

AI Chatbot UI – Assignment Document

Course: Python + Streamlit + Gemini Fundamentals

Assignment Title: Basic AI Chatbot UI

Difficulty Level: Beginner

1. Overview

In this assignment, you will build a **simple chatbot interface** using **Python**, **Streamlit**, and **Gemini CLI**.

The chatbot will allow users to enter text, send it to the Gemini model, and display the AI's response in a conversational format.

This project introduces:

- Streamlit layout basics
- Handling user input
- Managing chat history using session state
- Prompt design
- Integrating Gemini api into a Python app

2. Objectives

By completing this assignment, you will learn how to:

- Build an interactive UI with Streamlit
- Store and display chat history
- Design prompts for AI models
- Make Gemini api calls from your app
- Display messages in a clean, readable chat layout

3. Requirements

A. User Interface

Your app must include:

- A page title
- A text input field for the user's message
- A "Send" button
- A chat history display area

B. Features

Your chatbot must:

- Accept a message from the user
- Send it to Gemini using
- Display the model's response
- Store conversation history in `st.session_state`
- Show each turn clearly labeled ("You:" / "Bot:")

C. Prompt Requirements

The prompt you send to Gemini should:

- Include the user message
- Include any behavior instructions (e.g., "Respond briefly", "Be friendly", etc.)

D. Optional Bonus Features

(+5 points bonus possible)

- Chatbot personality selector
- Clear chat button
- Message bubbles with different styling
- Timestamp for each message

4. Deliverables

Submit a folder containing:

- `chatbot_app.py`
- A short write-up (5–8 sentences) explaining:
 - How your chatbot works
 - Your prompt strategy
 - Any bonus features
- A screenshot of the working chatbot UI

5. Grading Rubric

Category	Points
Working Streamlit user interface	10
Chat history functionality	10
Correct Gemini CLI integration	15
Prompt clarity & design	10
UI readability & message formatting	5
Summary write-up	5
Bonus features	+5