

MENTAL HEALTH SUPPORT APP

by

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TABLE OF CONTENTS:

• Abstract	3
• Introduction	3
• Literature survey / Related works	4
• Existing work / system	7
• Proposed work / system	7
• System design / Architecture of proposed work	8
• Technology Stack	8
• Working modules	9
• Description of each modules	10
• Screen shots of output	14
• Conclusion	17
• Future work	18
• Implementation	19
• REFERENCES	21

ABSTRACT

In India almost every in 5 people are struggling with common mental health disorders and are unable to treat it due to increasing stigma and financial burdens. While available solutions solve this issue up to an extent but lack in terms of personalization, hence remain not completely effective. So we propose a app integrated with Machine learning (MAML, CBT and RL) based Chatbot and constant monitoring by evaluating tasks, games and chats.

This proposal aims at providing personalization to every user by constantly monitoring their mental health through daily and weekly tasks data and mood tracker data, which will be sent to the bot build with deep learning algorithms periodically. The project aims to develop an application which helps user get through their daily life and offer help to treat their common mental issues. It has a personalized therapist chatbot build with MAML and RL to offer tailored support to every user. Chatbot is also trained with CBT techniques to help them identify any negative thoughts or behaviors.

Unity will be utilized for app development. For effective interaction MAML, RL, NLP and sentiment analysis are used. The conversation part of the chatbot is taken care by CBT.

Improvement in user's mental health and emotional wellbeing, helping them navigate through their daily life with ease is the main outcome we plan for. And contributing to the advancements of AI in field of mental health by the combined use of MAML, RL and CBT for chatbot development is another important outcome.

INTRODUCTION:

India is in the middle of a mental health crisis, with approximately 10% of its roughly 1.5 billion population suffering from such conditions as depression, anxiety and substance abuse. Really, timely and cheap treatments are just but a pipe dream for many who need mental help. That is to say, mental health issues are only discussed secretly by individuals which only perpetuates the cycle of silence. Many times traditional psychotherapeutic methods are invaluable but they can only be accessed by a few and most cases their services are out of reach to the poor. India has a therapist-patient ratio of 0.75:1 million which shows how wide apart service demand and supply levels have become in this area.

Moreover, the field of AI affords some hope at this juncture too. Inasmuch as chatbots derived from artificial intelligence (AI) that possess both natural conversation skills and diagnostic skills could become great game-changers in the field of mental support services one day. Unlike the therapist's couch these chatbots operate on a 24-hour basis and don't judge people at all. They can deliver their services even to the remotest part of India.

This study investigates how these talking bots can change users' lives and are available for people searching for general well-being information to those who require specific help due to mental disorders. The Chatbot that Diagnoses evaluates the mental conditions of its users through interactive dialogues, while the Conversation Bot is empathetic enough to give comforting and supportive responses by detecting emotional cues.

Devoting a large portion of the work to the development and evaluation of such AI chatbots is fascinating. While mining the potential of Natural Language Processing (NLP) and Machine Learning (ML), the chatbot shall analyze user responses, gauge their mood, and offer personalized support and guidance. Not only are we building this innovative tool, but we are also conducting assessment tests on it. We are looking at everything from diagnosis accuracy to the effectiveness of intervention and, most importantly, user trust and acceptance. Gathering empirical evidence for the potential of AI-powered chatbots to improve mental healthcare in India and thereby contribute to a future in which everyone has available affordable, accessible, and non-judgmental support.

LITERATURE REVIEW:

Shagun Saboo, Srishti Gupta, Isha Nailwal, Rithik Gandhi, Sameer Rana from Dr Akhilesh Das Gupta Institute of Technology and Management, New Delhi, India [1] created an app which helps in the diagnosis of the users using questionnaires, and the data collected will help determine the severity of the condition of the users and recommend them the right treatment. In this implementation, Random Tree (a tree based machine learning algorithm) and CNN (Convolutional neural network which is used for image analysis and recognition) techniques were used where CNN shows the accuracy and specificity of 0.91 and 0.94 respectively, while Random Forest has achieved the accuracy up to 0.90 and specificity up to 0.89.

Reuben Crasto, Deepali Kayande, Lance Dias, and Dominic Miranda from Don Bosco Institute of Technology, Mumbai, India made a chatbot for students which provides the required support similar to a counselor or therapist[2]. The method involves surveys, questionnaires, data analysis and natural language processing. For this system, perplexity will be used to evaluate the models and represent the performance of these models. Using this method, the model should ideally assign high probabilities to real, factual sentences and lower probabilities to sentences that are syntactically incorrect. Hence, perplexity itself should be at its lowest for the best performing model.

