The Solution of Depression Lying in a Programming Language

Upma Gandhi
Department of Computer Science
Kalindi College, University of Delhi

Abstract— Mental health is as treasured as equally as physical health. Being happy has now become a need. Depression has rooted deep in this modern age of technology. We have lost our cherished open environment for the sake of our so called privacy. Psychologist are the best solution but not in the country where a person facing depression is psycho. Every person can't go to inaccessible and costlier psychologists for help. But nearly everyone possesses a mobile phone. Through this concept, an application will be programmed in the most utilitarian programming language java. The issue is considered, giving us personality websites. These will definitely help to analyze what we are, but doesn't assist us to solve our daily mental complications. The application discussed in this paper will ease the user's conscious mind and revive the healthier state step by step.

Keywords: Psychometrics Centre, Cleverbot, myPersonality

I. INTRODUCTION

Today in this connected world, everyone is accessible, but not everyone is reached. The distances as well as unavoidable psychological situations lead to depression. Everyone occasionally feels blue or sad, but these feelings usually pass within a couple of days. When a person has depression, it interferes with his or her daily life and routine, such as going to work or school, taking care of children, and relationships with family and friends. Depression causes pain for the person who has it and for those who care about him or her. One of the most influential results is loneliness. Loneliness is the unpleasant experience that occurs when a person's network of social relationships is significantly deficient in quantity or quality. The subjective psychological discomfort people experience when their network of social relationships is significantly deficient in either quality or quantity generally results in loneliness. Having talked about the problem, the solution comes after with light steps. Java programming language, the game changer of the decade. Java is the most efficient as well as robust programming language in the current time. There are many places where Java is used in real world, starting from commercial e-commerce website to android apps, from scientific application to financial applications like electronic trading systems, from games like Minecraft to desktop applications like Eclipse, Net beans and IntelliJ, from open source library to J2ME apps etc.

The most essential advantage of this language is its platform independency. Java is both compiler & interpreter based language. When the source code (java code) is compiled, it gets converted to native code known as BYTE CODE which is portable & can be easily executed on all operating systems. Byte code generated is basically represented in hex decimal format. Hexa decimal format is the same on every platform be it windows or Linux, Solaris work station or Macintosh. After compilation, the interpreter reads the generated byte code & translates it according to the host machine. Byte code is interpreted by Java Virtual Machine which is available with all the existing operating system. Hence to run java program, to a new platform, we only need required to port the interpreter and some of the library routines. This sensational programming language is basically every existing field from renowned application like whatsapp to the secured software of banking. Psychology with java, a new rather than odd combination is presented in this paper. A user assurance application development can change the meaning of technology, taking it from complexity to the path of simplicity. This app will analyse user's Complications related to the mental and emotional state of a person and will provide the necessary advises and various options to deal with it. Sometimes we only need a little push, this app will be that push for the user.

II. EXITING TECHNIQUES

There are some existing applications on personality analysis, future prediction, character selection etc. on social networking sites. These apps work on the algorithm of limited calculation of the simple common questions asked by the user. Also the results provided to the user are also very similar. There is very less research done on the collaboration of psychological with technology. The existing techniques concentrate on many aspects of user's answer.

A. MyPersonality:

Youyou Wu and Michal Kosinski worked on the myPersonality Facebook application. Wu is a social psychologist at the University of Cambridge's Psychometrics Centre, interned at Facebook, and Kosinski, a computer scientist at Stanford University, In a paper published online today in the Proceedings of the National Academy of Sciences, the researchers show that yes, computers can know us better than we know each other, at least as measured by a computerized personality test.

