

emojiDEPRESSION

Addressing mental health in young people.

By: Ben and Ramy

The Mental Health Problem

Case Study: Erik and Margaret

Being young is hard. Youth are constantly up against huge challenges and face high levels of pressure in their daily lives. As a result, many teens suffer from depression. Erik and Margaret are two teens living drastically different lives, but they both face the same problem - one that EmojiHealth has the capacity to solve.

Erik

I met Erik last year. He was always a great guy to talk with, but school never seemed to come very easily for him. After he was rejected by all his chosen universities, **he was diagnosed with depression.**

- | | |
|---------------------|----------------------------|
| ✔ Loves Basketball | ✗ Depressed |
| ✔ Graphic Designer | ✗ Feels hopeless & alone |
| ✔ Great team-player | ✗ Can't afford therapy |
| ✔ Energetic | ✗ Friends don't understand |

Margaret

On the surface, Margaret is the face of student success: she runs a neuroscience club, and has been accepted to prestigious universities. **However, she, too, struggles with depression.**

- | | |
|-------------------------|----------------------------------|
| ✔ Driven leader | ✗ Worried about social life |
| ✔ Incredibly gifted | ✗ Too busy to seek help |
| ✔ Able to see therapist | ✗ Scared of her peers' reactions |
| ✔ Bright future | ✗ Anxious |



Our Solution

The Interactive Chatbot Recovery Partner

emojiDepression



Purposeful:

Designed to be a recovery partner for depressed teens



Patient Focused:

Facilitates patient data retrieval for professionals



Personalized:

Provides a more interactive, organic patient experience



Educational:

Educates teens on mental health in a digestible fashion



What problems will emojiDEPRESSION solve?

1

Stigma

Stigma surrounding depression prevents diagnosed individuals from reaching out. EmojiDEPRESSION is both personal enough to make the user feel safe and interactive enough to eliminate their sense of loneliness.

2

Limited Resources

Qualified and affordable mental health professionals are hard to find, as well as difficult to access regularly. EmojiDEPRESSION limits the need for frequent checkups by quantifiably tracking the patient's progress.

3

Availability

Mental health issues are unpredictable and erratic. Critical depressive episodes may happen at any time in the absence of a professional. EmojiDEPRESSION is available 24/7 to provide temporary coping methods until further help arrives.



The Solution

Here's how chatbots can help

Chatbots help by removing the negative aspects of human interactions while providing reliable knowledge and credible resources to users.

Eliminates Stigma

Studies show that in situations where we feel we may be judged (such as when we're ordering fast-food), we actually prefer to interact with computers rather than with humans.

Reduces Anxiety

When telling a friend about your mental illness, you never know what to expect or who else will find out. Chatbots reduce this anxiety by keeping your information private, and giving reliable advice.

Reduces Patient Cost

While not a substitute for trained doctors or professionals, chatbots can reduce the cost the patient pays for repetitive tasks like checking medication.

24/7/365 Availability

Chatbots don't need to be paid overtime nor do they need to receive holiday pay, EI or CPP. They are the perfect recovery partner: always available and always reliable.



How It Will Work

The technical information to make EmojiDepression
really work for those who need it most

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Key Features



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Feature 1: Mood Calendar

Daily Checkups

User may choose the time and frequency at which the chatbot requests for calendar entries.



Organic Responses

Chatbot offers empathetic responses from a large response bank depending on user's mood.