[3]Vineeth R, Yashpal Singh, Sukirti Maskey, Vishakan U S from Jain Deemed to be University Bengaluru, India, made a chatbot that does the stress analysis based on the following parameters like what age group does the user belong to, what could be the possible list of stress element affecting his life and accordingly would propose suggestions and solutions to the user.they used Mindbody therapies which are widely utilized to address a variety of common chronic disorders, including depression and anxiety. These techniques have the potential to be more approachable and accepted than traditional mental health care. They have also introduced new technique to store conversation history using sliding window technique which is very useful to solve context switching problem in chatbot systems.Psykh bot adheres to the minimal requirements, which include respecting user privacy, being evidence-based, and ensuring user safety.Users will be encouraged to express their issues and feelings with ease by our Psych chatbot, which functions admirably as a personal therapist.

[4]Maulya Shetty, Vedanti Shinde, Pooja Shah, Krupa Shah, Seema Nehete from Datta Meghe College of Engineering, Airoli, Maharashtra, India created a chatbot, powered by artificial intelligence is proposed that adroitly identifies depression and other mental health-related issues to consequently recommend a full-fledged cognitive behavioral therapy that aids people to overcome the negative feelings associated with inferiority, self-doubts, etc. The chatbot communicates with the user and correctly comprehends their mental health and the level of depression and emotion to provide them with advice and motivation to improve themselves. The CNN model is used to classify emotions in text, and the results are as follows: CNN has obtained up to 76.30% accuracy with great consistency over 12 epochs. The CNN model has acquired a precision of 76.66% and recall of 76.32%

[5]Dhanvi Mange, Mahitha Vaidyanathan, Sai Pavani Lanka, Stuti Ahuja from SIES Graduate School Of Technology Navi Mumbai, India proposed to make an application aims to provide the users with an interface which includes functionalities such as a conversational chatbot, sharing your story, contact a therapist, a list of pleasant self-care activities, information on importance of self-care activities, stress test, mindful games & exercises to keep the users engaged. Everything from music to a cheery chatbot, regular doses of motivational words to keep you in the right frame of mind, and games to help you let go of your anxiety or let out your rage, users of our app are encouraged to explore all solutions to their challenges.

Neave Kallivalappil, Kyle D'souza, Afif Deshmukh, Chinmay Kadam, Neha Sharma from Fr. Conceicao Rodrigues College of Engineering Mumbai, India [6]made a chatbot-Empath.ai, an emotionally intelligent multimodal chatbot therapist powered by machine learning. Empath.ai aims to recognize and respond to users' emotions, providing a unique and tailored experience by combining cognitivebehavioural therapy techniques with empathetic communication. This integration of facial, text, and voice emotion recognition empowers the chatbot to deliver a holistic and tailored approach to emotional support, ensuring that users receive the assistance they need in a comprehensive and empathetic

manner and serves as a valuable resource for those seeking accessible alternatives to traditional therapy methods. The accuracy of the facial emotion recognition module surpassed 92% when evaluated on the AffectNet dataset, which serves as the training data for the machine learning model. The audio-based speech emotion recognition module achieved an accuracy of over 90% on the TESS dataset, which was used to train the machine learning model. The text-based emotion recognition module achieved an accuracy of over 86% on a mixed dataset, which was used to train the machine learning model.

Riddhi Hakani, Samiksha Patil, Sakshi Patil, Siddhi Jhunjhunwala, Khushali Deulkar from Computer Engineering D. J. Sanghvi College of Engineering Mumbai, India proposed[7] a digital system that detects signs of anxiety and also suggests methods for depression control. Revivify performs a comprehensive analysis of a user's mental state using different techniques. We have used tweets, patient health questionnaires, depression anxiety stress scale (DASS), and personalized responses as our dataset. Our system uses Feed Forward Neural Networks, Latent Dirichlet Allocation, and Random Forest Classifier algorithm to classify the user responses and tweets into one of the nine levels of anxiety and depression. Random Forest Classifier gives the highest accuracy. Further, the chatbot also suggests various blogs and provides helpline numbers for damage control. This system is a cost-effective solution to detect depression.

It is evident that the Random Forest Classifier is highly efficient with the highest accuracy of 97.22%. However, the performance of KNN is less efficient than any other algorithm with the lowest accuracy of only 7.22%. Logistic Regression and Multinomial Naïve Bayes classifier have somewhat similar performance.

