TheraAI – Project Documentation

1) Project Planning

A. Project Overview:

TheraAI is an intelligent chatbot specialized in mental health support. It is built using the Qwen3 model with LoRA Fine-Tuning, enabling it to deliver highly accurate and realistic interactions. The system provides simple therapeutic suggestions such as breathing exercises, grounding techniques, and anxiety-management tips.

The project aims to offer quick, safe, and accessible psychological support for individuals who may struggle to reach a mental health professional.

B. Problem Statement:

There is a significant gap between the growing need for mental health support and the availability or accessibility of qualified professionals.

Many users hesitate to seek help, or they lack proper resources.

TheraAI addresses this by providing:

a) Immediate initial support.
b) Practical therapeutic exercises.
c) Tools to help users monitor their mental state.
d) A future plan to connect users with psychologists for following.

C. Project Objectives:

Current Objectives:

- ➢ Develop an AI-powered chatbot fine-tuned on trusted psychological content.
- ➢ Deliver practical exercises and mental health guidance.
- ➢ Build a simple web-based chat interface using HTML, CSS, and JavaScript.

Future Objectives:

- ➢ Securely store user conversations with encrypted databases.
- ➢ Add a psychologist dashboard for patient monitoring.
- ➢ Implement a mood evaluation system (Mood Scoring System).
- ➢ Introduce chat memory for improved conversational quality.

D. Project Scope:

Included in the Current Scope:

- ❖ Web-based chatbot.
- ❖ Qwen model + LoRA Fine-Tuning.
- ❖ Simple exercises and mental support.

Out of Scope in the Current Version:

- ❖ Medical diagnosis.
- ❖ Direct doctor integration.
- ❖ Conversation storage.
- ❖ Advanced psychological assessments.

E. Technologies Used:
- ➢ Back-end Model: Qwen (with LoRA Fine-Tuning).
- ➢ Programming Languages: Python.
- ➢ Front-end: HTML, CSS, JavaScript.

2) Stakeholder Analysis:

Needs: Private space to talk, simple advice, calming exercises, quick responses.

Impact: Improved emotional well-being, reduced anxiety.

3) Database Design:

- o **Future Data Requirements:**
  - ❖ User info.
  - ❖ Chat session logs.
  - ❖ Sentiment scores.
  - ❖ Psychologist notes.

- o **Database Model Summary:**
  - ❖ Users – Identifying users.
  - ❖ Chat Sessions – Organizing sessions.
  - ❖ Messages – Message history.
  - ❖ Psychologists – Linked professionals.
  - ❖ Follow Up Reports – Progress tracking.

4) UI/UX Design:

➢ **Design Philosophy**

The interface must reflect calmness and simplicity with soft colors and intuitive layout.

➢ **Wireframe Description**
   a) Large chat container.
   b) Clear message alignment.
   c) Input bar.
   d) Send button.
   e) TheraAI logo.
   f) Dark mode available.

➢ **User Flow**
   1. User enters.
   2. User writes a message.
   3. Model processes.
   4. Bot responds with exercises and tips.
   5. Future login and doctor dashboard.

➢ **Strengths**
   a) User-friendly.
   b) Fast replies.
   c) Minimal distractions.
   d) Supportive color palette.