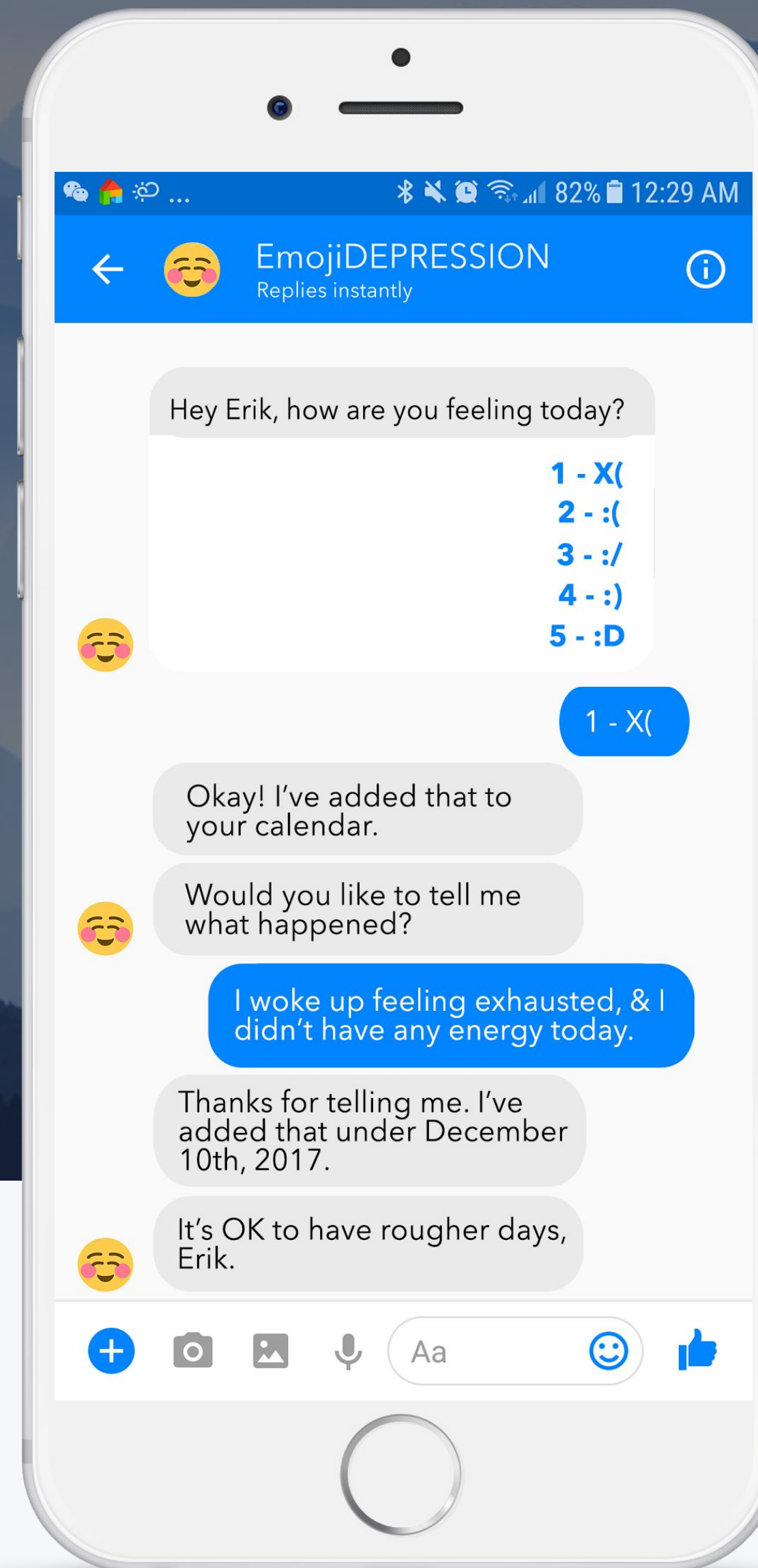
Use of Emojis

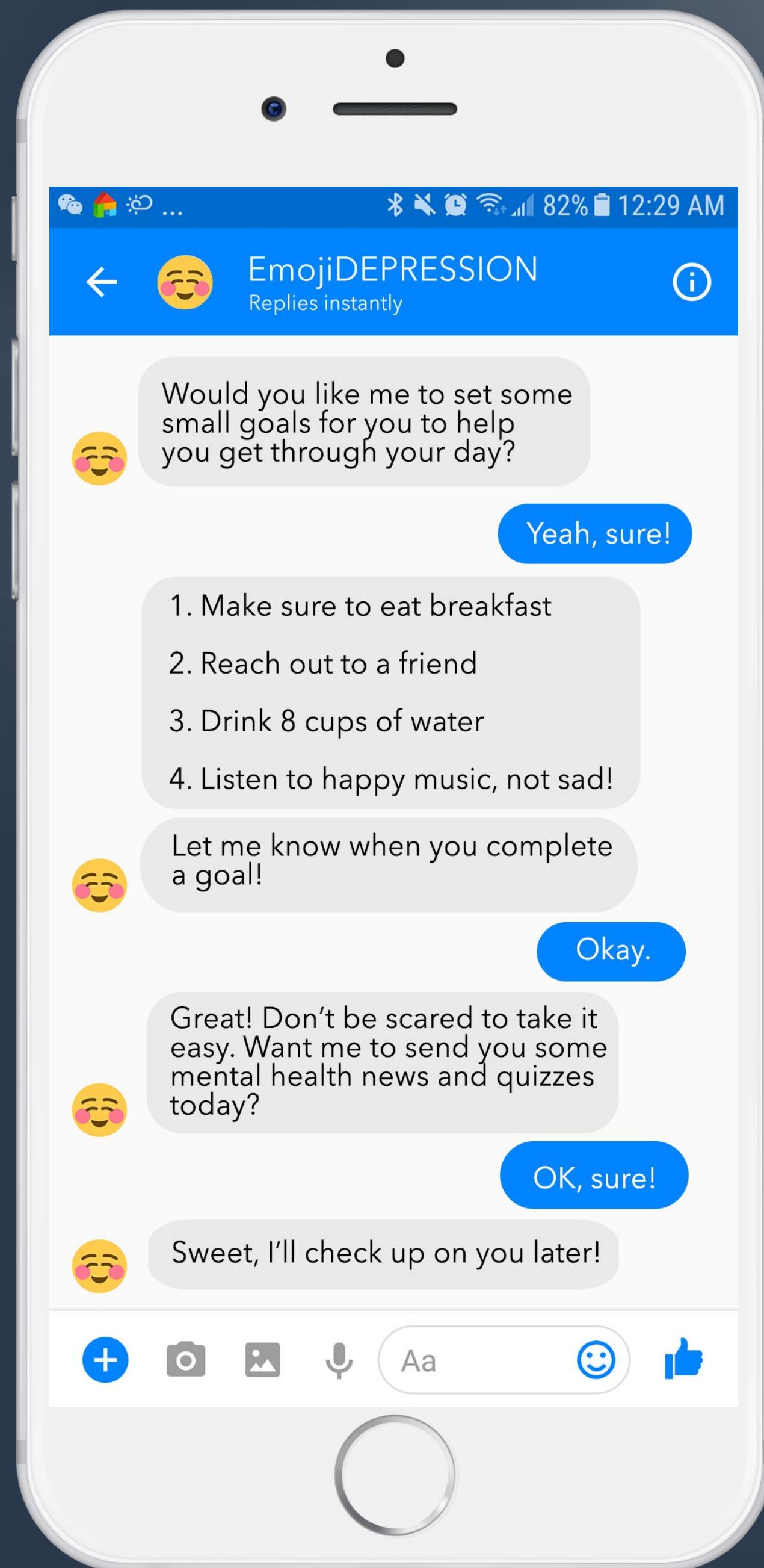
Depending on the user's mood, the chatbot will adjust emoji use in order to relate with the teen.



Casual Language

The emojiDEPRESSION chatbot uses familiar, casual language to eliminate user discomfort.





Mood Calendar: Adaptability

Chatbot pushes appropriate support content according to the patient's mood



Small Goals

Setting small goals for the user on their bad days will help motivate them to push through the rest of their day.



Quizzes

Following emojiHEALTH's quiz model, quizzes on the latest mental health treatment news will keep the user up-to-date.

