

# **Software Requirements** **Specification** **for Emoup**

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## **CATEGORY:** Mobile Application

### **PURPOSE**

The purpose of developing this “EmoUp” is to improve the mental health of its users by boosting their confidence and decreasing the stress and anxiety levels that the users are experiencing during these hard times.

### **INTRODUCTION**

Introduction contain the following sub categories

#### **Existing System**

There are some available applications that accomplish the need for boosting our mental health condition whenever we feel low. Many applications deal with lowering the percentage of mental problems, suicide rates, Anxiety, Depression, Obsessive-Compulsive Disorder, Post-Traumatic Stress Disorder.

The problem with the existing solution is that they depend on the manual inputs from the user to analyze the mood which may lead to an inaccurate solution as well as an uncomfortable experience.

#### **Proposed System**

EmoUp is the one-stop solution for all things positive. One of the main features of Emoup is to intelligently get the person's emotion by recognising its face, where users can then further move to our emotion rebalancing center. Based on the emotion detected , the user can than choose one of the four therapies offered in our app which consists of :

- Music Therapy
- Inspiration Therapy
- Expression Therapy
- Video Therapy

Based on emotion, we will play a music to get a cheerful mood back, inspiration therapy gives boost using famous inspirational quotes, in expression therapy users can write down their thoughts as a form of self-reflection and find reasons for gratitude in their daily life and finally in video therapy users can dive into whole new relaxing world created using echoAR.

#### **Advantages for Users**

- **No manual inputs :** The user need not give manual inputs as the app provides an intelligent way of emotion detection using face recognition.
- **Integration of different therapies :** The app offers four different therapies and hence there is no need to use different platforms to get different therapies . This gives a comfortable experience to users and helps us to analyse the user in a better way.

## FUNCTIONAL REQUIREMENTS

- **Emotion detection** : As the user opens the app , the camera automatically detects the face and predicts the emotion of the user.
- **Selection of therapy** : After the emotion detection , the user can select any one of the four therapies provided.
- **Effective solution** : After the selection of therapy , the user should get an effective solution.
- **Weekly health reports** : Users should get weekly health reports.

## NON FUNCTIONAL REQUIREMENTS

- **Performance Requirements:** The system should use memory efficiently as there will be a lot of users and their data. System needs to process a large chunk of data and compute the emotional routes based on the inputs from the users cognitive response.
- **Security Requirements:** The data being fed into the system will be made available to the general public and can be used by analysts to improve the algorithms. All the data generated will be open source under Apache license.
- **Stress:** The application must support approximately 100 users at the time of launch which would be spread across multiple cities.
- **Scalability:** With ever increasing anxiety problems we need to create a microservice architecture to deal with increasing users.
- **Software Quality Attributes:** The end user application will be used by the general public of all age and for the very reason the app needs to be easy to use and provide all the necessary features handy. Similar dashboard for users needs to be provided so as to provide easy access to their weekly reports.

## TECH STACK :

- **User Interface Design** : Figma
- **Database** : MongoDB
- **Cognitive Services** : Azure
- **API Interface** : Fast API
- **Languages** : Dart, Python
- **Server** : Microsoft azure