Wu and her colleagues analyzed a database of my Personality's 100-item questionnaires that measured users on a Five Factor Model of Personality, gathering data on how open, conscientious, extroverted, agreeable and neurotic people were. Users could also ask friends to assess their personalities using an abbreviated, 10-question version of the test, and my Personality database now contains more than 300,000 such friend-ratings. People who use the app can opt in to share their anonymized personality ratings and Facebook data for research purposes, and more than 40 percent of the app's 7.5 million

users have done so. Wu and Kosinski developed an algorithm that predicts somebody's Five Factor personality type using only Facebook likes. Using a sample of 17,622 U.S. participants who had been judged by at least one friend and a group of 14,410 users who'd had two friends fill out the 10-question survey, the researchers measured correlations between the self-judgments of personality and the judgments made by Facebook friends. The average Facebook user had liked about 227 items, but the computer program needed only 100 likes to outperform the average human judge. The model predicted the average person's five-trait personality better than their work colleagues, Facebook friends, and even some of their family members. Only spouses outperformed the model, on average. Given enough likes, the computer can always outperform humans, Wu said. The ability to create an accurate personality profile depends on having enough relevant information to work with, and in some cases, the computer has more signals and can better access and assess them than the human mind can. "Even if I gave you a list of likes, you might not be able to remember them or make sense of all of them," Wu said. Another advantage: Computers can generate algorithms to make predictions in a rational and consistent way, while people often fall prey to bias by giving undue weight to certain things.

People are unlikely to fall in love with a computer program that merely predicts their five-trait personality profile, and it's probably overreaching to sell this model as superior to human judgment just yet. Yes, the differences between the computer and the humans were significant in a statistical sense, but it's also a very large sample size, and that means most differences will reach such significance, said Joshua Miller, a clinical psychologist who studies personality at the University of Georgia. This study's bottom line is that a computer can outperform humans at predicting a score on a computer test, and that's hardly surprising. In real life, the computer probably isn't meaningfully superior to humans in ways that matter. But that doesn't make this finding less impressive, said Miller, because it hints at what might be possible. Facebook likes are some of the most basic, visible digital fingerprints that a person leaves on the Internet.

B. Cleverbot

Cleverbot is a web application that uses an artificial intelligence algorithm to have conversations with humans. It was created by the British AI scientist Rollo Carpenter. It is unique in the sense that it learns from humans, remembering words within its Artificial Intelligence. In its first decade Cleverbot held several thousand conversations with Carpenter and his associates. It was launched on the web in 1997; the number of conversations held has exceeded 150 million. Since 1997, Cleverbot has engaged in about 65 million conversations with Internet users around the world, who chat with it for fun via the Cleverbot website. Cleverbot "learns" from the conversations with the human, same as a person learns from his experience. It stores them all in its database of huge capacity, and in every future conversation, its responses to questions and comments mimic past human responses to those same questions and comments. Another theory behind Cleverbot is that, when a human talk, it doesn't talk to the bot, but to another human being. Cleverbot just switch the connection after two three dialogues, before one can understand that they are talking to another human. The connection is switched on predefined words like human, robot. It's a good way of communication but doesn't provide any satisfaction or advice to ease one's problem.

C. The Psychometrics Centre

This is an application centre of University of Cambridge. Its consists of various application which includes Concerto, Apply magic sauce, research in psychology with computer science and 30 years of experience in psychometric test development and are pioneers in adaptive testing and personality targeting technology. These applications provide a wide range of personality applications to the user having different analysis of human's traits. One of these applications present the user with the access to build own adaptive personality tests. This application is efficient to present the traits of the user but does not provide any psychological assistance related to the mantel health of the user.

III. FROM BOOKS TO SCREEN

A. Concept Used

The application will base on the concept of interaction as well as filling the gap between user and programmer. This application will work on the predefined algorithm of defining the users issue by the help of certain authentic questions. The new aspect will be that the user will be able to add the privileges of adding there memorable videos as well as voices of their loved ones that can instantly snatch them out of their darkness. This application uses all the vital advantages of java and adds a mile to the calculated application with an emotional touch.