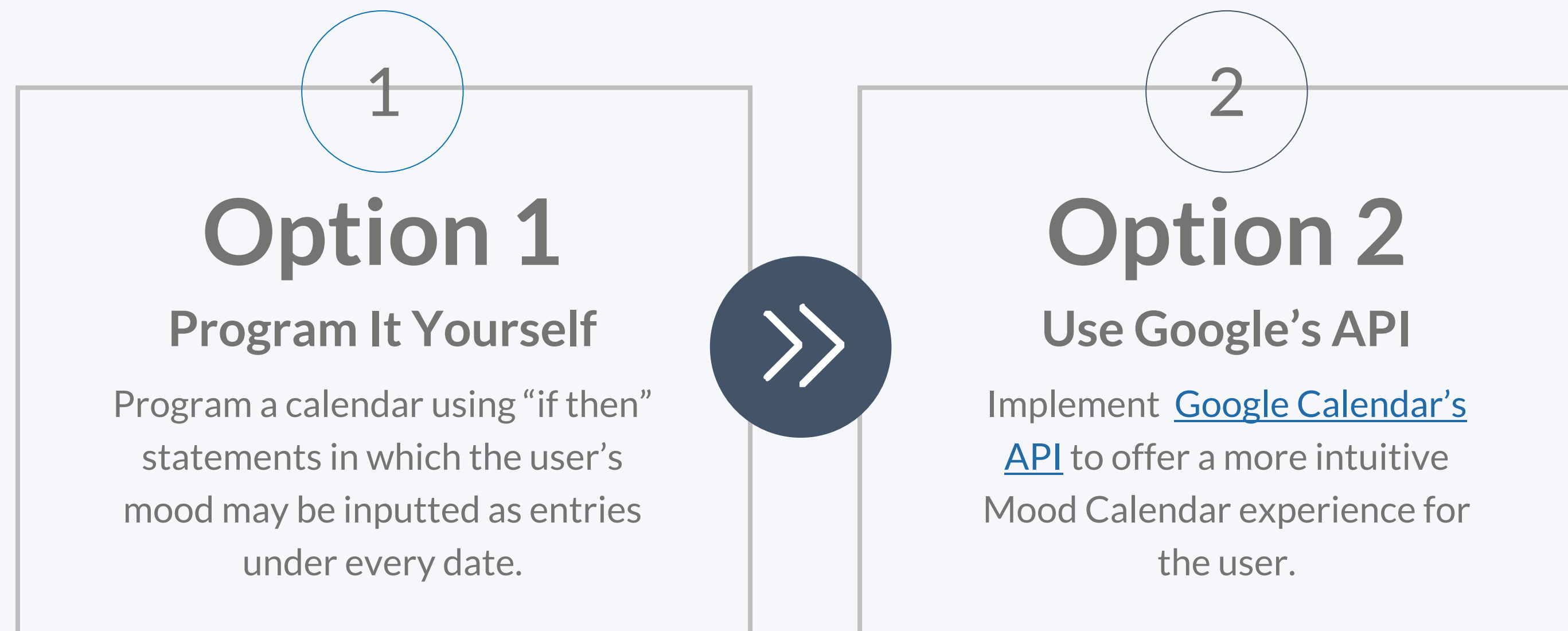


Progress Tracking

The chatbot will record all completed goals and user engagement into the mood calendar.

Implementation of the Mood Calendar

The mood calendar can be created in many ways. However, due to the nature of a chatbot, it cannot be displayed visually to the user as a standard calendar. Instead, the calendar entries would be stored in the backend database of the chatbot, waiting to be pulled out once the user's personally chosen keyword is inputted.



Feature 2: Crisis Detection

01.

Keyword Detection

When the user inputs certain “high risk” keywords, the chatbot will push out crisis management messages. Keywords and terms include: “suicide”, “end it all”, “in my next life”, “I’m done with this”, “help” and other phrases that professionals at organisations like Kids Help Phone can identify as common precursor phrases.

02.

Mood Trends

If the chatbot recognizes too many consecutive “1”s in the calendar, it will push out crisis management messages. Just like when certain keywords are detected, if the verification check of the calendar when entering new data highlights a problem, crisis management services may be contacted.

03.

Crisis Management

The chatbot will direct the user to local crisis help phone lines, as well as provide different coping methods in the meantime. If crisis detection is activated frequently, the chatbot may be able to share data about their location (if consent is given) to help emergency services and may automatically call for help.

