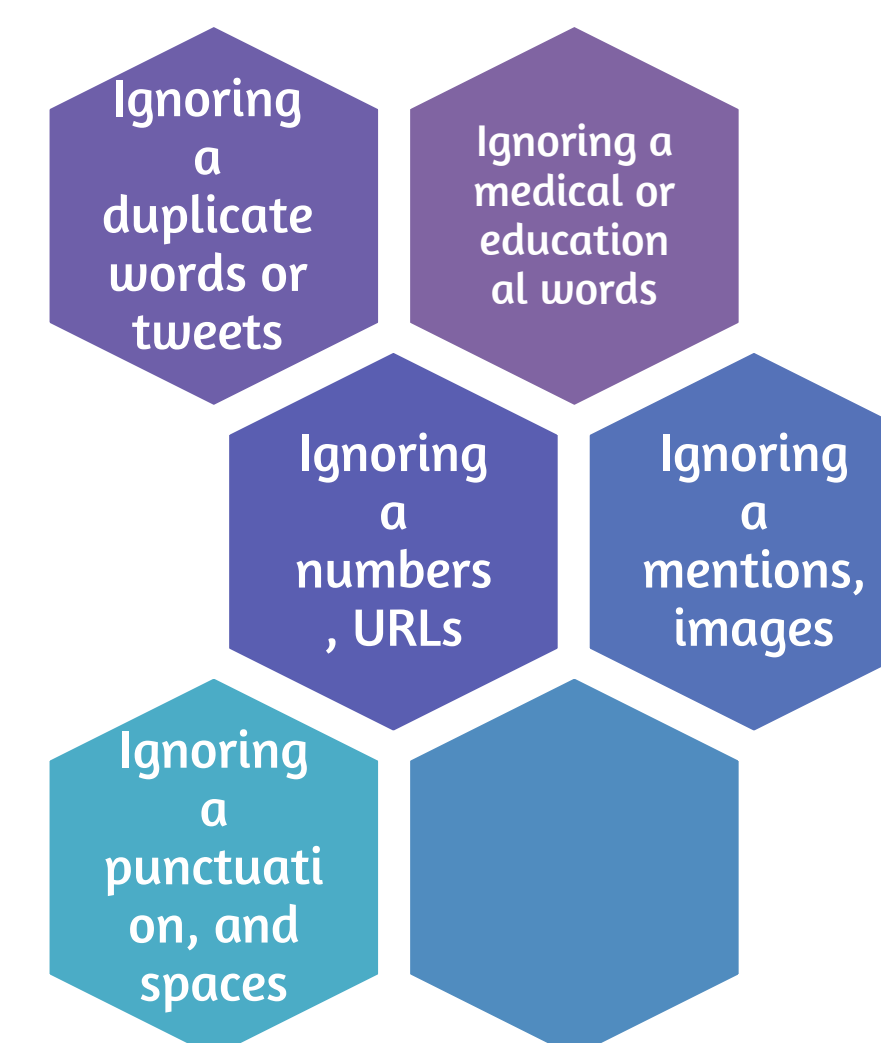


Figure 3: Tweet's preprocessing text

FUTURE PLAN

- In the future, we plan to increase and improve some functions in our application to provide a better user experience:
- Ultimately envision the model being implemented in a wearable device (Smart Watch) or home device
 - Add more feature about history of depression ,like a graph of user contain average depression monthly
 - Provide a voice detector response to the voice of users
 - Make an organization for mental disease and to make a website of this idea

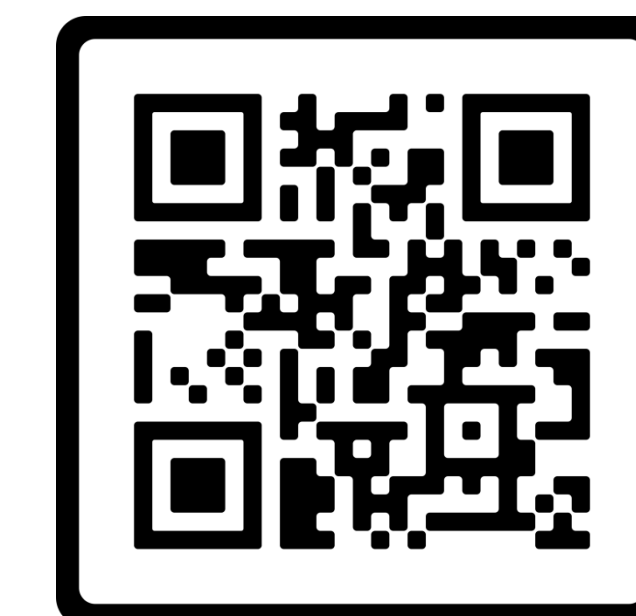
RESULTS

- The project is capable to:
- Predicting depression through English tweets
 - Reducing severe depression and finding solutions to treat it through psychological methods
 - More response for depressed people to speak with Doctor counseling

TOOLS



REFERENCES



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