VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI-590018



Mini Project Report On

"AI Powered Chat-Bot for Mental Health"

A report submitted in partial fulfilment of the requirements for MINI PROJECT

In

Computer Science and Engineering (IOT , Cyber Security including Blockchain Technology)

Submitted by

TARUN R GOWDA	4AL22IC056
T H LIKITHA	4AL22IC055
P KEERTHI REDDY	4AL22IC024
ANVESH M S RAO	4AL22IC005

Under the Guidance of
Prof. Vasudev S Shahapur



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (IOT, CYBER SECURITY INCLUDING BLOCKCHAIN TECHNOLOGY)

ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY MOODBIDRI-574225, KARNATAKA

2023 – 2024 ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY MIJAR, MOODBIDRI, D.K. - 574225



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (IOT, CYBER SECURITY INCLUDING BLOCKCHAIN TECHNOLOGY)

CERTIFICATE

This is to certify that the Project entitled "AI Powered Chat-Bot for Mental Health" has been successfully completed by

TARUN R GOWDA 4AL22IC056

T H LIKITHA 4AL22IC055

P KEERTHI REDDY 4AL22IC024

ANVESH M S RAO 4AL22IC005

the Bonafide students of Department of Computer Science & Engineering (IOT, Cyber Security including Blockchain Technology), Alva's Institute of Engineering and

Technology in DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING (IOT, CYBER SECURITY INCLUDING BLOCKCHAIN TECHNOLOGY) of the VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI during the

year 2023–2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

Prof. Vasudev S Shahapur Project Guide Dr. Pyadeep V HOD CSE(ISE/ICB)

H.O.D.

Dept. Of Information Science & Engineering
Alva's Institute of English & Testucity
Mijar, MOODEstars Street

ABSTRACT

Mental health is a critical aspect of well-being, but access to adequate mental health care is often limited by factors such as stigma, cost, and availability of professionals. This project aims to develop an AI powered chatbot designed to assist individuals in managing their mental health. The chatbot will use advanced Natural Language Processing (NLP) and machine learning techniques to engage users in meaningful, empathetic conversations, offering real-time support for various mental health concerns such as anxiety, depression, and stress.

The chatbot will be trained on a variety of therapeutic approaches, including Cognitive Behavioural Therapy (CBT), mindfulness, and emotional regulation techniques, to provide evidence-based guidance. It will also include features for monitoring mood, offering self-help resources, and directing users to appropriate professional help if necessary. By providing 24/7 support, the chatbot aims to bridge the gap between individuals and mental health services, offering a confidential, accessible, and non-judgmental space for users to express their feelings and receive personalized advice.

This project will contribute to the growing field of AI in healthcare, exploring the potential of technology to improve mental health support systems. Through continuous learning and feedback mechanisms, the AI chatbot will evolve, enhancing its ability to understand and respond to a diverse range of user needs, ultimately fostering mental well-being and encouraging healthier coping strategies.