B. Phase

The application will me password protected enabling the user to use the privacy space efficiently. Firstly the user will be asked with a questionnaire based on depression related issues. Each question will reflect a particular complication related to the mental health of the issue. According to the observations based on the question, a particular distress is analyzed. The professional advice of the authenticated psychologist will be reflected on the screen. In the next phase, the inspiring videos will be provided to the user order to connect with user conscious mind and to give a consenting visual related to user's problem. Next will indelible phase. A human is an emotional being having a bucket full of emotional feelings. We connect to those who understand us, but there are some relations that are gifted by lord to the lucky ones. The time we spend, the bonding, the love affects our way of thinking and shapes it. In the time of stress any advice from any application or psychologist will be less effective than a simple, honest, assuring talk with a loved one. So in his phase, user can record the voices of their loved ones that will help them in future to deal with their dark time. Death, distances, ego often takes us away from our precious ones, if their voices will be with us, then we will get our strength. We know ourselves better than anyone. In the second phase, the application will enable the user to add the voices according to the various categories of the mood. The user will also be able to define the different moods, whichever they like. They voice that will bring peace to us, will be

able to relax the user. The relaxation process will be the end of second phase. The end of second phase will show the user the audios in a perfect order, so that next time the user will login in a problematic situation, solution will be ready wearing tie to present its services. The third phase is the encouragement phase. Humans have a tendency to take challenges when they observe that another human with same conditions and resources achieve their destination. They aspire to follow the same path of hard work, dedication and commitment. This phase present the user with the required motivational videos, documentaries on the lives of people having the same problem. The videos will depict their journey and how they overcome their difficulties. The third phase will be the most important phase as it enables the user to understand that everywhere there is a problem, the solution is not far behind. Next will be the fourth phase which concentrates on the basic do's and don'ts for the user. The points will be provided by the valid psychologist. According to the issue, these points will help the user to concentrate on the reviving process. Now the user will be in the mental state of understand as well as reasoning the decisions that what is right and what is wrong. The simple but effective activities will be based on enlightening the user .The application will end with the fifth phase of quotation. It is said that words have more power than a sword. Sometimes, some ordinary words, when used together can do miracles to the human mind. This phase will give the last but effective teachings from some exceptional people.

C. Technology Used

Java has a lot of features to build this kind of application, but most useful will be Swing. Swing is a GUI widget toolkit for Java. It is part of Oracle's Java Foundation Classes (JFC) — an API for providing a graphical user interface (GUI) for Java programs. Swing was developed to provide a more sophisticated set of GUI components than the earlier Abstract Window Toolkit (AWT). Swing provides a native look and feel that emulates the look and feel of several platforms, and also supports a pluggable look and feel that allows applications to have a look and feel unrelated to the underlying platform. It has more powerful and flexible components than AWT. Swing provides several advanced components such as tabbed panel, scroll panes, trees, tables, and lists.

IV. Conclusion

The objective of this paper is to analyze that whether a java application could fulfill the psychological assistance to the user. In five phases of this application, a user will the valid as well as necessary advices and enough support in order to step out from any mental situation. A human mind is the greatest creation of the almighty and mighty in every aspect. Our conscious mind must remain healthy in order to lead a peaceful life. A technology which provides the assistance to human work is now able to provide the path to the peace of mind.

References

[1] Daniel Perlman, Letitia Anne Peplau, [Online]. Available: http://www.peplaulab.ucla.edu/Peplau_Lab/Publications_files/Perlman%20%26%20Peplau%2098.pdf
[2] National Institute of Mental Health, [Online]. Available: http://www.oiec.state.tx.us/documents/mhfadepression.pdf
[3] Life Science, [Online]. Available: http://www.livescience.com/
[4] ASCHWANDEN, [Online]. Available: http://fivethirtyeight.com/datalab/this-algorithm-knows-you-better-than-your-facebook-friends-do/
[5] Scary reasoned, [Online]. Available: https://scaryreasoner.wordpress.com/2010/12/03/i-think-i-know-how-cleverbot-works/
[6] University of Cambridge, official website [Online]. Available: chometrics.cam.ac.uk
[7] Wikipedia, https://en.wikipedia.org/wiki/Main_Page