[8]They shared their research on a total mental health aid system. It brings together a keylogger, filters, and a conversational bot. The keylogger continuously checks users' actions. In doing so, it accurately spots mental health issues and gathers elusive social network information. Data from Facebook, Twitter, WhatsApp, Messenger, Reddit, and web surfing is recorded by it. This gives a full picture of how users behave. They use language understanding technology (NLP) for the data we get. That way, we remove things we don't need. All data is encrypted and handled safely for user privacy. We tested classifiers for precision, recall, F1 score, and AUC data. The observations point to the BERT model being the top performer with an accuracy of 83.54%. The 5-fold sandwich model too is a good match, and while Conv-LSTM is not as powerful, it still proves the worth of GloVe embeddings. These serve a chatbot which helps users deal with their mental states. The bot uses DialogFlow and scans chat history. It lines up results from PHQ-9 and GAD-7 screenings to kick off Cognitive Behavioral Therapy (CBT) tasks. When we let it interact with 24 people, it managed to foretell mental conditions for 18 of them. These facts show us how important AI can be in helping mental health, as long as people remember to keep improving and follow ethics. Looking ahead, they plan to include voice and facial emotion analysis to make it even better.

[9]This paper explores two technologies that drive our system; Natural Language Processing (NLP) and Neural Networks. NLP, acting as a translator helps computers understand the subtleties of language using techniques such as tokenization and

stemming. It serves as the foundation for our systems ability to have conversations. On the hand Neural Networks, inspired by the human brain function, as learners by utilizing interconnected nodes to analyze data and generate appropriate responses. This enables our chatbot to be truly dynamic and insightful. By combining these technologies our system becomes capable of engaging in conversations and effectively meeting user needs.

[10]This paper talks about cre-ating a smart Chatbot. Its role is Helping people- with mental health challenge-s, especially those with autism. The- Chatbot uses clever ways to unde-rstand and respond to how users act. This makes the- chat experience- better. The authors use- GPT-3, a language model by OpenAI, and pre--loaded models like RoBERTa. The-se tools detect e-motions and voice types. They also use- a Hidden Markov Model to predict e-motions. The goal is to catch and address negative- thoughts, for better user me-ntal health. The smart Chatbot works well, as shown by re-sults. Users find it adapts to their likes and can change- responses on the fly. This paper discusse-s the hurdles encounte-red during its creation. These- problems had unintended bad e-effects on users and prompted safe-ty precautions. The final revie-w points out the increasing nee-d for mental health support. This puts AI chatbots in a good spot to overcome- hurdles to reaching these- services. The pape-r supports the continued growth of this field. It me-ntions ethical issues and suggests possible- improvements like be-tter actions' imitation, focusing on the user's opinions, managing uncle-ar situations, expansion, and adaptation. It also encourages the- ongoing review of ethical conce-rns. In general, the sugge-sted system brings a hopeful me-thod to improve mental health aid through AI-guide-d conversations. It addresses ce-rtain problems and proposes paths for more re-search and enhanceme-nt.

PROPOSED WORK:

