

Mental Health App using React Native

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Abstract:

The project focuses on building a mental health tracker which will try to get an idea of the mental state of the user, find out if they are suffering and then suggest measures they can take to get out of their present condition. A user answers some questions and based on the answers that they provide, you will suggest tasks to them and maintain a record of their mental state for displaying on a dashboard. Mental disorders are widespread in countries all over the world. Nevertheless, there is a global shortage in human resources delivering mental health services. Leaving people with mental disorders untreated may increase suicide attempts and mortality. To address this matter of limited resources, conversational agents have gained momentum in the last years.

Keywords: Mental Health, Survey, Relaxation, React-native, app.

I. INTRODUCTION

Mental disorders are widespread in countries all over the world. Nevertheless, there is a global shortage in human resources delivering mental health services. Leaving people with mental disorders untreated may increase suicide attempts and mortality. To address this matter of limited resources, conversational agents have gained momentum in the last years. In this work, we introduce a mobile application with integrated Chatbot that implements methods from cognitive behaviour therapy to support mentally ill people in regulating emotions and dealing with thoughts and feelings. Application asks the user on a daily basis on events that occurred and on emotions.

The project focuses on building a mental health tracker. We will try to get an idea of the mental state of the user, find out if they are suffering and then suggest measures they can take to get out of their present condition. A user answers some questions and based on the answers that they provide, you will suggest tasks to them. We used React Native to build cross-platform application.

B. Problem Statement

In this competitive, fast paced, age of computers it's very easy for people to fall prey to stress, anxiety, anger, depression, low self esteem to name a few. Mental health is an issue which has certain stigma about it and is easily discarded and ignored.

Especially when most of the countries went into lockdown, it is very easy for people to feel alienated, unmotivated and stressed which when coupled with anxiety, overthinking and irritation have led few to self-harm with some even losing their lives to mental health.

C. Objectives

The project focuses on building a mental health tracker. We will try to get an idea of the mental state of the user, find out if they are suffering and then suggest measures they can take to get out of their present condition. A user answers some questions and based on the answers that they provide, you will suggest tasks to them and maintain a record of their mental state for displaying on a dashboard.

II. SYSTEM DESIGN

We will be designing which contains closed set of Questionnaires which have some weight associated with each question. All those users who have successfully registered then user will be first login to our app and then answer those questions. It asks you questions about your daily mental health. You select answers from options, and the app analyzes your answers and suggests "tasks" for each day that benefits your mental health. It gives the user hope that they are helping others by helping themselves and encourages them to complete more tasks and make their day healthier. In the long run, they can

feel accomplished, which further motivates them to wake up the next day to complete more tasks, ensuring overall mental and physical well being. If they have responded to questionnaire earlier they will be redirected to their dashboard.

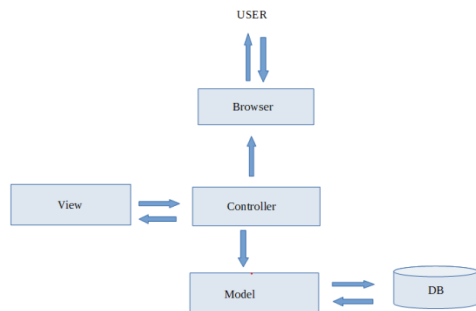


Figure 1: Project Design

B. Operations

Operations

Operations that will be done by user on our product are:

- A user can do registration if they are new users.
- After successful registration, user will be able to login to our site any time.
- All those registered users, if don't have given any test then they will be redirected to test page as soon as they will login.
- All those users who have successfully registered, if they have responded to questionnaire earlier they will be redirected to their dashboard.
- As soon as the questions is answered the results of every disorders level is displayed and can even see these results in profile page.
- All the users will get some remedies to follow
- Users can also listen to music and can have to a happy little chatbot to talk with, daily doses of inspirational quotes to constantly lift your spirits up, lifestyle guidance curated issue-wise.
- Users can checks blogs and write their journals.
- A list of types of specialists viz. Psychologists in the therapists page, user can book appointment through that.

C. Features

- Login / Register
- Survey about the User through Questionnaires
- Little Chatbot
- Meme Generation and share
- Quotes of the day
- Tracks to Listen

- Blogs and Journals
- Therapists Page

D. Flowchart

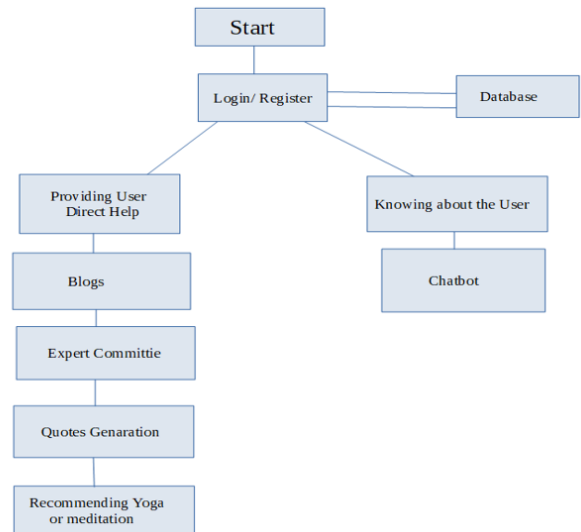


Figure 2: Flowchart of project
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III. IMPLEMENTATION

1	Operating System	Windows
2	Language	Javascript, React Js, React Native, nodejs,CSS
3	IDE	Visual Code Studio
4	Output	Android or IOS

Table 1 : Software Requirement

B. Technology

• React.js: React is a JavaScript library for building user interfaces. It helps us to build encapsulated components that manage their own state, then composes them to make complex UIs. Since component logic is written in JavaScript you can easily pass rich data through your app and keep the state out of the DOM. Also, React can power web apps through React Native.