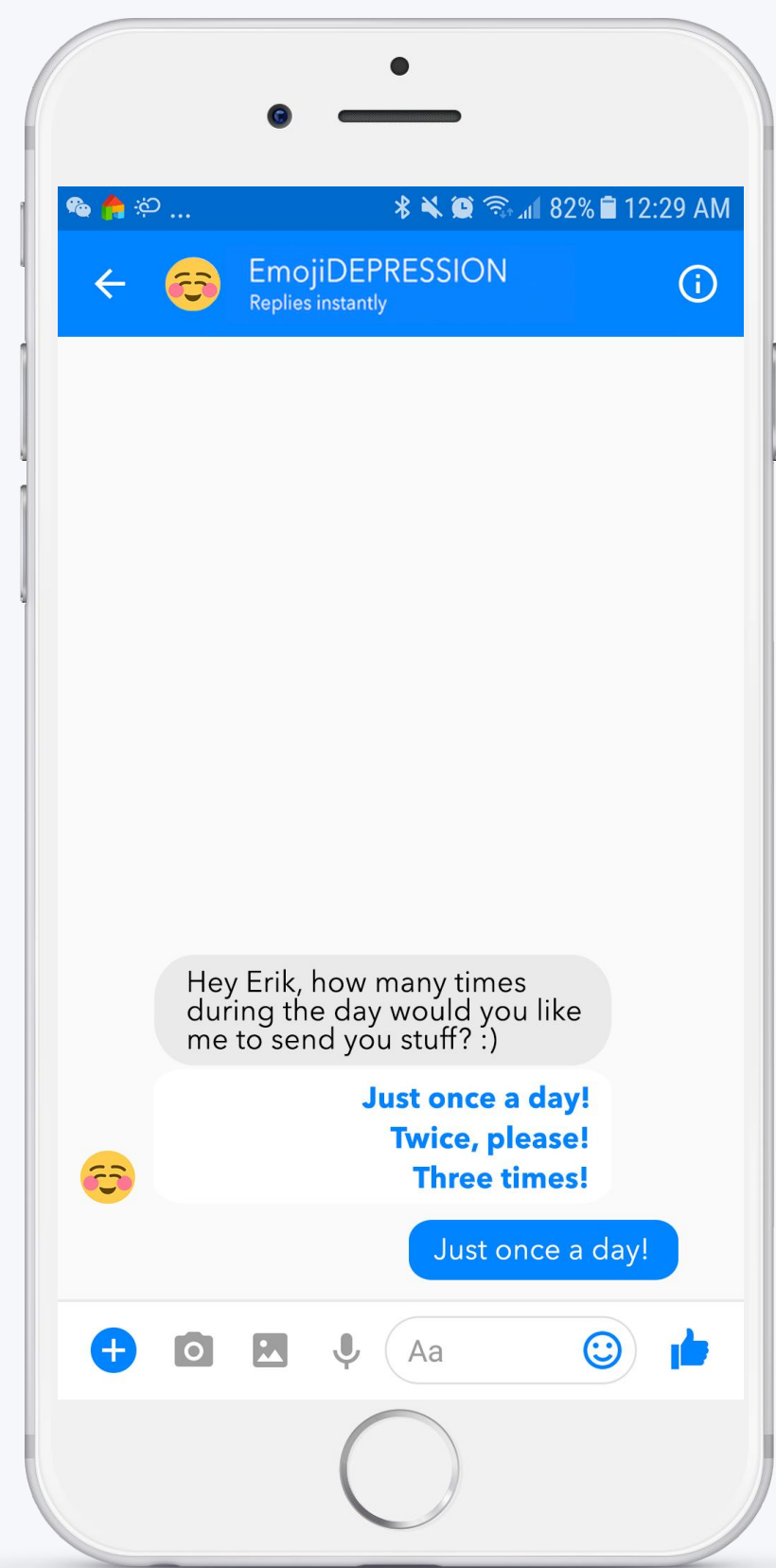
04.