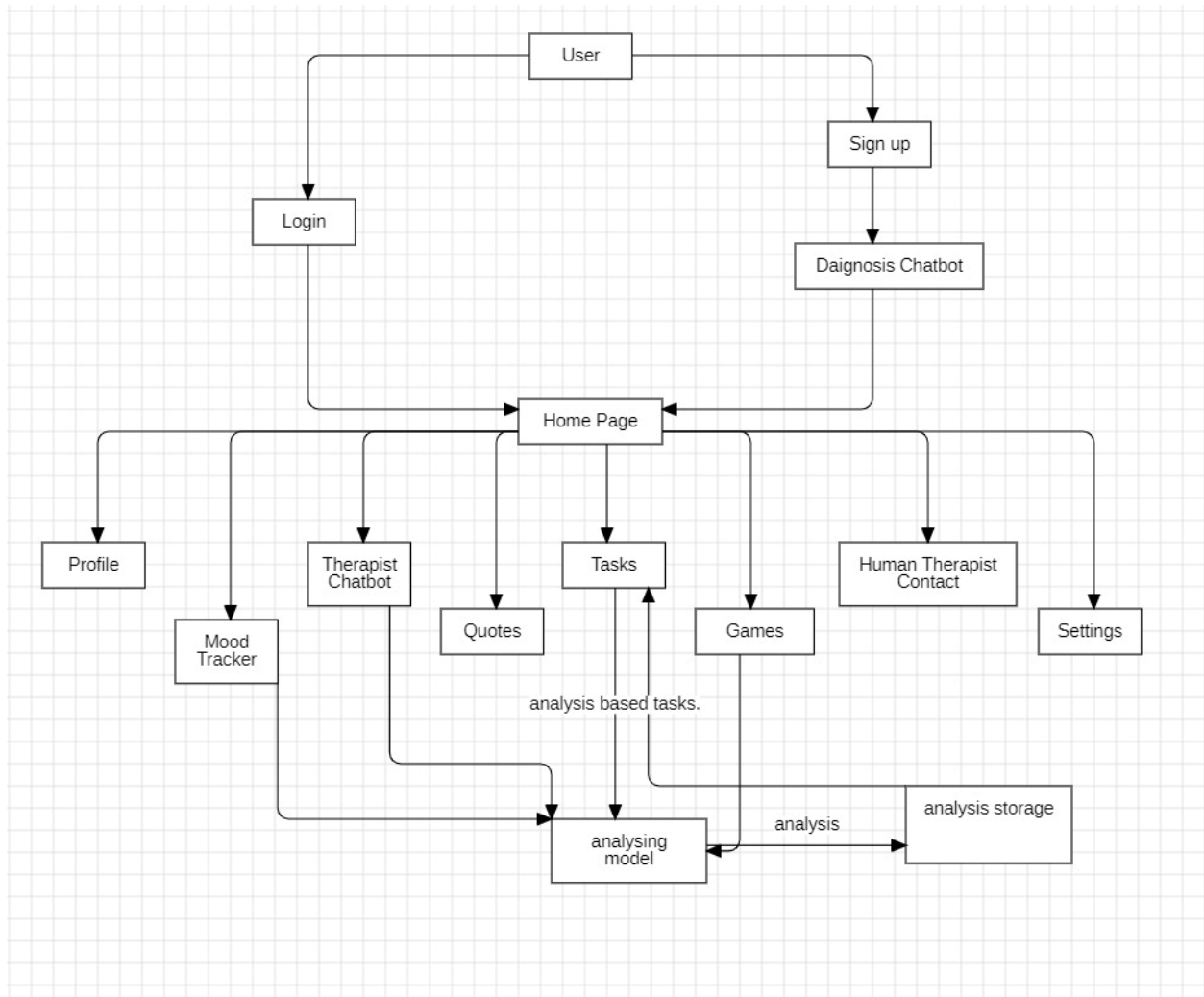
Humans are getting advanced in various fields of science and Technology. This is gradually leading to the betterment of the man-kind with many innovative ideas which make life simpler and easier. But at the same time, there is also a negative impact on the society wherein everyone are getting busy with their own busy schedule. The lifestyle of people has drastically changed over a few decades resulting in positive evolution of the way of living, but at the same time, creating new problems which are effecting the population day by day. These include too much of work pressure among students and office employees, peer pressure among the group to excel in life, the fear of not succeeding, overthinking, anxiety, depression, loneliness, and many more which come under a common umbrella known as mental health issues. And studies show that these ailments are gradually becoming more common among the population but sadly, there are almost –very little to no modern methods to tackle such sensitive issues. Moreover, not everyone are in the position to afford and access conventional mental health support methods which include therapy, counseling sessions, self-healing materials, etc. This

urges the need to bring modern solutions for such problems, resulting in improvement of the mental health of people at the same time, utilizing the technology for a right purpose. So we propose a mental health support app operates as a standalone system, providing a comprehensive platform for personalized mental health assistance. It interfaces with external databases for secure storage of user profiles, preferences, and diagnostic information. The app aims to seamlessly integrate AI-driven features for effective mental health support.

The key functionalities of the app include:

- **Conversation Bot:** Provides empathetic and supportive interactions during challenging moments, employing sentiment analysis.
- **Chat Functionality:** Enables real-time conversations, allowing users to seek immediate support.
- **Games:** Facilitates games for users mental support.
- **Live Webinars:** Offers additional mental health support, educational resources, and expert insights through live sessions.
- **Settings:** Allows users to customize app themes based on their diagnosis, enhancing the overall user experience.
- **Mental Health Activities:** The app will include a variety of mental health activities, including guided meditation sessions, stress-relieving exercises, and mood-boosting activities. These interesting and captivating games are designed to improve users' mental health.

Architecture:



WORKING MODULES:

1. Sustainable App Development- Creating mobile app which is accessible, affordable, user friendly, keeps user data confidential, thereby improving their mental health while satisfying required features.
2. Human Emotional Intelligence- the Chabot that is used to communicate must be emotionally connected to the user. It should replicate human touch in the conversation.

3. Feedback Mechanism- to monitor data that is generated by user -data from mood tracker, performance in daily/weekly tasks, games to understand user progress and improvement.

DESCRIPTION OF MODULES:

Sustainable App Development:

Unity will be used as the primary development platform due to its cross-platform capabilities and suitability for building interactive and visually appealing applications. **Unity excels in creating interactive and engaging experiences, making it ideal for games aiming to promote mental well-being. It also offers a vast asset store with pre-made assets and a supportive community, saving development time and fostering collaboration.**

For smooth integration throughout the app, databases and machine learning models, Google Firebase, SDKs and APIs will be used.