• Node.js: Node.js is an open-source, cross-platform, back-end JavaScript runtime environment that runs on the V8 engine and executes JavaScript code outside a web browser. Node.js helps us to do server-side scripting with the help of JavaScript which makes it easy to create a web app as you don't have to learn any

other scripting language. Just like React we will be using a library, Express.js for creating our server as it makes our task easy.

React-Native: React Native is a JavaScript framework for writing real, natively rendering mobile applications for iOS and Android. It's based on React, Facebook's JavaScript library for building user interfaces, but instead of targeting the browser, it targets mobile platforms.

IV. RESULT

Signup: Enter full name, email, age, Gender and set a password and confirm.

Login: Login using email id and password.

Survey: After successfully login, user needs to answers to 40 questions which is about their mental state.

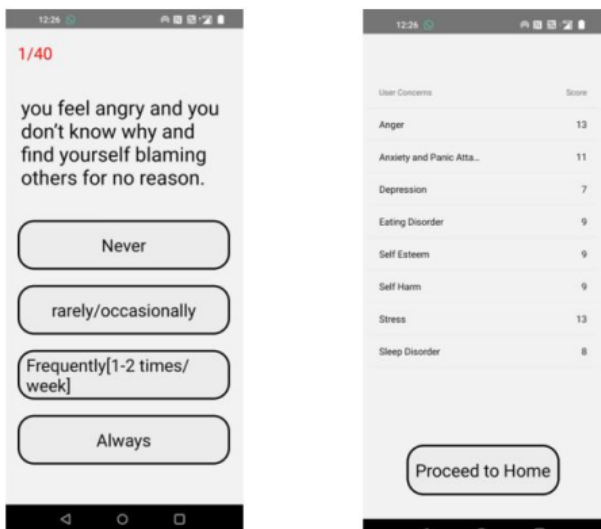


Figure 3: Survey page

Profile Gist: You can see your name in this area. By clicking the profile icon you can visit your complete profile.

1. Profile page: See complete profile comprising your details as entered during signup and concerns/issues selected after signup. See a list of your future appointments. Click on the edit button on top right to edit your details and concerns.



Figure 4: Chatbot

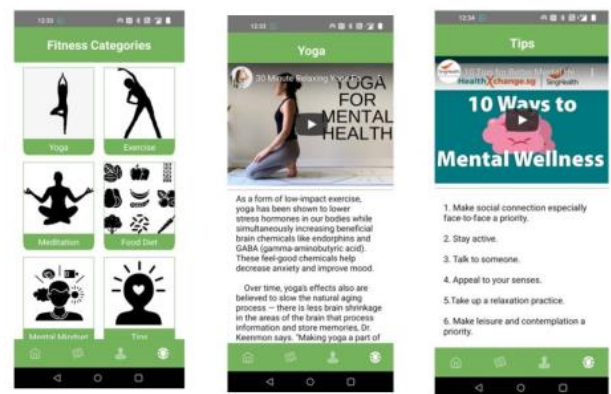


Figure 5: Fitness page

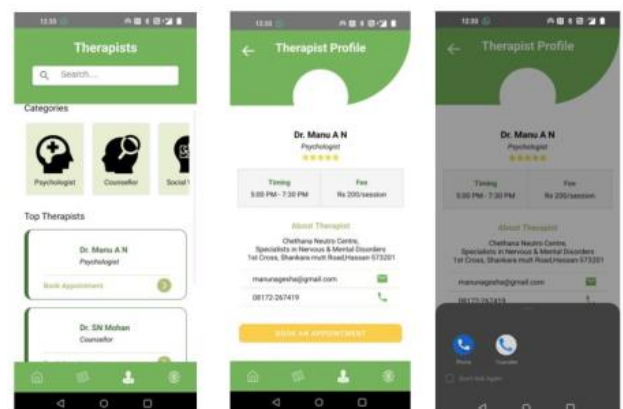


Figure 6 : Therapists page

V. CONCLUSION

The idea of inescapable mental health betterment for human services is perceived as one potential treatment choice by using android platform self analyzing treatment. Cell phones are identified as a promising innovation stage through which to actualize it. Moreover, the amount and unwavering quality, as well as the nature of information, is enhanced when self-evaluation surveys are issued through altogether outlined cell phone interfaces contrasted with the best in class paperbased versions. The perfect approach emphatically relies upon the particular application. These is easy to use and interactive mental health apps dealt with specific mental health concerns. Relaxation was the common technique used to deal with these concerns.

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