

Group Number:A2-G1

Project Title : AI Mental Health Therapist Chatbot.

Project Member's:

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Problem Definition :

Mental health includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make healthy choices. Mental health is important at every stage of life, from childhood and adolescence through adulthood.

AI Mental Health Therapist Chatbot will be a website which will talk with people whenever they want, about whatever they want. And also try to enlighten their mood or suggest helpful videos or articles that might help them recover their pain or give them hope. Mainly it will be able to counsel anyone through chatting and giving mental support.

Objective:

Depression and anxiety are hidden burdens to the sufferers. Sometimes people need to share their feelings and thoughts but they are not comfortable sharing with others.

Our goal is to develop an AI Mental Health Therapist Chatbot for those people who need mental support and motivation, where people can easily chat and get help. It will be much easier than going to a counselor and sharing it with an unknown person.

Solution & Project Outputs :

AI Mental Health Therapist Chatbot will be a website where people can chat with a bot and take advice from it.

Requirement analysis:

- **Registrations** (To use this website, the user will need to register first with their basic details.)
- **Login** (The user will need to log in to the system using a username and a password.)
- **Start Chatbot**
 - They can start chatting with the system i.e., chatbot.
 - The system will detect sentiments based on positive, negative and neutral.
 - According to sentiments, video links or articles will be provided to the user.

Impact on Society:

The percentage of people suffering from depression is increasing day by day. Many people face trouble to go to doctors or counselors and it takes much time and money. Besides, some may not feel free with counselors. They might be afraid of revealing their secrets or sharing their thoughts. But people can feel free with our chatbot as it will not reveal their stories or thoughts, nor it will judge, and provide mental support. So, it will be helpful to deal with these types of issues and people can live a mentally healthy life.

According to the World Health Organization, there is a global shortage of health workers trained in mental health. Many mental health interventions do not reach those in need, with approximately 70% with no access to these services. Chatbots could be a scalable solution that provides an interactive means of engaging users in behavioral health interventions.

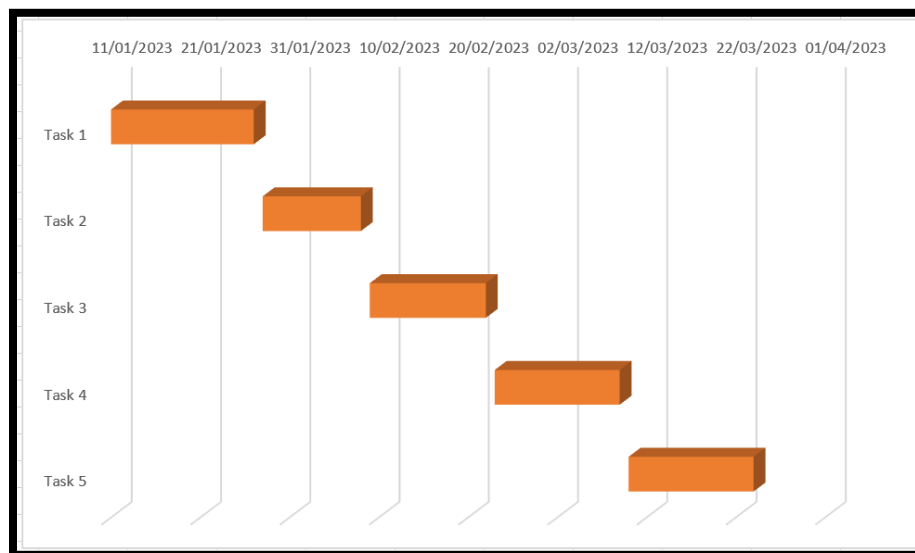
Project Management :

Tasks

1. Preparation and learning resources
2. Initializing Chatbot Training
3. Building the Deep Learning Model
4. Building the Chatbot
5. Testing

Fig: activity chart

6					
7	Task	Start Time	Finish Time	Duration	
8	Task 1	11/01/2023	27/01/2023	16	
9	Task 2	28/01/2023	08/02/2023	11	
10	Task 3	09/02/2023	22/02/2023	13	
11	Task 4	23/02/2023	09/03/2023	14	
12	Task 5	10/03/2023	24/03/2023	14	
13					

Fig: gantt chart**Project cost:**

7	Task	Start Time	Finish Time	Duration	
8	Task 1	11/01/2023	27/01/2023	16	
9	Task 2	28/01/2023	08/02/2023	11	
10	Task 3	09/02/2023	22/02/2023	13	
11	Task 4	23/02/2023	09/03/2023	14	
12	Task 5	10/03/2023	24/03/2023	14	

Total needed time = 68 days or 340 hours (we will work approximately 5 hours a day on average)

The average hourly rate for Software Engineer I ranges from \$33 to \$40 with the average hourly pay of \$36.

Per hour cost = 3500 tk(\$33 per hour)

So, Total cost = 1190000 tk