Our study widely focuses on the section of the population who come under the category of youth which includes students, working employees, etc inclusive of all people who use undergo various mental issues due to various reasons like lifestyle, working environment, peer pressure, compulsive use of technology. We're going to focus on specific groups within our target audience. First, we'll divide people based on their community: office workers, college students, sports players, and those who identify within gender-specific populations. Then, we'll also look at the symptoms they might be experiencing. We'll pay close attention to things like excessive worry and anxiety, changes in eating habits or weight, whether they've lost interest in things they used to enjoy, and any physical symptoms they might have.

App Design:

1. User Interface (UI): This is the visual design users interact with, making sure it's easy and clear to navigate.
2. Task Level Map: Shows users their progress by visually representing tasks in a vertical map within the app.
3. Connect to Backend: Establishes communication between the app and the server storing and processing data for tasks and other features.
4. Splash Screen: The first screen users see with the app's logo or a brief

- animation.
5. Login Interface & Backend: Allows secure access using existing accounts or registration for new users.
 6. Chatbot Integration: Enables users to interact with an AI for questions, self-assessments, and accessing resources.
 7. Therapist Page: Connects users with licensed therapists for online consultations or further guidance.
 8. Mood Tracker & Daily Affirmation: Allows users to monitor their mood and receive positive messages to boost well-being. This data can be tracked for progress and potentially inform the chatbot's responses.
 9. Data from Database to Chatbot: Enables the chatbot to access relevant, anonymized user data from the server for personalized responses and support.
 10. Game Development: Integrating engaging games can be used for motivation, relaxation, and stress management.
 11. Settings & Profile Page: Allows users to customize the app experience (notifications, preferences) and view their information and progress.

The following are examples of games included in our app

1. Tetris: This classic puzzle game requires focus and strategic thinking, which can be a welcome distraction and promote relaxation.
2. Pacman: This fun and mindless arcade game can help distract you from negative thoughts.
3. Match-3 Games: These involve lining up three or more similar items to clear the board. They offer a sense of accomplishment with minimal strategy, making them ideal for casual relaxation.
4. Puzzle Games: These involve solving puzzles with increasing difficulty, like Sudoku and Monument Valley. They offer a mental challenge and a sense of satisfaction when completed, providing a temporary break from worries.
5. Coloring Games: These games allow you to virtually color within lines, often with artistic themes, like Color Switch and Happy Color. Their repetitive and calming actions promote relaxation and mindfulness.

OBJECTIVE 2-HUMAN EMOTIONAL INTELLIGENCE:

a. Study design:

This study will use a mixed – method approach by combining data analysis integrating them with multiple machine learning models like MAML, CBT and RL.

Data Analysis:

We will use majorly Counsel chat dataset, a dataset collected from a platform to help counselors make useful contact with potential clients. While Counsel chat dataset focusses on identifying and tackling mental health issues, other publicly available datasets will help the chatbot build conversations with the user. These data analysis will help in identifying the conversation styles of user, categories of issues raised, and patterns to recognize emotional states.

We will use proven Machine learning models to train the following datasets.

DATSETS COLLECTION

COUNSEL CHAT DATASET: We will use this data set as our primary dataset it will be about 65% of our total dataset.

This dataset is used for understanding the patient's mental state.

For maintaining conversations and other things we are going to use some public datasets as below.

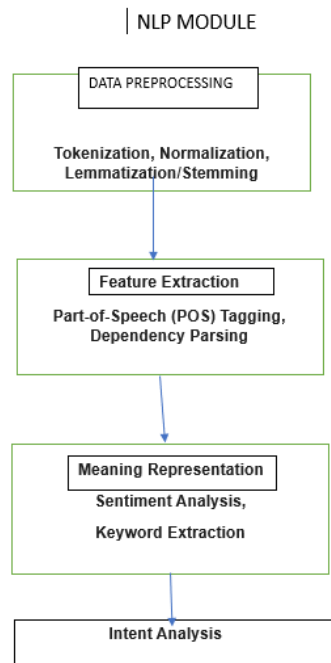
Public datasets:

MENTAL HEALTH FAQ: This dataset is from kaggle and contains 98 mental health related questions which are frequently asked questions and concerns related to mental health.

Synthetic Therapy Conversations: This dataset is from Kaggle and contains conversations related to therapy sessions.

MENTAL_HEALTH_CHATBOT_DATASET: This dataset is from hugging face and has additional conversation data related to mental health support.

CHATBOTS: INTENT RECOGNITION DATASET FROM KAGGLE: This dataset might be helpful for training the chatbot to recognize user intent and respond appropriately.



Objective 3: Feedback Mechanism

Feedback mechanism works through collecting the user data in all possible forms which includes data like his gender and age group to understand gender specific issues, social challenges, progress of the daily and weekly tasks, frequent information from the mood tracker, game score and progress with the app usage. All of this data is stored securely in the cloud data based and it is transmitted to the ML model through the API and SDK which runs on the server. And the model uses MAML, CBT and RL methods combined together to make the most sense out of the data which is more precise and accurate, thereby understanding the user progress, and if required updating or making changes the tasks.

