OOAD PROJECT GROUP 18

Feasibility Report

Mental health refers to a person’s emotional, psychological, and social well-being. It affects how individuals think, feel, and act. Mental health is important at every stage of life, from childhood and adolescence through adulthood. Mental illnesses are common, but help is available. People with mental health problems can get better and many recover completely. It is important to recognize the signs of mental health issues and seek professional help when needed. Taking care of one’s mental health is as important as taking care of physical health. It involves finding healthy ways to cope with stress, building resilience, and fostering positive relationships. In nowadays, depression and mental health issues has been increasing a lot.

Target users:

So, we are preparing a mental health application for people who are suffering from depression, and other mental health issues so that they can check their mental health status and be aware of the problem.

The working of the chatbot:

The chatbot will ask some questions from the user based on the information provided by him. The privacy of the user will be secured and if the user is not comfortable on giving any personal information, there will be an option to stay anonymous.

Objectives and benefits:

Based on the information provided by the user, our chatbot will give solutions to his problem. The solutions basically give some suggestions and mental exercise, or for serious mental health issue consult a doctor. From the economic aspect, chatbot will be free to the user. Sometimes a person is suffering from a mental disease and does not realize it which can turn into serious mental issue. So, one can check his mental health status from it on a regular basis from this app.

Teamwork description:

I and my teammates will communicate mainly through a Whatsapp group if anyone feel any trouble in the project and require any kind of resource required to complete his part of work. We will be having a meet after every three days regarding our work progress.

A brief overview of our project:

Our chatbot will communicate with the user and detect his mental health condition and will provide suggestions and mental exercise to get over from his problem . If he has a serious mental health issue it will suggest him to consult a doctor(pyschiatrist).

The requirement analysis:

Process to be followed:

We will follow the iterative refinement process starting from a basic chatbot and then refining it to the need adding features bit by bit.

Outline plan:

The website and the chatbot part will be simultaneously made by two separate teams.

Initial Phase (First Week) :

- Get the necessary libraries and collecting the dataset for the chatbot.

- Initialize the project on GitHub.

- Start working on the first model for the chatbot (Mental health analysis)

- Build basic frontend for the chatbot.

Second Phase (2 - 3 weeks) :

- Make the first model of the chatbot and add the suggestions part.

- Designing the complete frontend for chatbot.

- Making the backend and database for storing conversations

- Deploying the beta version

Final Phase (1 - 2 weeks):

- Test running the beta version and refining it with the training conversations

- Releasing the final product

Risk analysis:

- Chatbot can produce wrong results.

- It can generate offensive content based on the conversational data gained

Fallback plan:

- Keeping rollback points for the project

- Adding a filter if necessary

Probable technical requirements:

- Python with chatterbot and numpy libraries

- An IDE for developing website with HTML5 and CSS

- NodeJS installed

- Git and GitHub

- Dataset for training chatbot.

Conclusion:

Team members:

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