Search for Help

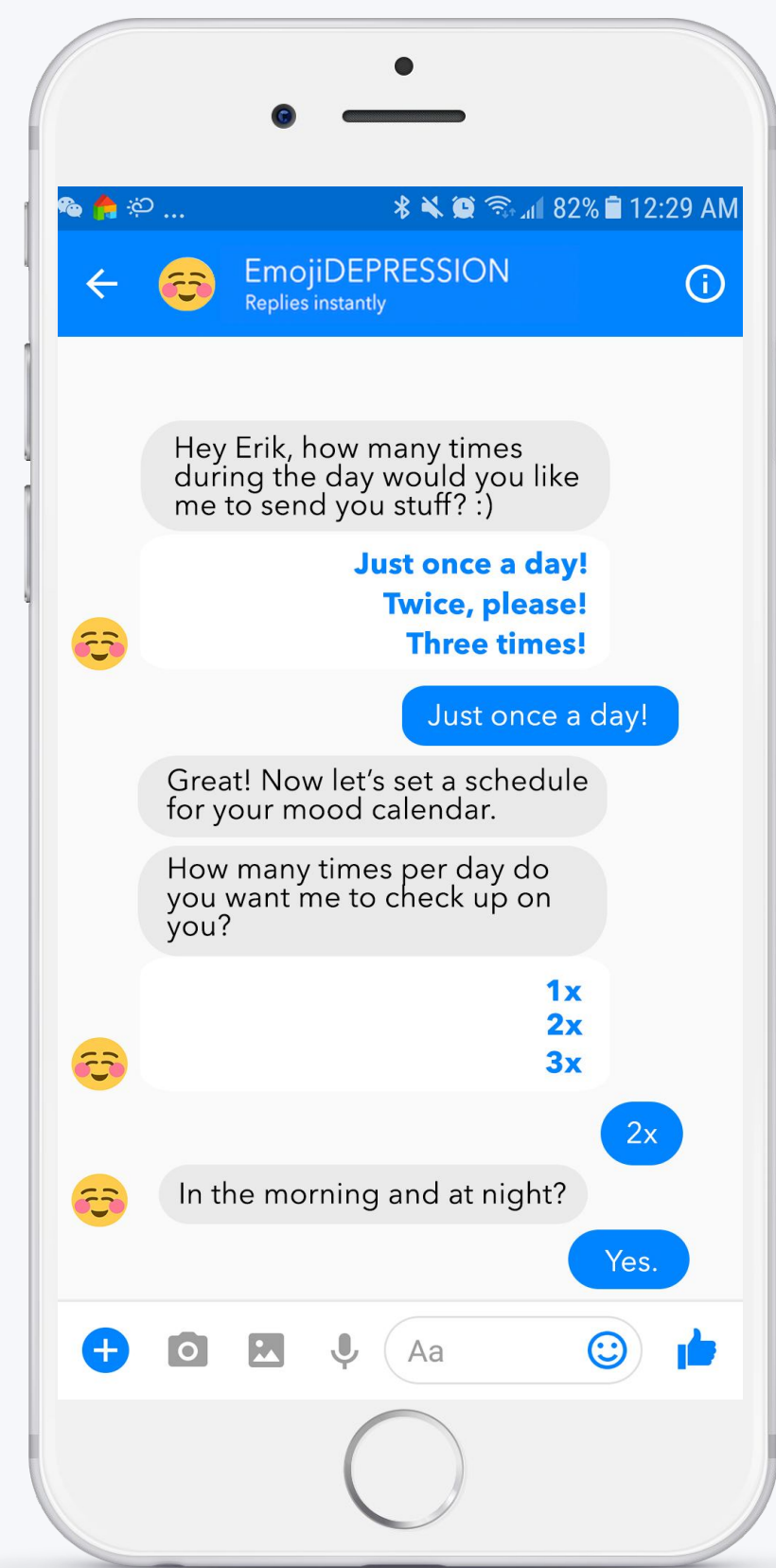
The chatbot will recommend user to immediately set an appointment with a professional. Once user is with a professional, the latter may analyze the data inputted on the progress of the user by inputting the user’s personal keyword that has been set beforehand. It is protected by patient-client privilege for privacy reasons.