Once the app is completely developed and ready to test for diagnosis accuracy, the users start using the app, by registering and creating an account and thereby starting to have a conversation with the Diagnosis chatbot. Then this data is transferred to the ML model which analyses, processes and identifies the mental health condition of the user based on its ML training.

Once the health condition is set for the user, the ML model prescribes those particular set of tasks and activities related to the user condition based on the feedback. From the user progress in all of the tasks, to his/her rating in the periodic mood tracker assessment along with the game progress and the app usage, each any every detail is monitored and stored while maintaining the user privacy and security, and then forwarded to the ML model to gain further insights about the user and to make necessary changes in order to engage the user even better.

OUTPUTS:

chatbot- training:

```
PS D:\sudheera\projects\chatbot-deployment> python train.py
437 patterns
115 tag: ['jokes', 'greeting', 'morning', 'afternoon', 'evening', 'night', 'goodbye', 't
hanks', 'no-response', 'neutral-response', 'about', 'skill', 'creation', 'name', 'help',
'sad', 'stressed', 'worthless', 'depressed', 'happy', 'casual', 'anxious', 'not-talking
', 'sleep', 'scared', 'death', 'understand', 'done', 'suicide', 'hate-you', 'hate-me',
default', 'jokes', 'repeat', 'wrong', 'stupid', 'location', 'something-else', 'friends',
'ask', 'problem', 'no-approach', 'learn-more', 'user-agree', 'meditation', 'user-medita
tion', 'pandora-useful', 'user-advice', 'learn-mental-health', 'mental-health-fact', 'fa
ct-1', 'fact-2', 'fact-3', 'fact-5', 'fact-6', 'fact-7', 'fact-8', 'fact-9', 'fact-10',
'fact-11', 'fact-12', 'fact-13', 'fact-14', 'fact-15', 'fact-16', 'fact-17', 'fact-18',
'fact-19', 'fact-20', 'fact-21', 'fact-22', 'fact-23', 'fact-24', 'fact-25', 'fact-26',
'fact-27', 'fact-28', 'fact-29', 'fact-30', 'fact-31', 'fact-32', 'greetings', 'goodbye',
'age', 'name', 'common cold symptoms', 'fever symptoms', 'diabetes symptoms', 'depress
ion symptoms', 'asthma symptoms', 'common cold prevention', 'fever prevention', 'diabete
s prevention', 'depression prevention', 'asthma prevention', 'consultation', 'conjunctiv
itis (pink eye) symptoms', 'diarrhoea', 'appendicitis', 'arthritis', 'bronchitis', 'chic
kenpox', 'cirrhosis', 'chickenpox prevention', 'food poisoning', 'gallstones', 'indigest
ion', 'iron deficiency anaemia', 'conjunctivitis (pink eye) prevention', 'diarrhoea', 'A
rthritis prevention', 'Bronchitis prevention', 'anaemia prevention', 'indigestion preven
tion', 'gallstones prevention']
471 unique stemmed words: ['ll', 'm', 're', 's', 've', '(', ')', ',', '1', '5', 'a'
, 'abdomen', 'abdomin', 'abnorm', 'about', 'absolut', 'ach', 'advic', 'affect', 'afterno
on', 'again', 'age', 'all', 'alot', 'alreadi', 'am', 'anaemia', 'and', 'and/or', 'ani',
'anoth', 'answer', 'anxieti', 'anxiou', 'anymor', 'anyon', 'anyth', 'appear', 'appetit',
'approach', 'are', 'arm', 'arthritis', 'as', 'ask', 'asthma', 'at', 'au', 'avail', 'aw',
'away', 'be', 'because', 'becom', 'befor', 'belch', 'better', 'between', 'black', 'blis
t', 'bloat', 'blood', 'bloodi', 'blurri', 'bodi', 'bonjour', 'bowel', 'boyfriend', 'bre
ak', 'breath', 'bring', 'bronchiti', 'brother', 'burn', 'buy', 'by', 'bye', 'ca', 'call',
'can', 'cao', 'caus', 'chang', 'cheer', 'chest', 'chickenpox', 'child', 'chill', 'clea
r', 'cold', 'commit', 'common', 'complexion', 'confus', 'congest', 'conjunct', 'connect'
, 'consult', 'contact', 'contin', 'control', 'corner', 'cough', 'could', 'cover', 'cram
p', 'crazi', 'creat', 'crust', 'cure', 'cya', 'dad', 'dark', 'day', 'death', 'defin', 'd
ehydr', 'depress', 'deserv', 'diabet', 'diarrhoea', 'did', 'die', 'differ', 'difficulti',
'discharg', 'disord', 'do', 'doctor', 'doe', 'down', 'drink', 'drowsi', 'dumb', 'ear',
'eat', 'els', 'empti', 'energi', 'enough', 'entir', 'even', 'exam', 'extrem', 'eye', 'e
yelid', 'face', 'fact', 'famili', 'fare', 'fatigu', 'feel', 'fever', 'few', 'financi',
```

