MujahidGPT — Software Requirements Specification (SRS)

1. Introduction

1.1 Purpose

This Software Requirements Specification (SRS) describes the functional and non-functional requirements for MujahidGPT, an AI-powered conversational assistant built in Python and deployed on Hugging Face Spaces.

1.2 Scope

MujahidGPT will be a web-based conversational agent accessible via a browser. Core capabilities include natural-language dialogue, daily task assistance, context handling, and deployment in Hugging Face Spaces.

2. Overall Description

2.1 Product Perspective

MujahidGPT is a standalone web application with an LLM backend.

2.2 Product Functions

• Chat interface

• Task assistance

• Export conversation

• Admin configuration

3. Functional Requirements

FR-1: Chat UI

FR-2: Timestamped messages

FR-3: LLM backend response generation

FR-4: Session context

FR-5: Token limit management

FR-6: Task templates

FR-7: Structured task creation

FR-8: Export features

FR-9: Copy to clipboard

FR-10: Admin model switching

FR-11: Error logs

FR-12: Rate limiting

FR-13: Safety filters

4. Non■Functional Requirements

• NFR■1: Response latency < 2.5s

• NFR■3: Availability 99%

• NFR■5: HTTPS security

• NFR■8: Mobile responsive UI

• NFR■10: Modular codebase

• NFR■11: Portable deployment

5. External Interfaces

• User Interface (chat window)

• Model API adapter

• HTTPS communication

6. Data Requirements

Sessions, preferences, logs stored optionally and securely.

7. Security & Privacy

Privacy■by■design, no PII stored by default, deletion on request.

8. Safety

AI safety filters for harmful content, disclaimers for high■stakes topics.

9. Testing

Unit tests, integration tests, UX tests, model evaluation.

10. Deployment

Deployed on Hugging Face Spaces using Gradio/Streamlit. Includes requirements.txt and clear instructions.

11. Future Enhancements

Voice support, multilingual features, OAuth integrations, persistent accounts.