**🤖 Personal Training Assistant – Overview & Technical Specification**

**📋 Project Description**

This project is a **locally hosted personal coaching assistant**, powered by an LLM, designed to provide reflective conversations, behavioral analysis, motivational nudges, and tailored micro-actions — all through WhatsApp.

It doesn’t aim to be a general chatbot — but a **deeply personalized companion** trained on *your* principles, tone, life context, and decision-making style.

**🎯 Project Objectives**

**🎯 Core Goal**

To create a **mental and behavioral coaching agent** that helps the user navigate daily challenges, thought loops, and habits — using natural language and a personal knowledge base of values, rules, and voice.

**🧩 What Can This Agent Actually Do?**

| **Capability** | **Description** |
| --- | --- |
| 💬 Open Dialogue | Understands emotional or situational input like “I feel stuck” and responds with reflections, clarity, or micro-tasks. |
| 🧭 Intent Classification | Detects whether the message is emotional, practical, reflective, or task-oriented — and routes accordingly. |
| ✅ Task Generation | Suggests small, focused actions based on situation + user profile. |
| 📌 Principle Recall | Dynamically pulls personal rules or values in context (“What do I believe about this?”). |
| 🕒 Timed Follow-up | Saves a reminder or action and triggers it later via WhatsApp. |
| 📈 Daily/Weekly Review | Optionally prompts for “How was your day?” — then tracks patterns across time. |

**🧠 How It Works (Under the Hood)**

**🧠 Local LLM (Mistral / Phi-3 / LLaMA)**

* Runs via Ollama or equivalent.
* Uses a **persistent system prompt** to lock tone, behavior, and rules.
* Supports a **custom knowledge base** for reasoning (via embeddings or context injection).

**📚 Personal Guidelines & Identity (Profile)**

* Predefined by the user (you):
  + Communication style
  + Do's and don'ts
  + Decision-making principles
  + Trigger-based responses
  + Reflection templates and reframing phrases

**🔍 RAG-Based Reasoning**

* Every message triggers a query into your custom knowledge (via embedding search)
* Resulting context is inserted into the LLM prompt
* Output feels deeply “you”

**🧱 System Architecture**

text

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[WhatsApp Web] ⇄ [LLM Coach (local)] ⇄ [Personal Profile DB (Vectors)]

⇓

[Logic Router]

⇓

[Personalized Response + Micro-action]

⇓

[WhatsApp Message + Excel Logging]

**💼 Example Use Cases**

| **User Message** | **Agent Response** |
| --- | --- |
| "I can’t get out of bed" | “That’s the loop again, right? One small step. Just get up and splash water on your face. Nothing else.” |
| "I’m annoyed I delayed this again" | “Let’s call it what it is: avoidance out of fear. But you’ve broken this before. Want to walk through it together?” |
| "Remind me this evening" | Adds task to reminders.xlsx and sends a message at the set time |
| "Give me something strong for today" | Pulls a personal motivational quote or “anchor principle” from your values file |

**🧩 Expandable Features**

* Sentiment/emotion detection per message
* Time-sensitive behavior (different tone in the morning vs night)
* Mood trend analysis based on chats
* Weekly summaries of behavior patterns
* Integration with journaling platforms or calendar apps
* Custom "mindset snapshots" based on recurring topics

**🔐 Privacy & Control**

| **Feature** | **Benefit** |
| --- | --- |
| 🔒 Local-only Execution | No cloud, no third parties, full control |
| 📂 Manual Data Access | All info stored in editable files (Excel/JSON) |
| 🧩 Open Source | Easy to audit and modify |
| 🔁 Self-Updatable | You can adjust your own rules or personality profile at any time |

**🛠️ Project File Structure**

| **File/Folder** | **Purpose** |
| --- | --- |
| main\_loop.py | Handles WhatsApp input, invokes LLM |
| profile.json | Defines personality, rules, tone, responses |
| embeddings/ | Vector-based personalized reflections |
| reminders.xlsx | Reminder and micro-task scheduling |
| whatsapp\_driver.py | Sends WhatsApp messages (via Selenium or API) |
| logs/ | Archives of interactions, actions, feedback |