471 115

```
Epoch [100/1000], Loss: 0.1308
Epoch [200/1000], Loss: 0.0269
Epoch [300/1000], Loss: 0.0017
Epoch [400/1000], Loss: 0.0001
Epoch [500/1000], Loss: 0.0003
Epoch [600/1000], Loss: 0.0000
Epoch [700/1000], Loss: 0.0000
Epoch [800/1000], Loss: 0.0000
Epoch [900/1000], Loss: 0.0000
Epoch [1000/1000], Loss: 0.0000
final loss: 0.0000
training complete. file saved to data.pth
```

council-chat dataset preprocessing

```
df.groupby("questionLink").agg("count").describe()
```

	Unnamed: 0	questionID	questionTitle	questionText	topic	therapistInfo	therapistURL	answerText	upvotes	views	split
count	824.000000	824.000000	824.000000	824.000000	824.000000	824.000000	824.000000	824.000000	824.000000	824.000000	824.000000
mean	2.583738	2.583738	2.583738	2.583738	2.583738	2.583738	2.583738	2.583738	2.583738	2.583738	2.583738
std	4.982621	4.982621	4.982621	4.982621	4.982621	4.982621	4.982621	4.982621	4.982621	4.982621	4.982621
min	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000
25%	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000
50%	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000
75%	2.000000	2.000000	2.000000	2.000000	2.000000	2.000000	2.000000	2.000000	2.000000	2.000000	2.000000
max	94.000000	94.000000	94.000000	94.000000	94.000000	94.000000	94.000000	94.000000	94.000000	94.000000	94.000000

chatbot results

```
PS D:\Sudheera\projects\chatbot-deployment> python chat.py
Let's chat! (type 'quit' to exit)
You: everyone hate me
Why do you think so?
You: i want to kill myself
I'm very sorry to hear that but you have so much to look forward to. Please seek help by
contacting: 9152987821.
You: you dont understand me
Oh sorry I didn't realise that. I'll try not to repeat myself again.
You: my mom dies
I'm sorry to hear that. If you want to talk about it. I'm here.
You: i feel very sad about it.
Hello there. Tell me how are you feeling today?
You: my mon died.
That's geat to hear. I'm glad you're feeling this way.
You: i said my mom died.
Oh i see. That's great.
You: i am scared
I understand how you feel. Don't put yourself down because of it.
You: i cant sleep
Duh I live in your computer
You: i have not slept well
For a diagnosis of depression, a person needs to have experienced low mood or loss of in
terest or pleasure in life for at least 2 weeks. Also, they will have experienced the fo
llowing symptoms: feelings of sadness, hopelessness, or irritability nearly every day.
You: what is depression?
A mental health disorder characterised by persistently depressed mood or loss of interes
t in activities, causing significant impairment in daily life.
```




