CHANGE OF FEELING:
DEVELOPMENT OF AN EMOTION TRACKING APPLICATION

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Everyone has different emotions throughout the day. They can be happy, and they can be sad at some times. However, it will be serious if they did not notice that they have negative emotions for a long time.

Understanding emotion is an important starting point to help you to find out the cause of the emotion and manage them.

People who are aware of their emotion can manage their lifestyle choices in a better way.

It can be explained as they are able to make clear-headed decisions, or they can choose to seek for mental health professionals to prevent the triggers of negative emotions.
What are the problems?

- Most people in modern life have their own emotional challenges.
- Some people don’t aware and understand of their own emotion.
- Existing applications requires users to select the predefined emotion.
- Existing applications do not provide further help on user based on their emotion patterns.
RESEARCH BACKGROUND

• In order to improve mental health from mental disorder, the fundamental requirement is to understand the emotion [6]. People who understand their emotion are able to take an action to control themselves.

• Most people often use their smartphone to search for advice through online or find an application to assist them. The reason is that smartphone is convenient to bring along at anytime and anywhere. Therefore, there are many smartphone applications available to promote the awareness for understanding emotion.

• Application with emotion tracking function is also believed to encourage the users to manage themselves [7]. The users can access the applications and enter the data in real time instead of finding a computer or paper to participate into the process of understanding emotion [8].
RESEARCH BACKGROUND

DOMAIN BACKGROUND

Method for Emotion Recognition

- Facial Expression
- Speech
- Manual Picking

Tools

- Artificial Intelligence
- Predefined mood
- Pick-A-Mood pictorial tool

Services

- Firebase

Database

- Cloud Database
- Real-time database

Operating System

- IOS
- Android

Programming Language

- Kotlin
- Java
Our initiative

It is a positive psychology technique and has been suggested as a self-help method.

Emotion tracking application is developed to encourage users to monitor their emotion.

Pick-a-mood pictorial tool is used in this application to determine user emotion.

Able to calculate percentage of each emotion category recorded and display the result. The recommendations of self-care are provided too in this application.
METHODOLOGY : HOW WE DO IT?

• Object-oriented System Development (OOSD) MODEL
  • Object-oriented Planning Phase
  • Object-oriented Analysis Phase
  • Object-oriented Design Phase
  • Object-oriented Implementation Phase
  • Object-oriented Testing And Maintenance Phase.

• PICK-A-MOOD PICTORIAL TOOL is utilized to determine emotion
METHODOLOGY : HOW WE DO IT?

- Development using Java, XML and Firebase
- Running on Android platform

<table>
<thead>
<tr>
<th>Types of users</th>
<th>Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public user (anyone that interested in emotion management)</td>
<td>Registration, log in and log out, reset password module</td>
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<tr>
<td></td>
<td>Emotion determination module</td>
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<tr>
<td></td>
<td>Profile management module</td>
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<tr>
<td></td>
<td>Report, record and recommendation module</td>
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<td></td>
<td>Reminder module</td>
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</table>
A pictorial tool with cartoon-based for reporting and expressing moods.

- Utilizes cartoon character to help people on visually express or reporting mood in easier way.

- 9 types of emotion are excited, cheerful, irritated, tense, relaxed, calm, bored, sad and neutral.

- Categorized in 5 main emotion categories, such as energized-pleasant, energized-unpleasant, calm-pleasant, calm-unpleasant, and neutral.


APPLICATION DESIGN AND DEVELOPMENT

- LOGIN PAGE
- REGISTRATION PAGE
- RESET PASSWORD PAGE
- HOME PAGE
APPLICATION DESIGN AND DEVELOPMENT

PROFILE MANAGEMENT PAGE

EMOTION DETERMINATION PAGES
APPLICATION DESIGN AND DEVELOPMENT

RECORD, REPORT, RECOMMENDATION PAGES

RECORD PAGE

REPOR

DATE

25 26 27 28 29 30

1 2 3 4 5 6 7 8 9

10 11 12 13 14 15 16

17 18 19 20 21 22 23

24 25 26 27 28 29 30

RECOMMENDATION

It's not selfish to love yourself, take care of yourself.

REMEMBER PAGE

OPEN TIME PICKER

CANCEL REMINDER
USER ACCEPTANCE TESTING

• RESPONDENTS: Students of Universiti Tun Hussein Onn Malaysia.

• JUSTIFICATION:
  • As a student, they will face with many challenges including involve with many academic and non-academic activities and interact with many individuals in which may cause them to have many different emotions in each day of their life.
  
• The responses are collected using Google Form. The demonstration video of the emotion tracking application is also provided for the respondents to view.
The evaluations are based on the features of application and the user interface of the application.
CONCLUSION

- Emotion tracking application is believed to increase the awareness of people of their own emotion.
- People also could realize the earlier signal of unstable emotional state or having negative emotion for a long time.
- Recommendations will be given by the application to encourage users to take actions on it. It can help users to achieve life stable and move back to the right path.
THANK YOU