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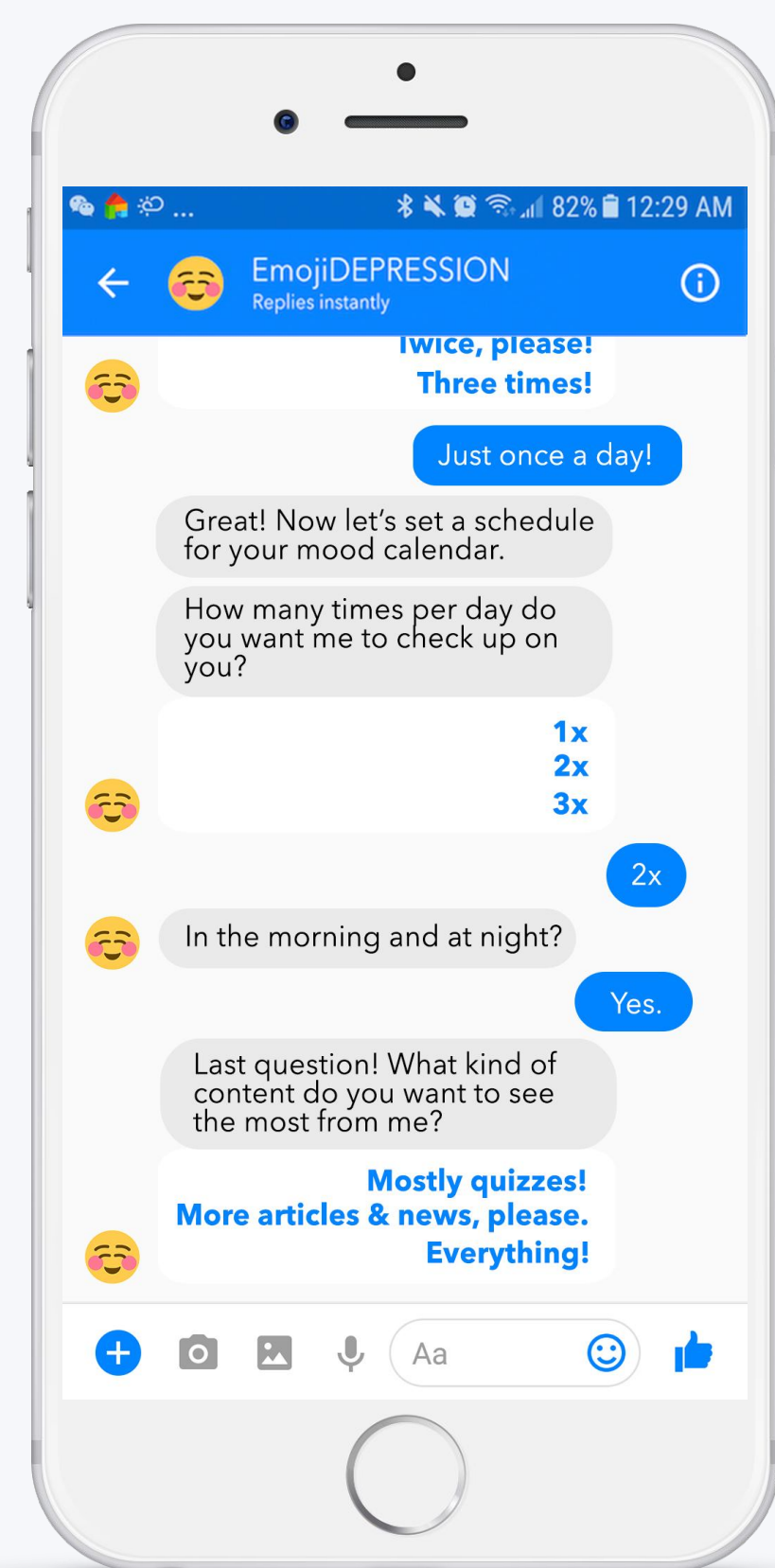
Feature 3: Personalization



The chatbot asks for the frequency at which to push content.



The chatbot sets mood calendar entry schedule, including frequency.



The chatbot asks about what kind of content the user prefers to see.

Feature 4: Education



News

The chatbot will provide the latest need-to-know mental health news to keep the user updated. News will be pushed daily according to the user's personalized schedule.



Information

Want-to-know information on mental health, such as the different types of disorders and the biology of mental health, will be triggered by certain keywords.



Quizzes

Following emojiHEALTH's quiz model, quizzes will contain need-to-know information and strive to be both engaging and informative.



Articles

Article content pushes will be prefaced by a one-line summary of the article, and followed by a link to the article in question. Articles must be carefully curated.

It's important to provide information in a bite-sized format and refer the user to the complete resource afterwards, because user engagement decreases once there is too much to read. All content that is pushed must be carefully curated and written into the back-end database, and news content will be written in real-time and pushed on a weekly basis.

Maintaining Credibility of Information

Utilize Youth

Youth are a bastion of good information and, when utilized effectively, can add tremendous amounts of value. The University of Toronto Schools has a positive mental health committee, with students and educators willing to share experiences and information.