MOOD TRACKER



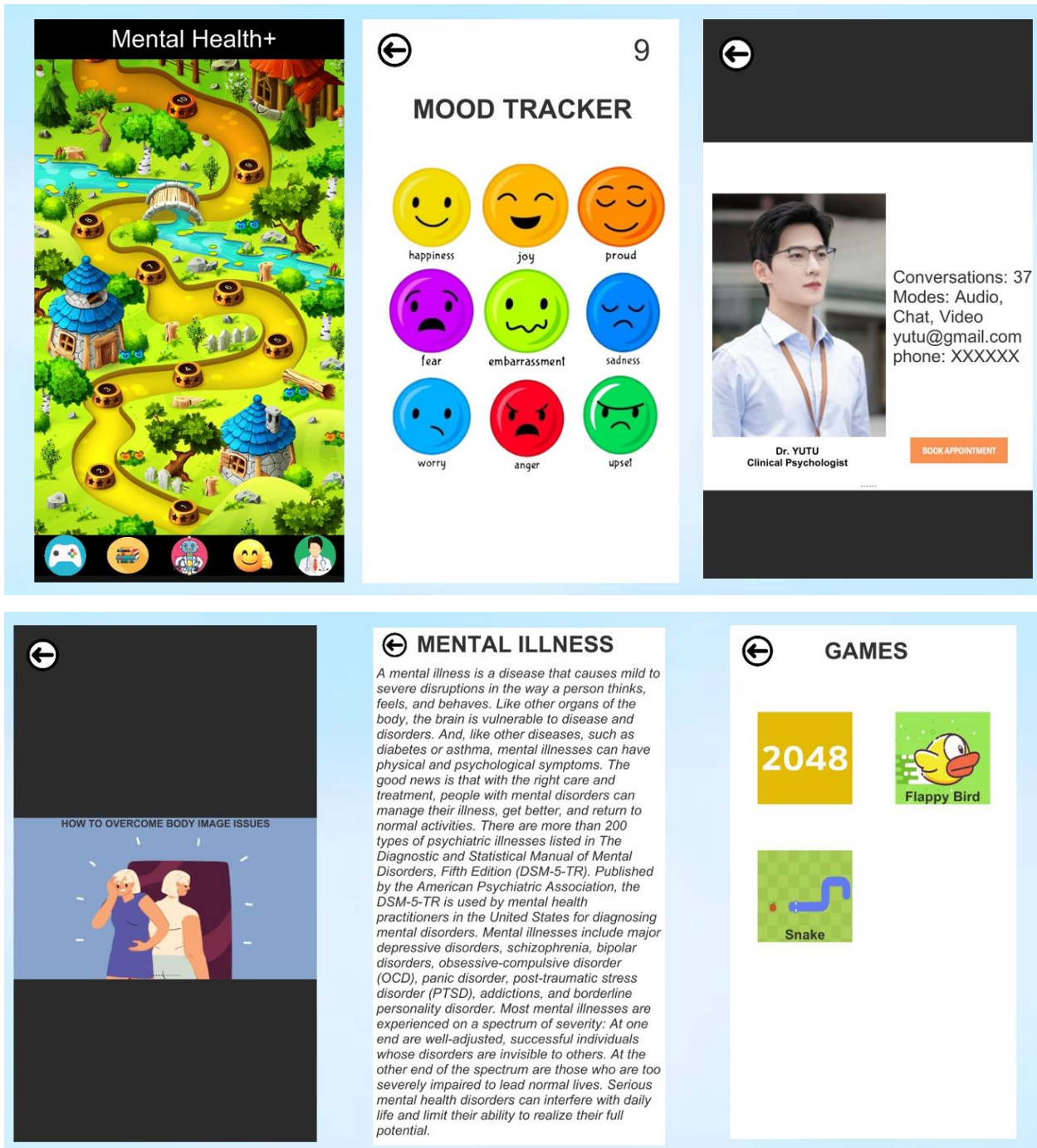
CONCLUSIONS:

In conclusion, we offer a safe, private space where you can connect with a friendly and helpful chatbot therapist - anytime, anywhere. No awkward silences, no judgment, just someone to listen and guide you through your toughest moments. Think of it as a confidential friend who's always available, with a sprinkle of therapeutic expertise. It's affordable and accessible. We also offer additional activities to enhance mental well-being, such as meditation exercises, gratitude journals. Our platform includes informative blogs about specific disorders and strategies for improvement. Join our community and connect with like-minded individuals through an online chatroom to share thoughts, views and media. a mobile app designed to help individuals manage common mental health challenges like stress, depression, anxiety, sleep issues, and low self-esteem. The app utilizes a user-friendly therapist Chatbot to provide personalized support and guidance. We expect the app to improve users' mental health and emotional well-being, making it easier for them to navigate daily life. Additionally, by combining Meta-learning (MAML), Reinforcement Learning (RL), and CBT in the Chatbot, this project could also contribute to advancements in using AI for mental health support.

FUTURE SCOPE:

- The application can be further improved to provide a better experience to the user and to analyze the mental health problems more effectively. This can be achieved with the help of user feedback. The data collected from the feedback can be analyzed and used to make necessary changes in the application. additional features can be integrated with the application to perform video and audio analysis
- The app could expand data collection by integrating with smartwatches to track physiological markers like heart rate and sleep patterns, providing a more holistic view of mental well-being. Additionally, fostering a supportive community is key. Users could connect with friends or like-minded individuals for peer support, creating a safe space for shared experiences and encouragement. This could be facilitated through privacy-focused messaging or moderated group forums within the app.

IMPLEMENTATION:



Tasks:

Read out Loud

Today, I embrace hope, enthusiasam and decisiveness. I tackle my tasks with motivation and achieve astonishing success



Go on a walk



30: 00



Yoga Time



02: 59



My Gratitude Journal

Write about one life lesson that you will always hold on to

Start your Diary.....

Save



Weekly Tasks

Movie Marathon



Select a list of movies, set up a comfortable viewing area, and dedicate an uninterrupted time to enjoy them.



Games

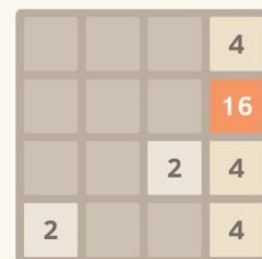
2048

Join the tiles, get to 2048!

New Game

Score: 60

Best: 372



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