Engage Pharma Companies

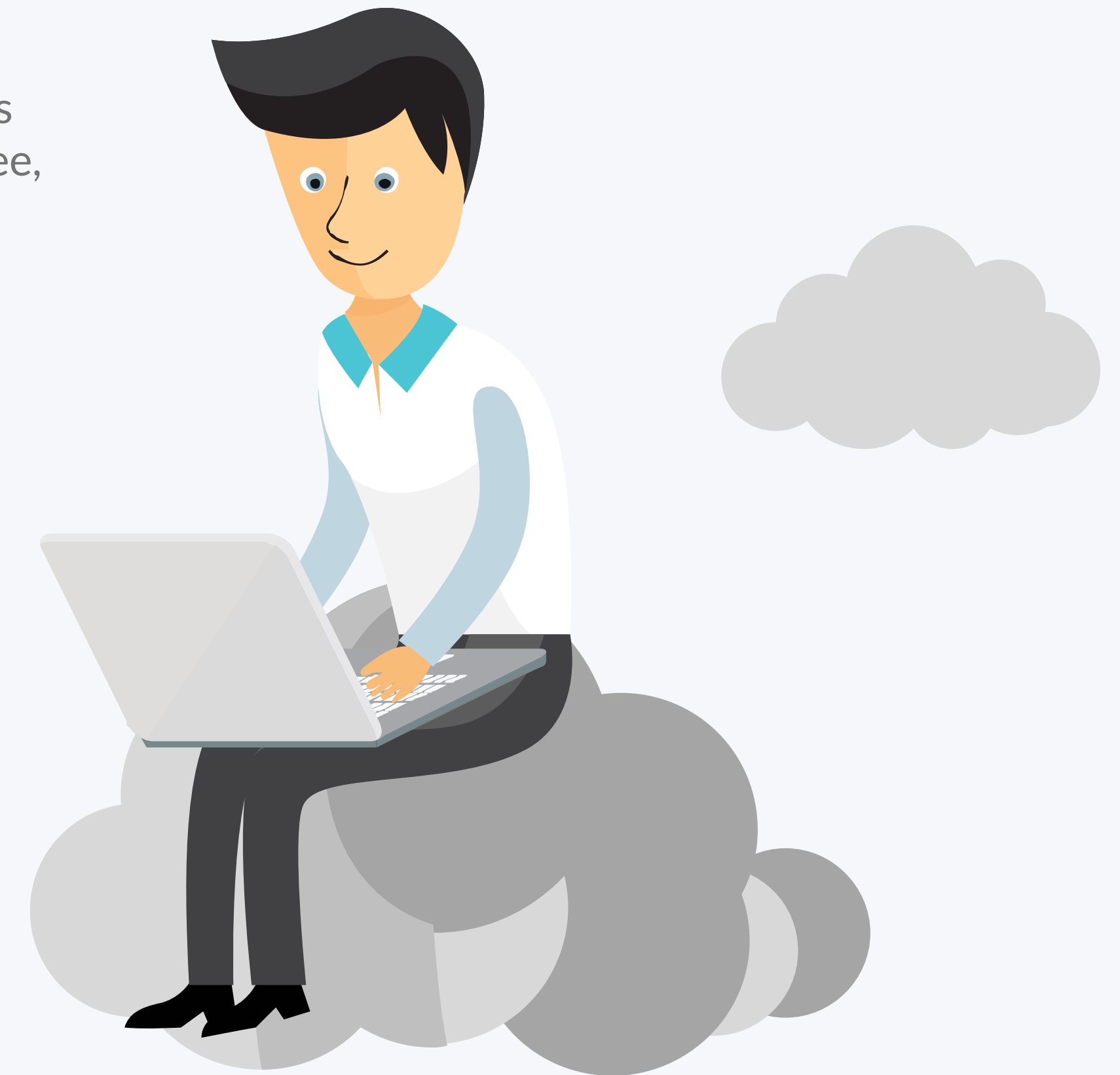
Companies like Pfizer not only understand medications for depression like Zoloft, they are also a potential source of financial backing for the project.

Partner with Nonprofits

Organizations like the Centre for Addiction and Mental Health can provide strategic partnerships to give EmojiDepression insight from professionals about what information is needed to help a patient suffering from depression.

Partner with Nonprofits (cont.)

Create a strategic partnership with Kids Help phone so that when the chatbot identifies worrying conversation topics through crisis detection and management, it can immediately direct users to professional help.



Potential Concerns: Things To Be Mindful Of



Correlations

Studies show that social media makes depression worse; perhaps a chatbot outside of messenger may help people disconnect.



Responsiveness

Those who suffer from depression often lack quality social connections. An impersonal chatbot might only exacerbate these issues.




Intuitiveness

A chatbot needs to be able to detect when a conversation should be escalated for professional human intervention.



Relevance

Depression is unique to the individual. Thus, making sure the information presented is personal and relevant can be a challenge.



If you have questions,
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